



JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah L. Clark, Purchasing Agent

1149 Pearl Street
1st Floor, Beaumont, TX 77701

OFFICE MAIN: (409) 835-8593
FAX: (409) 835-8456

Addendum to IFB

IFB NUMBER: IFB 24-062/MR
IFB TITLE: Jefferson County Diversion Center Renovation
IFB DUE BY: **11:00 am CT, Wednesday, November 13, 2024**
ADDENDUM NO.: 4
ISSUED (DATE): November 8, 2024

To Bidder: This Addendum is an integral part of the IFB package under consideration by you as a Bidder in connection with the subject matter herein identified. Jefferson County deems all sealed bids to have been proffered in recognition and consideration of the entire IFB Specifications Package – *including all addenda*. For purposes of clarification, **receipt of this present Addendum by a Bidder should be evidenced by returning it (signed) as part of the Bidder’s sealed bid submission.** If the bid submission has already been received by the Jefferson County Purchasing Department, Bidder should return this addendum in a separate sealed envelope, clearly marked with the IFB Title, IFB Number, and IFB Opening Date and Time, as stated above.

Reason for Issuance of this Addendum:

- 1. Vendor Questions**
- 2. Updated Scope of Work & Updated Project Drawings**

The information included herein is hereby incorporated into the documents of this present bid matter and supersedes any conflicting documents or portion thereof previously issued.

Receipt of this Addendum is hereby acknowledged by the undersigned Respondent:

ATTEST:

Witness

Witness

Approved by ____ Date: _____

Authorized Signature (Respondent)

Title of Person Signing Above

Typed Name of Business or Individual

Address



JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah L. Clark, Purchasing Agent

1149 Pearl Street
1st Floor, Beaumont, TX 77701

OFFICE MAIN: (409) 835-8593
FAX: (409) 835-8456

1. Question: With Veteran's Day on Monday, Nov. 11-would it be possible to change the bid date and/or time?

Answer: No.

2. Question: Bid Form shows Mold Remediation as Line Item 1. If owner is performing mold remediation and GC is not required to use a TDLR certified contractor, is this line item required?

Answer: The mold remediation is not being done by the owner. The vendor that bids on this line item must be a TDLR certified contractor. Vendors do not have to bid on line item #1 if they do not plan on doing the mold remediation.

3. Question: Just to confirm, per addenda #1 The Mold Remediation scope. We want to clarify that the GC is not required to have a TDLR licensed contractor for the demolition work after the mold remediation is complete.

Answer: See question 2.

4. See Brave Addendum 4 Attachment beginning on page 3 of this addendum for all other vendor questions, updated scope of work and updated project drawings.

ADDENDUM # 04

IFB 24-062/MR Jefferson County Diversion Center Renovation

B/A No. 23141

Issue Date: 11/08/2024

Notice:

- Receipt of this Addendum shall be acknowledged on the Bid Form.
- This Addendum forms part of the Contract Documents for the above referenced project and shall be incorporated integrally therewith.
- Bidder shall make necessary adjustments and submit his/her proposal with full knowledge of all modifications, clarifications, and supplemental data included therein. Where provisions of the following supplemental data differ from those of the original Contract Documents, this addendum shall govern and take precedence.
- Identified items revised on the Drawings are designated by a cloud line surrounding the revised section of the drawing and a delta (Δ) symbol with the corresponding revision number.
- Items revised in the Project Manual are shown in bold AND italicized.

Modifications:

A. Owner Requested changes to Bidding Information (Demolition Work allocation)

1. Mold Remediation demolition scope – more clarifications after 11/06 site visits and RFIs.

Response:

Mold Remediation Protocol and Interior Demolition document provided to further clarify the scope.

Renovation GC Demolition scope of work (in Contract)

- a) Refer to Mold Remediation Protocol and Interior Demolition scope for clarifications included as an attachment with this addendum.
- b) Any demolition remaining after completion of mold remediation contractor is to be completed by GC as required for the renovation scope of this project.
- c) All CMU demolition required for the renovation scope is under Renovation GC.
- d) Renovation GC is responsible for rebuilding any wall or partial patches demolished due to mold infestation.

B. Changes to Bidding Information (questions & clarifications): RFIs

1. Sergio Gomez, Construction Managers of Southeast Texas, LLC Question – What size rebar and what spacing will be the rebar be in the paving?

Response: *Jacques Gilbert, PE: 4,000 psi concrete with No.3 bars palced at 18 in on center in both directions.*

2. Sergio Gomez, Construction Managers of Southeast Texas, LLC Question – How thick is the concrete to be Demoed?

Response: *Existing concrete thickness is unknow, GC to field verify.*

3. Todd Stinson, Project Manager of Preferred Facilities Group – USA Question - *During the site walk-thru today, the possibility of leaving the heavy-duty door frames on what had been individual holding cells in place rather than removing them was briefly discussed. Details are indeed provided that would involve removing the existing CMU enough to remove the existing door frames, then setting the new hollow metal frame and - per details – infilling the remaining gap with new CMU construction. While this method is certainly common, it usually comes with a price. It is a time-consuming and expensive way to replace an existing frame & door. A potentially less-costly option discussed could be to leave the existing door frames in place. Repair any holes from no-longer used original security hardware as required, and refinish the existing frames as required to be aesthetically acceptable. The new door hardware may require some reconsidering to ensure it could be installed to work with the existing frame. The new doors may need to be custom fitted to the existing frames.*

**Jefferson County Diversion Center Renovation
Addendum 04**

Response: Look and feel of the existing door frames are not acceptable by the design team. GC to provide cost of new frames with wall patching vs cost of keeping the frames in place for owners to make decision based on the competitive cost of construction.

4. Todd Stinson, Project Manager of Preferred Facilities Group – USA Question – It was also discussed that the scope of the abatement and demolition was going to be revised again to put more demo work into the abatement contractor due to the presence of mold on the within some of the drywall construction.

Response: Information provided in the earlier section of this addendum. New partitions are added to the scope of work due to Mold demolition of existing walls. GC to account for any wall patching or new wall required due to mold remediation demolitions.

5. Todd Stinson, Project Manager of Preferred Facilities Group – USA Question – Could the language in the specifications about providing temporary construction fencing be clarified to explain where exactly this is to be provided? Perhaps simply marking on a site plan the location for it would suffice. The site is normally secured by the containment fence that surrounds the complex.

Response: Temporary construction fence is required to avoid vandalism and for protection of stored materials. This is considered means and methods of construction. GC is required to submit staging plan for approvals before starting of the construction.

6. Sergio Gomez, Construction Managers of Southeast Texas, LLC Question – Is there a flagpole required for this project? There is no specification for a flagpole but there is a detail in the drawings showing the flagpole foundation.

Response: No, there is no flagpole in the project. Detail 8 on sheet A.040 can be ignored

7. Sergio Gomez, Construction Managers of Southeast Texas, LLC Question – Sheet C1.00 calls out “D1 – Existing Type C inlet to be removed” but is not shown on the drawing.

Response: Existing Type C inlet approximate location is provided on the sheet C1.00. GC to field verify exact location.

8. Sergio Gomez, Construction Managers of Southeast Texas, LLC Question – There is no specification for Lightning Protection. Sheet A.200 calls out “25.23 – Conductor Cable Lightning Protection System”. Can you clarify if we are putting a new lightning protection system or if it is existing? If existing – is the intent just to remove and reinstall during the roof work?

Response: Yes, GC to provide new Lightning System. See attached spec section.

C. Changes to the Project Manual/Drawings:

Specifications

Table of Content revised to include new spec sections. Spec section on Lightening Protection System added.

Architectural Sheets

Demolition of mold wall identified and New partitions are shown.

Plumbing Sheets

1. Added new roof plan P1.3 with roof gutters sized at 8”x6” and 6” downspouts (16 total downspouts)
2. Updated sheet P1.1 to show 6” downspouts down through wall and terminate with downspout nozzle JR Smith 1770 or equal.
3. Updated sheet index on sheet P0.1.

D. Attachments:

Mold Remediation Protocol & Interior Demolition	Format	Date
Report	8½x11	11/08/2024

Specification	Format	Date
Cover page	8½x11	11/08/2024
Table of Content	8½x11	11/08/2024
26 4100 Lightning Projection System	8½x11	11/08/2024

**Jefferson County Diversion Center Renovation
Addendum 04**

Drawing Sheet		Format	Date
G.000	Cover Page	30x42	11/08/2024
G.001	Index and General Information	30x42	11/08/2024
D.101	Demolition – Overall Floor Plan	30x42	11/08/2024
D.110	Demolition – Enlarged Floor Plan POD 200	30x42	11/08/2024
A.100	Overall Floor Plan	30x42	11/08/2024
A.101	Enlarged Floor Plan – POD 200	30x42	11/08/2024
A.102	Enlarged Floor Plan – POD 400	30x42	11/08/2024
P0.1	Plumbing Abbreviations and Symbols	30x42	11/08/2024
P1.1	Plumbing Plan – Waste	30x42	11/08/2024
P1.3	Plumbing Roof Plan	30x42	11/08/2024

End of Addendum 04

Mold Remediation Protocol & Interior Demolition

SURVEY LOCATION: Jefferson County Diversion Center Renovation –
Pods 100, 200, 300, & 400
3890 FM 3514
Beaumont, Texas 77705

PROJECT CONTACT: Ms. Mistey Reeves

SITE VISIT DATE: October 30, 2024

PROJECT MANAGER: Jarrold Ardoin, MAC #1288
Project Manager

REPORT DATE: November 6, 2024

REPORT PREPARED BY: Mohammed Hussein, MAC #1801
Operations Manager

REPORT APPROVED BY: Daniel Ward
Vice President

VERSION: Revision 1 Final

TDLR Mold Assessment
Consultant
License: MAC1801
Expires: 09/22/2025



Honesty Environmental Services, Inc.

MOLD ASSESSMENT SUMMARY

On April 10, 2024, Mr. Jarrold Ardoin, a Texas Department of Licensing and Regulation (TDLR) Licensed Mold Assessment Consultant (MAC #1288) and EHS Specialist with Honesty Environmental Services, Inc, performed a mold assessment of the above-mentioned facility. The assessment included visual observations, temperature, relative humidity, and surface moisture measurements. This work was requested and defined by Ms. Mistey Reeves of Jefferson County.

The purpose of this work, conducted on June 7, 2024, was to determine the extent of suspect visible mold within the subject areas within the structure and establish a scope of remediation work for the facility. It is the understanding of HES that this work was requested as a result of visible suspect mold in the various areas of the facility.

As a result of the assessment, the following recommendations were made:

- Have a TDLR licensed Mold Assessment Consultant prepare a mold remediation protocol for the cleaning and/or removal of the mold impacted building materials identified.
- All sources of moisture shall be resolved prior to performing any mold remediation activities.
- The presence of mold in excess of 25 contiguous square feet in various areas of the building has been discovered. A mold protocol outlining a remediation scope of work has been developed and the mold contaminated building materials are to be remediated by a TDLR-licensed Mold Remediation Contractor following TDLR rules and regulations.
- Clean and/or remove the mold impacted building materials throughout the facility with an EPA approved biocide agent to prevent any further mold growth.
- Install HEPA filtration air scrubbers to filter out mold spores from the air. Allow the air scrubbers to run for at least 48-72 hours before testing the affected areas.
- Remove or professionally clean the HVAC system, including all the HVAC unit(s), duct work and vents after repairs are complete. Install a new HVAC air filter(s) after the cleaning is completed and ensure that the air filter(s) is changed periodically per the manufacturer's recommendations.
- The HVAC system was not operating at the time of the assessment, which may have contributed to the elevated humidity levels in the interior of the building. HES recommends the HVAC system be turned on once mold remediation is complete and be allowed to cycle to reduce the humidity levels.
- Mold may exist in wall cavities or chases.

MOLD REMEDIATION PROTOCOL & INTERIOR DEMOLITION

Eliminate Moisture Intrusion

Remediation should be conducted in accordance with the Texas Mold Assessment and Remediation Rules. Ensure that all moisture intrusion problems in the facility have been identified and completely repaired prior to beginning remediation work.

General Scope of Work:

A licensed mold remediation contractor will be responsible for the following:

1. All items indicated in Remediation Scope of Work for Remediation Activities.
 - a. Isolate the work area with a local containment made of six mil polyethylene. Maintain diminished negative pressure within the containment using a HEPA filter negative air machine. Cover all HVAC supply and return air registers in the work area with six-millimeter polyethylene. Post warning signs at the entrance to the work area in accordance with EPA, OSHA and TDLR requirements.
2. Install “air-scrubbers” equipped with HEPA filtration throughout the remediation area to clean the air during remediation and following completion of remediation.
3. As part of a qualified Mold Remediation Project, remove/clean or encapsulate all water damaged and/or mold impacted material as indicated in the Scope of Work. It is estimated that the areas listed in the scope of work will be impacted by the remediation. Based on visual inspection, additional quantities may exist inside wall cavity or behind walls. Mold growth that has been identified has the potential to grow, travel or increase in size due to conditions within the facility. **Contractor is responsible for verifying quantities in the field prior to the start of work.**
4. The integrity of the wall studs and all other structural members should be evaluated prior to remediation. **Contractor to remove 1 foot beyond any obvious water damage or visible mold growth.**
5. Upon completion of gross removal of building materials, complete the following for the building interior in the vicinity of the mold remediation project:
 - a. Wipe down and remove all surface molds from exposed surfaces and wall studs. Wash affected exposed surfaces and wall studs with an EPA registered disinfectant detergent, (i.e., Sporicidin or Microban), per manufacturer’s recommendations. Ensure that the material is thoroughly dried to prevent the spread of mold proliferation.
 - b. HEPA vacuum the base of the remediation areas in the vicinity of the work areas. Upon completion, operate “air scrubbers” equipped with HEPA filtration throughout the area to clean the air.

- c. DO NOT apply encapsulant.
- d. Upon completion of remediation, notify the licensed Mold Assessment Consultant so that a post remediation assessment can be conducted.
- e. Upon achieving clearance for all work areas, remove barriers.

Scope of Work – Pods 200/400, et.al.

This work area includes Pods 200 & 400, Control Room, Control Room Restroom, two Plumbing/Mechanical Chases, two Mechanical Rooms, two Mezzanine Mechanical Rooms, unless otherwise noted.

Interior Demolition

1. Remove and dispose of gypsum board ceiling/plywood ceiling and support system throughout.
2. Remove and dispose of lay-in ceiling tiles/grid and walls in and around control room and associated restroom.
3. Remove and dispose of HVAC air handlers, ductwork, makeup air fan, controls, grills, registers, mixing boxes, exhaust ducts and other interior mechanical equipment.
4. Remove and dispose of smoke purge makeup air fan, associated ductwork, and support system.
5. Remove and dispose of raised floor and associated supports in control room, associated restroom, and connected platforms in Pods 200/400 & Pods 100/300.
6. Remove and dispose of steps to raised floor and associated supports in Pods 200/400 & Pods 100/300.
7. Remove and dispose of carpet/glue and other floor finishes in Pods 200/400.
8. Remove and dispose of interior doors excluding hinges in Pods 200/400, control room, control room restroom, and doors in Pods 100/300 leading to control room. Door frames are to remain in place.
9. Remove and dispose of washing machines, dryers, and associated hardware.
10. Remove and dispose of light fixtures (including whips back to junction boxes), wall ornaments, cabinetry, desks, and millwork including control room and Pods 200 & 400.
11. Remove and dispose of 6 showers, shower drains, moisture barriers, and surrounding gypsum board.
12. Remove gypsum wall board in and around washer/dryer areas.
13. Remove gypsum wall board in offices and group rooms.
14. Remove gypsum wall board around exterior doors.
15. Leave gypsum wall board constructed above all ceilings throughout building.
16. Clean structure beams, columns, and insulation backing motors. Leave in place.
17. Clean 12 tubular daylighting devices, **SAVE FOR REUSE**. Leave in place, if possible.

Mold Remediation

18. Clean, biocide, and sanitize ceiling system hanger wires extending to roof deck for possible use by others.
19. Clean, biocide, and sanitize all floors (approximately 9,970 square feet) and remaining walls (approximately 22,840 square feet) in Pods 200/400, control room, control room restroom, mechanical room, mechanical room mezzanine, and plumbing mechanical chase. Leave in place.
20. Clean, biocide, and sanitize plumbing equipment/lines, mop sink, gas lines, tanks, hot water heaters (approximately 150 square feet) throughout including mechanical room, mezzanine, and plumbing/mechanical chase. Leave in place, to be removed by others.
21. Clean, biocide, and sanitize all exterior doors and frames (approximately 360 square feet) in Pods 200 & 400 and mechanical rooms. Leave in place; to be removed by others.
22. Clean, biocide, and sanitize 2 louvers (approximately 120 square feet) at mezzanine mechanical rooms. Leave in place.
23. Clean, biocide, and sanitize cell door control panels, electronic boxes, solid conduit electrical wiring, electrical data equipment. Leave in place, to be removed by others.
24. Clean, biocide, and sanitize door frames, cell beds/tables, eating tables, windows, mirrors, and restroom lavatories, toilets, former shower enclosures and restroom accessories (approximately 540 square feet). Leave in place, to be removed by others.
25. Clean, biocide, and sanitize fire alarm boxes, security alarm boxes, electrical boxes, motors, railings, vertical ladders, conduit, plumbing lines, and fire extinguishers. Leave in place, to be removed by others.
26. Maintain differential pressure utilizing negative air machines equipped with HEPA filters continuously throughout the project duration.
27. Conduct HEPA filter air scrubbing during cleaning/removal and for a minimum of 48 hours after cleaning and prior to clearance.

Scope of Work – Pods 100/300 (there is no demolition in these areas)

This work area includes Pods 100 & 300.

Mold Remediation Only

1. Clean, biocide, and sanitize all exposed surfaces including ceilings (approximately 9,970 square feet), walls (approximately 20,860 square feet), floors (approximately 9,970 square feet), doors (approximately 1,218 square feet), and door frames (approximately 870 square feet).
2. Clean, biocide, and sanitize exposed surfaces of cell bed/tables, eating tables, mirrors, windows, window frames, HVAC equipment/ducts/registers, restroom lavatories/toilets/showers/accessories, plumbing lines, mop sinks, washing machine/accessories, and dryers/accessories.

3. Clean, biocide, and sanitize fire alarm boxes, security alarm boxes, electrical boxes, motors, railings, vertical ladders, conduit, plumbing lines, and fire extinguishers.
4. Clean, biocide, and sanitize cell door control panels, electronic boxes, solid conduit electrical wiring, electrical data equipment.
5. Clean, biocide, and sanitize all remaining items not listed above located within Pods 100/300.
6. Maintain differential pressure utilizing negative air machines equipped with HEPA filters continuously throughout the project duration.
7. Conduct HEPA filter air scrubbing during cleaning/removal and for a minimum of 48 hours after cleaning and prior to clearance.

Personal Protective Equipment

The remediation contractor shall provide appropriate personal protective equipment for executing the work. Minimum recommendations are as follows:

- Minimum of Disposable clothing constructed of suitable materials such as DuPont Tyvek or equivalent.
- Minimum of Half-face respirators approved by NIOSH equipped with an N-95 filter.
- Minimum Headgear, eye protection, work gloves and footwear of size to properly fit individual workers and/or authorized visitors.

General Mold Remediation Requirements

- Isolate the entire remediation work area from the public using warning tape, posting an 8" x 11" yellow sign with black lettering stating "NOTICE: Mold Remediation Project in Progress.
- Perform all work using HEPA vacuum or HEPA filtered negative air machine to generate air changes. Exhaust air outside of the building in such a manner as to avoid exhaust air being re-introduced into the facility. Barriers and ventilation should be placed in such a manner as to prevent spore migration from the current work area to other areas within the building.
- Move all movable objects away from the wall. Clean and sanitize all non-porous equipment with EPA registered product. Discard any porous materials as these materials cannot be effectively cleaned and sanitized.
- Remove any additional mold/water damaged materials discovered during remediation activities (i.e., wall studs and supporting frame work).
- Clean walls, wall cavities, floors, and non-porous materials with an EPA registered disinfectant detergent per manufacturer's recommendations.
- Apply Encapsulant AFTER Mold Assessment Consultants Visual Inspection.
- Notify the Mold Assessment Consultant upon completion for clearance and cleanliness verification.

- Quantity of remediation is estimated, contractor is responsible for verifying quantities in the field.

Worker Decontamination

- Provide a decontamination area to allow workers to properly decontaminate prior to exiting the work area or removing materials from the work area. Use the following decontamination procedures for personnel in work area:
- Remove protective clothing before exiting the work area.
- Wet clean or HEPA-vacuum respirator, inner suit and exposed portions of the body in decontamination area.
- Maintain respiratory protection throughout the decontamination process.

POST REMEDIATION CLEARANCE REPORT

After remediation is complete for each work area, air scrubbers are recommended to be operated for at least 48 hours prior to the post remediation assessment. The post remediation assessment shall be conducted prior to build back.

The work area must be free from all visible mold, wood rot and water damage. Analytical and procedural inspection will be performed while the containment structure is still erected to determine adequate remediation.

The Mold Assessment Consultant will perform a post remediation clearance including the following:

- Visual inspection - A visual inspection of remediated areas for the absence of visible mold, dust, and wood rot prior to encapsulation.
- Analytical evaluation – Surface samples, as determined by the Mold Assessment Consultant prior to encapsulation.
- Surface samples must report no more than “**VERY LOW**” relative abundance of fungal spores according to Laboratory report.

Laboratory Surface Sample Relative Abundance Range			
N.D.	None Detected	No Fungal Spores Detected	PASS
<1+	Scattered Spores	1-20 fungal spores	PASS
1+	Very Low	21-100 fungal spores	PASS
2+	Low	101-1,000 fungal spores	FAIL
3+	Moderate	1,001-1,000 fungal spores	FAIL
4+	High	>10,000 fungal spores	FAIL

- **NO Stachybotrys** spores may be present for the containment to be considered clear.

A Post Remediation Clearance report will be issued by the Mold Assessment Consultant upon meeting clearance criteria.

SUBMITTALS

Submit proposed schedule and methods and operations to the Owner for review prior to the start of work. Include in the schedule the coordination for shut-off, capping and continuation of utility services as required.

Provide a detailed sequence of interior demolition and mold remediation work.

General Mold Remediation Requirements

Buildings and other structures to be demolished will be vacated and discontinued in use prior to the start of the work.

The Owner assumes no responsibility for the actual condition of structures to be demolished.

Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner insofar as practicable. However, variations within the structure may occur by Owner’s removal and salvage operations prior to the start of the demolition work.

Items of salvable value to the Contractor may be removed from the structure as the work progresses. Salvaged items must be transported from the Project Site as they are removed.

Storage or sale of removed items on the Project Site will not be permitted.

Historic artifacts, including time capsules, cornerstones and their contents, commemorative plaques and tablets, antiques, Christian figures, and other articles of historic significance remain the property of the Owner. Notify Owner’s Representative if such items are encountered and obtain acceptance regarding method of removal and salvage for Owner.

The use of explosives will not be permitted.

Do not bring explosives to the Project Site or use any explosives without the written consent of authorities having jurisdiction.

Conduct all work operations and the removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.

Maintain existing utilities indicated to remain, keep in service, and protect against damage during work.

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary service during interruptions to existing utilities, as acceptable to the governing authorities.

The Contractor will disconnect and seal the utilities serving the work area, prior to the start of work.

Contractor to coordinate with Owner the shut-off and capping of utility services serving the building as required.

Contractor shall protect the storm sewers, contain any runoff and keep adjacent streets and parking lots free of debris, dirt, mud, etc.

Structures to remain in place shall be protected from damage during all phases of work.

Contractor shall be responsible for preventing unauthorized personnel from entering the work area.

Contractor shall field verify the work indicated prior to work. Report discrepancies or concerns immediately to Owner or Owner's representative.

The Owner assumes no responsibility for the actual condition of structures to be demolished.

The demolition work specified herein shall be performed in a safe, satisfactory condition, starting with the ceiling and working down, with the safety and welfare of all people and property being of the highest priority.

The Contractor shall haul off all debris and unsalvageable materials; and no debris or rubble which may pose a threat to public safety will be left on the site overnight. No such debris or material will be placed on a sidewalk or public right-of-way so that it poses a danger to any person.

Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner insofar as practicable. However, variations within the structure may occur by Owner's removal and salvage operations prior to the start of the demolition work.

Storage or sale of removed items on the Project Site will not be permitted.

Comply with the governing regulations pertaining to environmental protection.

Do not use water when it may create hazardous or objectionable conditions such as ice, flooding and pollution.

Clean adjacent structures and improvements of all dust, dirt and debris caused by demolition operations, as directed by the Owner or Owner's Representative or governing authorities. Return adjacent areas to condition existing prior to the start of the work.

**DOCUMENT 00 0110
TABLE OF CONTENTS**

NUMBER TITLE

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

By Owner

COVER PAGE

00 0010	TABLE OF CONTENTS
00 0020	PROFESSIONAL SEAL

REPORTS

00 0030	Existing Conditions – Building Envelop	Aug, 2024
00 0040	Mold Assessment Report	May 2024
00 0050	Geotechnical Investigation	July 2024

DIVISION 01 – GENERAL REQUIREMENTS

01 1000	SUMMARY
01 2000	PRICE AND PAYMENT PROCEDURES
01 2100	ALLOWANCES
01 2200	UNIT PRICES
01 2300	ALTERNATES
01 2500	SUBSTITUTION PROCEDURES
01 3000	ADMINISTRATIVE REQUIREMENTS
01 3100	REQUESTS FOR INTERPRETATION
01 3250	CONSTRUCTION PROGRESS SCHEDULE
01 3553	SECURITY PROCEDURES
01 4000	QUALITY REQUIREMENTS
01 4100	REGULATORY REQUIREMENTS
01 4216	DEFINITIONS
01 4523	TESTING AND INSPECTING SERVICES (D+A STRUCTURE)
01 4533	CODE-REQUIRED SPECIAL INSPECTIONS
01 5000	TEMPORARY FACILITIES AND CONTROLS
01 5713	TEMPORARY EROSION AND SEDIMENT CONTROL
01 5719	TEMPORARY ENVIRONMENTAL CONTROLS
01 6000	PRODUCT REQUIREMENTS
01 6001	SUBSTITUTION REQUEST FORMS Bidding Phase
01 6003	SUBSTITUTION REQUEST FORMS Post Bid
01 6116	VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS
01 6116.01	ACCESSORY MATERIAL VOC CONTENT CERTIFICATION FORM
01 7000	EXECUTION AND CLOSEOUT REQUIREMENTS
01 7123	FIELD ENGINEERING
01 7610	TEMPORARY PROTECTIVE COVERINGS

- 01 7800 CLOSEOUT SUBMITTALS
- 01 7900 DEMONSTRATION AND TRAINING
- 01 9113 GENERAL COMMISSIONING REQUIREMENTS

DIVISION 02 -- EXISTING CONDITIONS

- 02 4100 DEMOLITIONS
- 02 4117 CIVIL DEMOLITIONS (D+A CIVIL)

DIVISION 03 -- CONCRETE

- 03 0580 UNDER SLAB VAPOR BARRIER RETARDER (D+A STRUCTURE)
- 03 2000 CONCRETE REINFORCING (D+A STRUCTURE)
- 03 2100 CONCRETE REINFORCEMENT (D+A CIVIL)
- 03 3000 CAST IN PLACE CONCRETE (D+A STRUCTURE)
- 03 5400 SELF-LEVELING UNDERLAYMENT

DIVISION 04 -- MASONRY

- 04 0100 MAINTENANCE OF MASONRY
- 04 0511 MASONRY MORTARING AND GROUTING
- 04 2001 BRICK VENEER
- 04 2200 CONCRETE UNIT MASONRY

DIVISION 05 -- METALS

- 05 4000 COLD FORMED FRAMING
- 05 5000 METAL FABRICATIONS

DIVISION 06 -- WOOD, PLASTICS, AND COMPOSITES

- 06 1000 ROUGH CARPENTRY
- 06 2000 FINISH CARPENTRY
- 06 4100 ARCHITECTURAL WOOD CASEWORK

DIVISION 07 -- THERMAL AND MOISTURE PROTECTION

- 07 0553 FIRE AND SMOKE ASSEMBLY IDENTIFICATION
- 07 2100 THERMAL INSULATION
- 07 2500 WEATHER BARRIERS
- 07 4113 METAL ROOF PANELS
- 07 4213 METAL WALL PANELS
- 07 4646 FIBER CEMENT SIDING
- 07 6200 SHEET METAL FLASHING AND TRIM
- 07 7100 ROOF SPECIALTIES
- 07 7123 MANUFACTURED GUTTERS AND DOWNSPOUTS
- 07 7200 ROOF ACCESSORIES
- 07 8400 FIRESTOPPING

07 9200 JOINT SEALERS

DIVISION 08 -- OPENINGS

08 1113 HOLLOW METAL DOORS AND FRAMES
08 1416 FLUSH WOOD DOORS
08 3100 ACCESS DOORS AND PANELS
08 4313 ALUMINUM-FRAMED STOREFRONTS
08 5113 ALUMINUM WINDOWS
08 6233 TUBULAR SKYLIGHTS
08 7100 DOOR HARDWARE (AA)
08 8000 GLAZING
08 8300 MIRRORS
08 8723 SAFETY AND SECURITY FILMS
08 9100 LOUVERS

DIVISION 09 -- FINISHES

09 2116 GYPSUM BOARD ASSEMBLIES
09 2236 METAL LATH
09 2400 PORTLAND CEMENT PLASTER
09 5100 ACOUSTICAL CEILINGS
09 6500 RESILIENT FLOORING
09 6700 FLUID-APPLIED EPOXY FLOORING
09 9113 EXTERIOR PAINTING
09 9123 INTERIOR PAINTING
09 9725 CONCRETE FLOOR SEALER

DIVISION 10 -- SPECIALTIES

10 1400 TRAFFIC AND PARKING SIGNAGE
10 2113.13 METAL TOILET COMPARTMENTS
10 2601 WALL AND CORNER GUARDS
10 2800 TOILET, BATH AND LAUNDRY ACCESSORIES
10 4116 EMERGENCY KEY BOX
10 4400 FIRE PROTECTION SPECIALTIES
10 7316 PREMANUFACTURED ALUMINUM CANOPIES

DIVISION 12 -- FURNISHINGS

12 2400 MANUAL ROLLER SHADES
12 3600 COUNTERTOPS
12 9300 SITE FURNISHINGS (KW)

DIVISION 13 -- SPECIAL CONSTRUCTION

NOT USED

DIVISION 14 -- CONVEYING EQUIPMENT

NOT USED

DIVISION 22 – PLUMBING (ASEI)

- 22 0518 ESCUTCHEONS FOR PLUMBING PIPING
- 22 0519 METERS AND GAGES FOR PLUMBING PIPING
- 22 0523 GENERAL DUTY VALVES FOR PLUMBING PIPING
- 22 0529 HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT
- 22 0553 IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT
- 22 0719 PLUMBING PIPING INSULATION
- 22 1116 DOMESTIC WATER PIPING
- 22 1119 DOMESTIC WATER PIPING SPECIALTIES
- 22 1123 DOMESTIC WATER PUMPS
- 22 1316 SANITARY WASTE & VENT PIPING
- 22 1319 SANITARY WASTE PIPING SPECIALTIES
- 22 3300 ELECTRIC, DOMESTIC-WATER HEATERS
- 22 4216 PLUMBING FIXTURES
- 22 4713 DRINKING FOUNTAINS
- 22 13 01 SANITARY SEWERAGE (D+A CIVIL)

DIVISION 23 – HEATING, VENTILATION AND AIR CONDITIONING (ASEI)

- 23 05 13 COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT
- 23 05 29 HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT
- 23 05 48 VIBRATION CONTROLS FOR HVAC
- 23 05 53 IDENTIFICATIONS FOR HVAC PIPING AND EQUIPMENT
- 23 05 93 TESTING, ADJUSTING, AND BALANCING FOR HVAC
- 23 0719 HVAC PIPING INSULATION
- 23 09 00 INSTRUMENTATION AND CONTROL FOR HVAC
- 23 11 23 FACILITY NATURAL-GAS PIPING
- 23 23 00 REFRIGERANT PIPING
- 23 31 13 METAL DUCTS
- 23 33 00 AIR DUCT ACCESSORIES
- 23 33 13 COUNTERBALANCED BACKDRAFT DAMPERS
- 23 37 13 DIFFUSERS, REGISTERS, AND GRILLES
- 23 81 26 SPLIT-SYSTEM AIR-CONDITIONERS.DOC
- 23 82 19 FAN COIL UNITS

DIVISION 26 – ELECTRICAL (ASEI)

- 26 0050 ELECTRICAL GENERAL PROVISIONS
- 26 0051 SUBMITTALS
- 26 0126 ELECTRICAL TESTING
- 26 0519 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
- 26 0526 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
- 26 0529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
- 26 0533 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
- 26 0543 UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS
- 26 0544 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING
- 26 0548 VIBRATION AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS
- 26 0553 IDENTIFICATION FOR ELECTRICAL SYSTEMS
- 26 0573 SHORT CIRCUIT ANALYSIS AND COORDINATION STUDY
- 26 0923 LIGHTING CONTROL DEVICES
- 26 2416 PANELBOARDS
- 26 2726 WIRING DEVICES
- 26 2813 FUSES
- 26 2816 ENCLOSED SWITCHES AND CIRCUIT BREAKERS
- 26 3213 PACKAGED ENGINE GENERATOR SYSTEM
- 26 4100 LIGHTNING PROTECTION SYSTEM**
- 26 5100 INTERIOR LIGHTING
- 26 5600 EXTERIOR LIGHTING

DIVISION 27 – COMMUNICATIONS (DATACOM)

- 27 0000 COMMUNICATIONS
- 27 0526 GROUNDING AND BONDING
- 27 1500 HORIZONTAL CABLING

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY (DATACOM)

- 28 0000 ELECTRONIC SECURITY
- 28 1000 ACCESS CONTROL
- 28 2300 VIDEO SURVEILLANCE
- 28 2600 INTERCOM

DIVISION 31 – EARTHWORK (D+A CIVIL)

- 31 0000 EARTHWORK
- 31 0000.01 EARTHWORK UNDER BUILDING PAD (D+A STRUCTURE)
- 32 0516 UTILITY STRUCTURES
- 31 1000 SITE CLEANING (KW)
- 31 1013 SITE PREPARATION (KW)
- 31 1100 CLEANING AND GRUBBING
- 31 2300 GRADING EXCAVATION AND FILL
- 31 2500 EROSION AND SEDIMENTATION CONTROL
- 31 6329 DRILLED CONCRETE PIERS AND SHAFTS (D+A STRUCTURE)

DIVISION 32 – EXTERIOR IMPROVEMENTS

- 32 1313 PORTLAND CEMENT CONCRETE PAVING (D+A CIVIL)
- 32 1319 CONCRETE PAVEMENT JOINTS (D+A CIVIL)
- 32 1273.19 CAST IN PLACE CONCRETE (D+A CIVIL)
- 32 1200 AGGREGATE SURFACING (KW)
- 32 1613 CONCRETE CURBS AND CURB AND GUTTER (D+A CIVIL)
- 32 3119 DECORATIVE METAL FENCES AND GATES
- 32 4116 LANDSCAPE DRAINAGE (KW)
- 32 8400 PLANTING IRRIGATION (KW)
- 32 91 19 LANDSCAPING GRADING (KW)
- 32 9200 LAWNS AND GRASSES (KW)
- 32 9300 EXTERIOR PLANTS (KW)
- 32 9313 TREES SHRUBS AND GROUNDCOVER (KW)
- 32 9400 LANDSCAPE PLANTIN ACCESSORIES (KW)
- 32 9813 LANDSCAPE ESTABLISHMENT PERIOD (KW)

DIVISION 33 – UTILITIES (D+A CIVIL)

- 33 0528 TRENCHING AND BACKFILLING FOR UTILITIES
- 33 3100 SANITARY UTILITY SEWERAGE PIPING
- 33 4100 STORM SEWAGE SYSTEM

END OF TABLE OF CONTENTS

**SECTION 26 41 00
LIGHTNING PROTECTION SYSTEM**

PART ONE - GENERAL

1.01 SECTION INCLUDES:

- A. Renovation and recertification of existing lightning protection system.
- B. Furnish all labor, materials, and items of service required for completion of a functional and unobtrusive lightning protection system.
- C. System furnished shall be the standard product of manufacturer's regularly engaged in the production of lightning protection equipment.
- D. Lightning protection system shall be as approved by Owner and Consultant.
- E. Cooperate with the roofing contractor and roofing material manufacturer to maintain roofing warranties.

1.02 RELATED SECTIONS:

- A. 02 07 20 - Minor Demolition and Renovation Work.
- B. 07 52 00 - Modified Bitumen Membrane Roofing.
- C. 07 62 00 - Sheet Metal Flashing and Trim.
- D. 07 92 00 - Joint Sealants.

1.03 STANDARDS:

- A. Lightning Protection Institute Installation Standard, LPI 175.
- B. Underwriters Laboratories, Inc. Installation Requirement, UL96A.
- C. National Fire Protection Association Lightning Protection Code, NFPA78.
- D. National Electrical Code (NEC).

1.04 SUBMITTALS:

- A. Product Data: Submit manufacturer's data sheets for each product to be used.
- B. Shop Drawings:
 - 1. Submit shop drawings.
 - 2. Prepare scaled roof plan locating and identifying all required details.
 - 3. Show type, size, and location of all grounding, down conductors, through roof/through wall assemblies, and roof conductors.
- C. Certificates:
 - 1. Underwriters Laboratories Inc. Master Label.
 - 2. Lightning Protection Institute Certification.
 - 3. Field-applied certification plates.

1.05 QUALITY ASSURANCE:

- A. Applicator:
 - 1. Employees Certified Master Installers.
 - 2. Company is UL listed.
 - 3. Member of Lightning Protection Institute.
- B. Regulatory Requirements: The lightning protection system shall conform to the requirements of the LPI, UL, NFPA, and NEC.
- C. Inspection: Contractor shall apply to Underwriters Laboratories Inc. for inspection and certification.

PART TWO - PRODUCTS

2.01 MATERIALS:

- A. Aluminum sized, weighted, and constructed to suit pre-application.
- B. Bolt type connectors and splicers shall be utilized.
- C. All mounting hardware shall be stainless steel.
- D. Ground rods shall be stainless steel of appropriate diameter.
- E. Air Terminals: Blunt end aluminum units.
- F. Braided Cable: Aluminum braided cable.
- G. Sealant Adhesive: Non-slump moisture curing structural sealant, gray in color, such as "M-1 Structural Sealant" by ChemLink, Inc.

PART THREE - EXECUTION

3.01 GENERAL INSTALLATION:

- A. The installation shall be accomplished by an experienced installation company that is UL listed, a member of the Lightning Protection Institute, United Lightning Protection Association qualified, and an employer of Certified Master Installers of lightning protection systems.
- B. A Certified Master Installer shall directly supervise the work.
- C. All equipment shall be installed in a neat, workmanlike manner.
- D. The system shall consist of a complete conductor network at the roof and include air terminals, connectors, splicers, bonds, copper downloads, and proper ground terminals.
- E. Lightning Protection System:
 - 1. Temporarily disconnect, remove, and salvage the lightning protection system including, but not limited to, cables, holders, clamps, and clips.
 - 2. Install the lightning protection system so that, upon completion, system can be re-certified by UL.
 - 3. Install equipment in a neat, workmanlike manner.
 - 4. System shall consist of a complete conductor network at the roof and include air terminals, connectors, splicers, bonds, and other associated hardware.
 - 5. Secure bases of air terminals and cable holders to inside vertical face of coping with appropriate fasteners.
 - 6. Set air terminal bases and metal cable holders in bed of sealant adhesive on top of cut section of protection pad installed on top of roof, where applicable.

3.02 COORDINATION:

- A. The lightning protection installer will work with other trades to ensure a correct, neat, and unobtrusive installation.
- B. It shall be the responsibility of the lightning protection installer to assure a sound bond to the main water service and to assure interconnection with other ground systems.

3.03 CLEANING:

- A. Remove trash, debris, equipment, and parts from the jobsite.
- B. Clean exposed metal surfaces, removing substances that might cause corrosion of metal components.

END OF SECTION



JC DIVERSION CENTER RENOVATION

3890 FM3514, BEAUMONT, TX 77705

B/A PROJ. 23141

05/02/2024
06/14/2024
08/23/2024
09/23/2024
11/01/2024
11/08/2024
11/08/2024

#:
SCHEMATIC DESIGN
DESIGN DEVELOPMENT
90% CONSTRUCTION DOCUMENTS
100% CONSTRUCTION DOCUMENTS
ADDENDUM # 01
ADDENDUM #03
ADDENDUM #04

1
2
3
4



100% CONSTRUCTION DOCUMENTS ADDENDUM #04

PROJECT TEAM:

ARCHITECT _____	BRAVE / ARCHITECTURE
CIVIL _____	DALLY + ASSOCIATES
LANDSCAPE _____	KW LANDSCAPE ARCHITECTS
STRUCTURAL _____	DALLY + ASSOCIATES
MEP _____	ASEI ENGINEERING
BUILDING ENVELOPE _____	PRICE CONSULTING, INC
AV/IT CONSULTANT _____	DATACOM DESIGN GROUP



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f
studio@bravearchitecture.com



CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

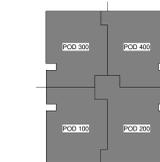
STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

BUILDING ENVELOPE
PRICE CONSULTING, INC
211 HIGHLAND CROSS DRIVE SUITE
200 HOUSTON, TX 77073
Consultant Contact

AV/IT CONSULTANT
DATACOM DESIGN GROUP
9111 JOLLYVILLE ROAD, SUITE 290
AUSTIN, TX 78759
Consultant Contact

KEYPLAN:



Ownership of Instruments of Service:
All reports, plans, specifications, computer files, field notes, notes & other documents and instruments prepared by BRAVE ARCHITECTURE are instruments of service that remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright therein.

SEAL:



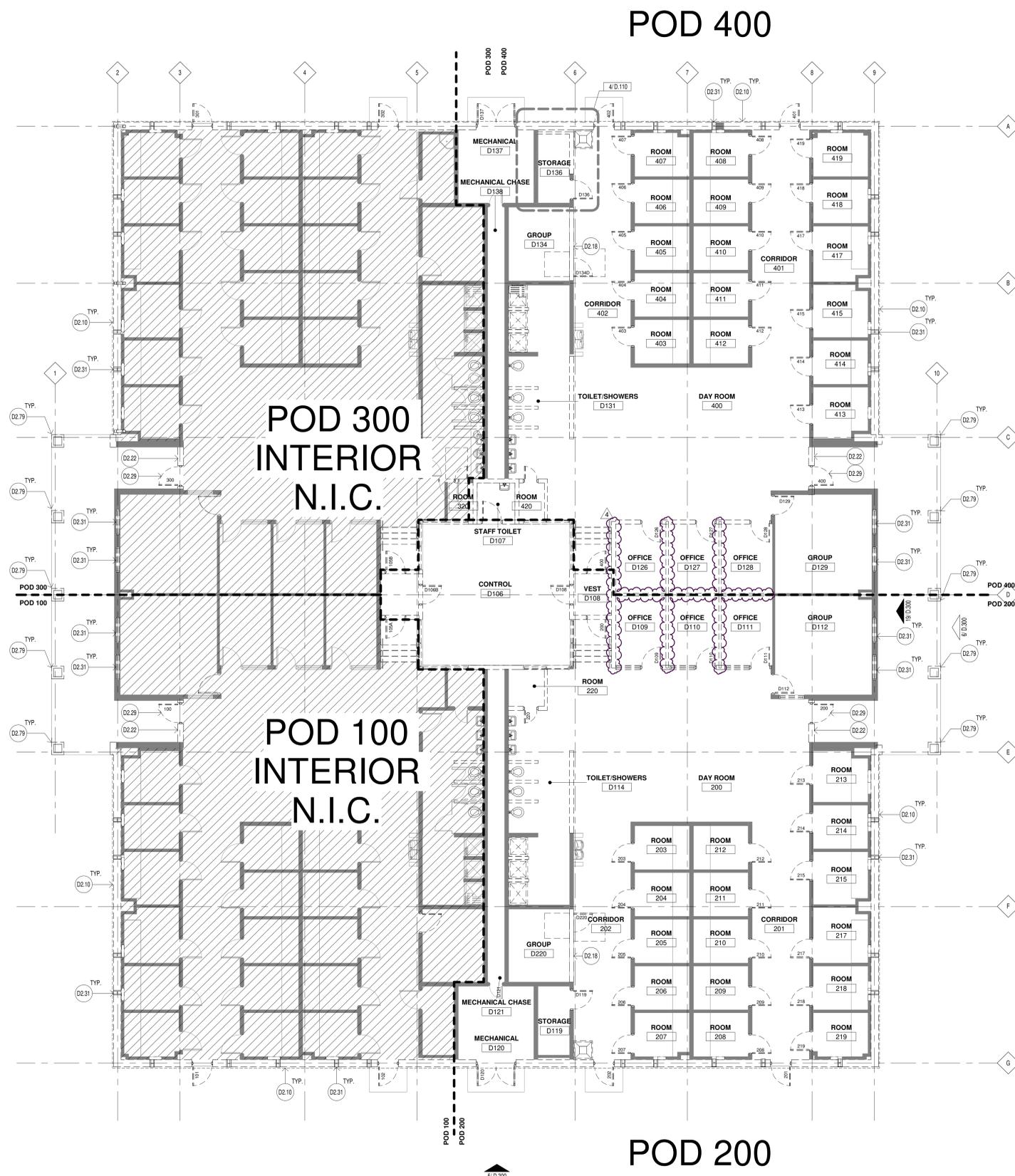
10/30/2024

FILE:
DRAWN BY:
CHECKED BY: Author
Checker

ISSUE:
05/02/2024 SCHEMATIC DESIGN
06/14/2024 DESIGN DEVELOPMENT
08/23/2024 90% CONSTRUCTION DOCUMENTS
09/23/2024 100% CONSTRUCTION DOCUMENTS
11/01/2024 ADDENDUM # 01
11/08/2024 ADDENDUM #04

DEMOLITION - OVERALL FLOOR PLAN

Scale: AS NOTED



- D2.10 Remove metal wall panels and metal stud walls, structure to remain
- D2.18 Remove wall, door and window in this area to receive new hollow metal frame and door. Re: proposed floor plans.
- D2.22 Remove wall finishes, patch and prepare surface for new construction
- D2.29 Remove door and frame patch and prepare surface for new construction
- D2.31 Remove window and frame, prepare for new windows, refer to floor plans for opening size
- D2.79 Remove column surround. Structure to remain.

MODIFIED DEMOLITION SCOPE OF WORK
Mod Remediation demolition scope has been modified, so Demolition required by GC has been reduced. Listed below are items allocated to remediation vs Remediation GC. Sheet notes on D.101, D.110, D.111, D.121 and D.125 revised.
Mod Remediation Demolition scope of work (Not in Contract)
a) All interior Doors from hinges down will be removed.
b) All exterior doors and frames will be cleaned wiped down, no demolition.
c) All CMU wall and interior dry wall with rods will be wiped down, no demolition.
d) All types of ceilings in POD 200 and 400 and all ceiling mounted lighting fixtures to be demolished.
e) Raised floor, steps, walls, windows, ceiling grid and ceiling tiles at Control Room to be demolished.
f) Existing mechanical ductwork and existing smoke purge system to be demolished.
Remediation GC Demolition scope of work (in Contract)
a) All interior Door Frames to be demolished as shown in the drawings.
b) All exterior doors and frames to be demolished as shown in the drawings.
c) All CMU wall and interior dry wall to be demolished as shown in the drawings.
d) Existing ductwork removed by remediation contractor may leave holes in the wall of the mechanical room/mezzanine floor or other spaces that needs to be patched and repaired.
e) Exterior soffit at entry canopy and exterior walls to be demolished as show in the drawings.
f) Existing roof patching at roofed locations to be repaired and patched as noted in the drawings.

KEYNOTES 2

- NOT IN SCOPE
- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED

- NOTES:
1. ALL UNIT DOORS TO BE REPLACED.
 2. REF. D.110 FOR TYPICAL DEMOLITION NOTES FOR ALL PODS, U.N.O.



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f
studio@bravearchitecture.com



CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

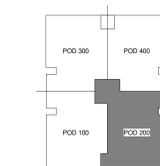
STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

BUILDING ENVELOPE
PRICE CONSULTING, INC
211 HIGHLAND CROSS DRIVE SUITE
200 HOUSTON, TX 77073
Consultant Contact

AV/IT CONSULTANT
DATACOM DESIGN GROUP
9111 JOLLYVILLE ROAD, SUITE 290
AUSTIN, TX 78759
Consultant Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE ARCHITECTURE, as instruments of service shall remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright therein.

SEAL:



10/30/2024

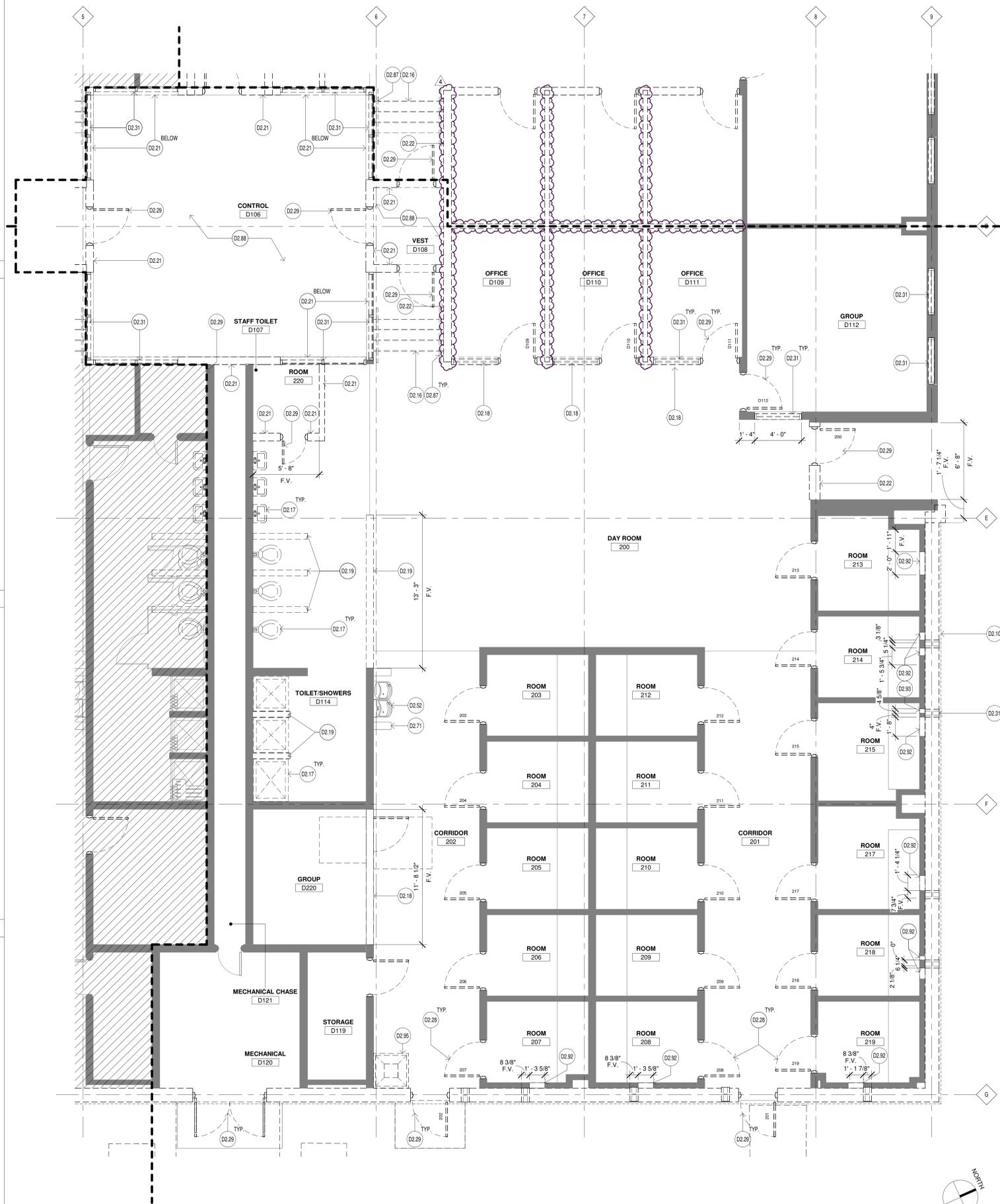
FILE:
DRAWN BY:
CHECKED BY: Author
Checker

ISSUE:
05/02/2024 SCHEMATIC DESIGN
06/14/2024 DESIGN DEVELOPMENT
08/23/2024 90% CONSTRUCTION DOCUMENTS
09/23/2024 100% CONSTRUCTION DOCUMENTS

1 11/01/2024 ADDENDUM # 01
4 11/08/2024 ADDENDUM # 04

DEMOLITION - ENLARGED FLOOR PLAN POD 200

Scale: AS NOTED



ENLARGED DEMOLITION FLOOR PLAN - POD B

1/4" = 1'-0" 5

ENLARGED FLOOR PLAN - D136 1/4" = 1'-0" 4

MODIFIED DEMOLITION SCOPE OF WORK

Mold Remediation demolition scope has been modified, so Demolition required by GC has been reduced. Listed below are items allocated to remediation vs Renovation GC. Sheet notes on D101, D110, D111, D121 and D125 revised.

Mold Remediation Demolition scope of work (Not in Contract)

- All Interior Doors from hinges down will be removed.
- All exterior doors and frames will be cleaned wiped down, no demolition.
- All CMU wall and interior dry wall with mold will be wiped down, no demolition.
- All types of ceilings in POD 200 and 400 and all ceiling mounted lighting fixtures to be demolished.
- Raised floor, steps, walls, windows, ceiling grid and ceiling tiles at Control Room to be demolished.
- Existing mechanical ductwork and existing smoke purge system to be demolished.

Renovation GC Demolition scope of work (in Contract)

- All Interior Door Frames to be demolished as shown in the drawings.
- All exterior doors and frames to be demolished as shown in the drawings.
- All CMU wall and interior dry wall to be demolished as shown in the drawings.
- Existing backwork removal by remediation contractor may leave holes in the wall of the mechanical room/mezzanine floor or other spaces that needs to be patched and repaired.
- Exterior soffit at entry canopy and exterior walls to be demolished as show in the drawings.
- Existing roof patching at rafter locations to be repaired and patched as noted in the drawings.

- D2.10 Remove metal wall panels and metal stud walls, structure to remain
- D2.16 Remove stair, patch and prepare surfaces for new floor finishes
- D2.17 Remove plumbing fixtures as noted
- D2.18 Remove wall, door and windows in this area to receive new hollow metal frame and door. Re: proposed floor plans.
- D2.19 Demo wall base, wall finish and wall where indicated; prepare for new construction
- D2.21 Remove wall, wall base, and floor finishes
- D2.22 Remove wall finishes; patch and prepare surface for new construction
- D2.28 Remove door
- D2.29 Remove door and frame; patch and prepare surface for new construction
- D2.31 Remove window and frame, prepare for new windows, refer to floor plans for opening size
- D2.52 Remove drinking fountain; prepare surface for new construction Re: MEP
- D2.71 Existing wall to remain
- D2.87 Remove railing; patch and prepare surface for new construction
- D2.88 Remove floor finishes, platform and platform structure; patch and prepare surface for new floor finishes
- D2.92 Remove interior CMU wall to receive new Window for new construction
- D2.93 Infill interior CMU wall to receive new Window for new construction
- D2.95 Remove mop sink, cap and remove plumbing fixture and drain; patch and prepare surface for new construction

- ENLARGED PLAN NOTES:
- POD - 200 AS SHOWN ON THIS PLAN
 - POD - 400 IDENTICAL TO THIS PLAN UNO.

KEYNOTES

- NOT IN SCOPE
- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED

- NOTES:
- TYPICAL DEMOLITION NOTES AT ALL PODS, U.N.O.
 - ALL UNIT DOORS TO BE REPLACED WITH TYPE 1, REFERENCE A.820
 - DEMO ON POD 400 IDENTICAL TO POD 200, U.N.O.

GENERAL NOTES 1



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f
studio@bravearchitecture.com



CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

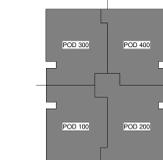
STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

BUILDING ENVELOPE
PRICE CONSULTING, INC.
211 HIGHLAND CROSS DRIVE SUITE
200 HOUSTON, TX 77073
Consultant Contact

AV/IT CONSULTANT
DATACOM DESIGN GROUP
9111 JOLLYVILLE ROAD, SUITE 290
AUSTIN, TX 78759
Consultant Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field notes, notes & other documents and instruments prepared by BRAVE ARCHITECTURE, as instruments of service shall remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all copyright, liability and other reserved rights, including the copyright therein.

SEAL:



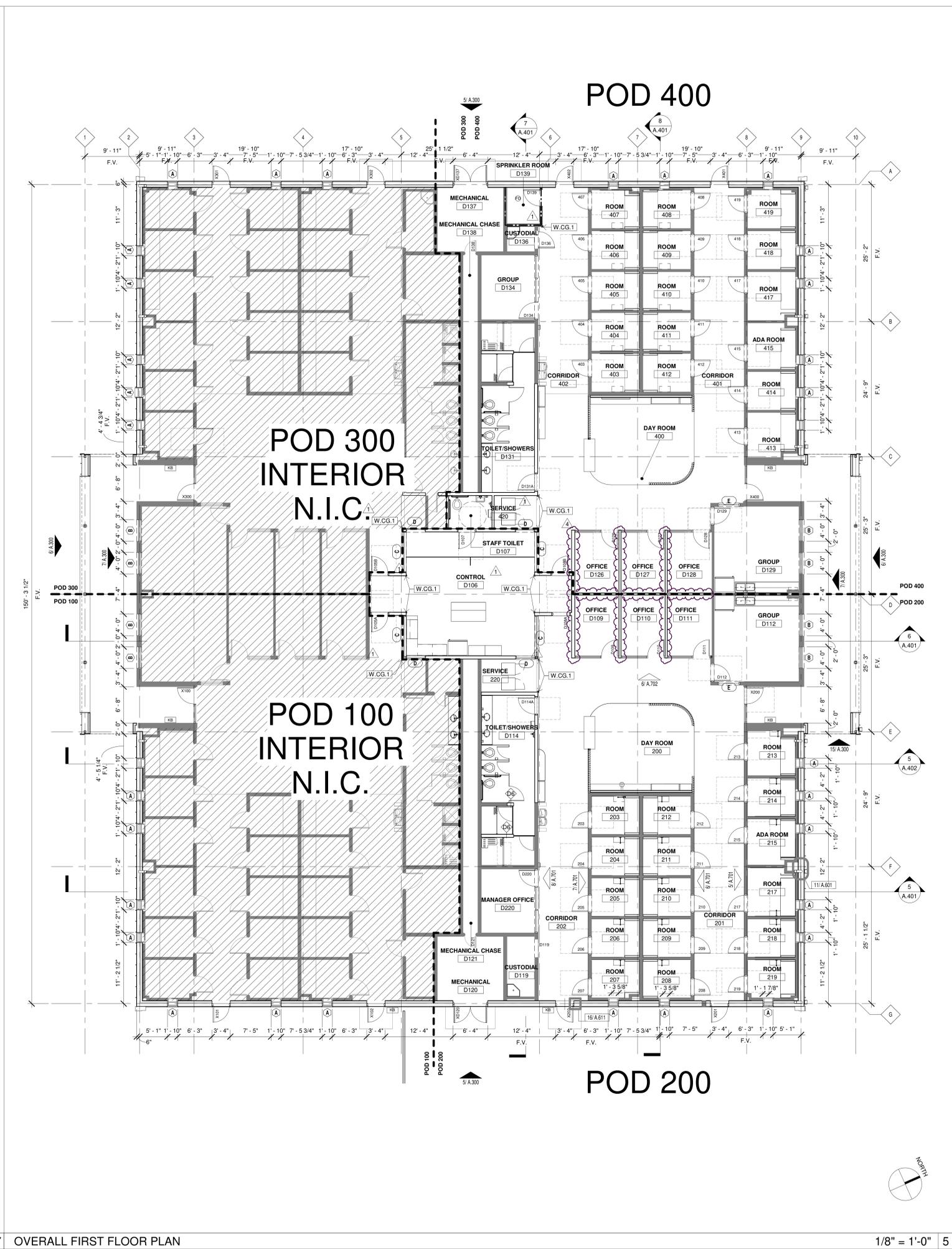
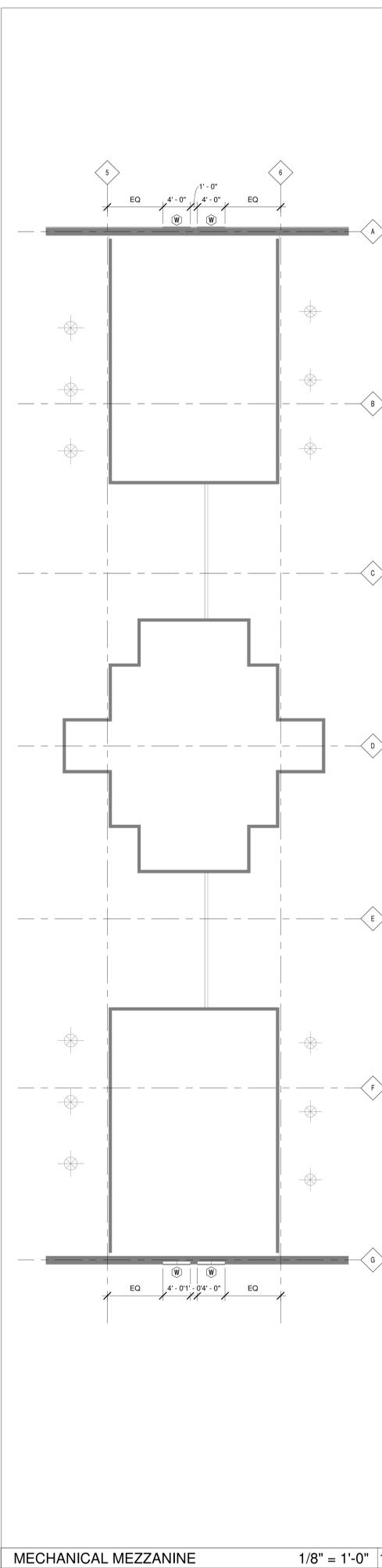
10/30/2024

FILE:
DRAWN BY: Author
CHECKED BY: Checker

ISSUE:
05/02/2024 SCHEMATIC DESIGN
06/14/2024 DESIGN DEVELOPMENT
08/23/2024 90% CONSTRUCTION DOCUMENTS
09/23/2024 100% CONSTRUCTION DOCUMENTS
1 11/01/2024 ADDENDUM # 01
4 11/08/2024 ADDENDUM #04

OVERALL FLOOR PLAN

Scale: AS NOTED



ROOF DRAIN NOTE:

- ADD CONCRETE SPLASH BLOCK AT EVERY ROOF DRAIN. LOCATION TO BE ALIGNED WITH ROOF DRAIN NOZZLE. RE: ROOF PLAN FOR QUANTITY AND LOCATION

NOTES:

THE FOLLOWING INSULATION VALUES TO BE USED PER BC TABLE C402.1.3

ROOFS:
ABOVE DECK: R-5G
METAL BUILDINGS: R-19 - R-11 LS

WALLS ABOVE GRADE:
METAL BUILDINGS: R-13 - R-6.5G
METAL FRAMED: R-13 - R-5G

KEYNOTES 2

- NOT IN SCOPE
- EXISTING WALLS
- NEW CONSTRUCTION
- MATCH LINES

NOTES:

- EXTERIOR WORK INCLUDES NEW WALL CONSTRUCTION, NEW WALL METAL PANELS, NEW RECOVERY ROOFING SYSTEM, NEW WINDOWS AND NEW EXTERIOR DOORS OF THE ENTIRE BUILDING.
- INTERIOR BUILDING OUT INCLUDES UPGRADING INTERIOR WALL AND FINISHES OF POD 300 AND POD 400 INCLUDING CONTROL ROOM, ALL MECHANICAL SPACES AND MEZZANINE FLOOR.
- SPRINKLER HEAD INSTALLATION AND RELATED WORK INCLUDED FOR ENTIRE BUILDING. PHASE I INCLUDES EXTERIOR
- REFERENCE A.110 FOR TYPICAL NEW CONSTRUCTION NOTES. U.N.O.
- ALL DIMENSIONS TO BE FIELD VERIFIED

LEGEND 1



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f

studio@bravearchitecture.com



CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

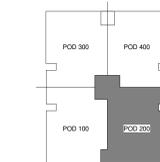
STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

BUILDING ENVELOPE
PRICE CONSULTING, INC
211 HIGHLAND CROSS DRIVE SUITE
200 HOUSTON, TX 77073
Consultant Contact

AV/IT CONSULTANT
DATACOM DESIGN GROUP
9111 JOLLYVILLE ROAD, SUITE 290
AUSTIN, TX 78759
Consultant Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field notes, notes & other documents and instruments prepared by BRAVE ARCHITECTURE, are instruments of service that remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright therein.

SEAL:



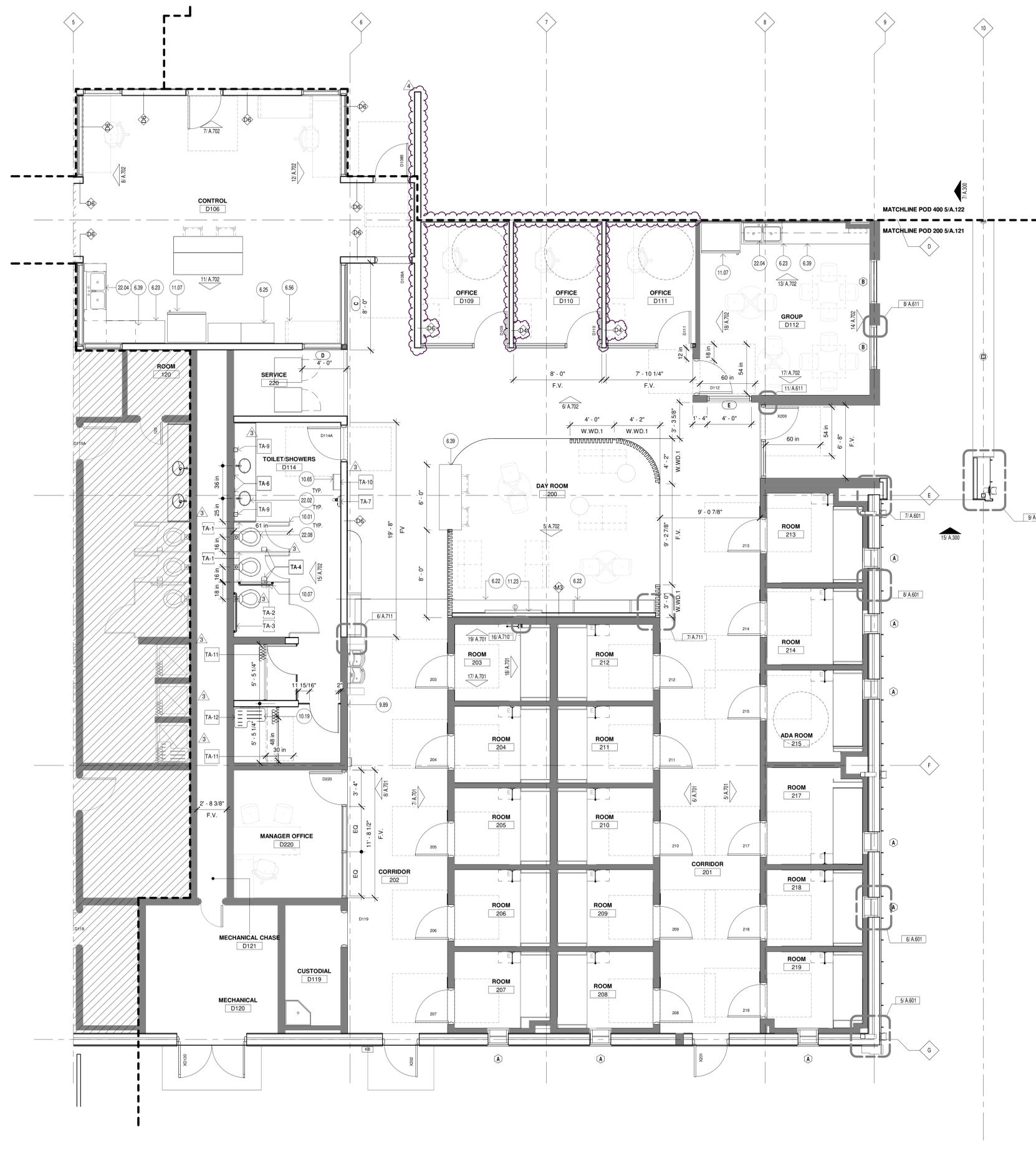
10/30/2024

FILE: 10/30/2024
DRAWN BY: Author
CHECKED BY: Checker

ISSUE:
05/02/2024 SCHEMATIC DESIGN
06/14/2024 DESIGN DEVELOPMENT
08/23/2024 90% CONSTRUCTION DOCUMENTS
09/23/2024 100% CONSTRUCTION DOCUMENTS
3 11/06/2024 ADDENDUM #03
4 11/08/2024 ADDENDUM #04

ENLARGED FLOOR PLAN - POD 200

Scale: AS NOTED



- 6.22 Millwork re: Millwork details
- 6.23 Base cabinets re: Millwork details
- 6.25 Tall cabinets re: Millwork details
- 6.26 Countertops re: Millwork details & Finish schedule
- 6.56 Desk - Furniture Owner Provided Owner Installed
- Existing wall: Field verify
- 9.89 Toilet partition(s) re: Accessory schedule
- 10.01 Grab bar, 36" long re: Accessory schedule
- 10.07 Folding shower seat re: Accessory schedule
- 10.19 Surface mounted waste receptacle re: Toilet Accessories Schedule
- 11.07 Refrigerator - Owner Provided Contractor Installed
- 11.23 Wall-mounted flat panel television
- 22.02 Counter-mount lavatory re: Plumbing
- 22.04 Two-compartment sink re: Plumbing
- 22.08 Wall-mount water closet re: Plumbing

NOTES:
THE FOLLOWING INSULATION VALUES TO BE USED PER IBC TABLE C402.1.3

- ROOFS:
ABOVE DECK: R-25g
METAL BUILDINGS: R-19 + R-11 LS
- WALLS ABOVE GRADE:
METAL BUILDING: R-13 + R-6.5g
METAL FRAMED: R-13 + R-5g

KEYNOTES

- NOT IN SCOPE
- EXISTING WALLS
- NEW CONSTRUCTION
- MATCHLINES

ENLARGED PLAN NOTES:
1. POD - 200 AS SHOWN
2. POD - 400 IDENTICAL TO POD 200 UNO.

- NOTES:
1. REFER TO TYPICAL NOTES FOR NEW CONSTRUCTION IN ALL PODS, U.N.G.
 2. FURNITURE SHOWN FOR REFERENCE ONLY AND TO BE PROVIDED BY OWNER
 3. ALL DIMENSIONS TO BE FIELD VERIFIED





4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f
studio@bravearchitecture.com



CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

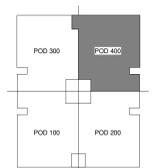
STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

BUILDING ENVELOPE
PRICE CONSULTING, INC
211 HIGHLAND CROSS DRIVE SUITE
200 HOUSTON, TX 77073
Consultant Contact

AV/IT CONSULTANT
DATACOM DESIGN GROUP
9111 JOLLYVILLE ROAD, SUITE 290
AUSTIN, TX 78759
Consultant Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field notes, notes & other documents and instruments prepared by BRAVE ARCHITECTURE are instruments of service that remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright therein.

SEAL:



10/30/2024

FILE: 10/30/2024
DRAWN BY:
CHECKED BY: Author Checker
ISSUE:
05/02/2024 SCHEMATIC DESIGN
06/14/2024 DESIGN DEVELOPMENT
08/23/2024 90% CONSTRUCTION DOCUMENTS
09/23/2024 100% CONSTRUCTION DOCUMENTS
3 11/06/2024 ADDENDUM #03
4 11/08/2024 ADDENDUM #04

ENLARGED FLOOR PLAN - POD 400

Scale: AS NOTED



- 10.06 Grab bar, 42" long, re: Accessory schedule
- 10.07 Grab bar, 36" long, re: Accessory schedule
- 22.01 Wall-mount lavatory, re: Plumbing
- 22.08 Wall-mount water closet, re: Plumbing
- 22.15 Floor drain, re: Plumbing

NOTES:
THE FOLLOWING INSULATION VALUES TO BE USED PER IBC TABLE C402.1.3
ROOFS:
ABOVE DECK: R-25G
METAL BUILDINGS: R-19 + R-11 LS
WALLS, ABOVE GRADE:
METAL BUILDING: R-13 + R-6.5G
METAL FRAMED: R-13 + R-5G

KEYNOTES

- NOT IN SCOPE
- EXISTING WALLS
- NEW CONSTRUCTION
- MATCHLINES

ENLARGED PLAN NOTES:
1. POD - 200 AS SHOWN
2. POD - 400 IDENTICAL TO POD 200 UNO.

- NOTES:**
1. POD 400 IS SIMILAR AS POD 200. ALL KEY NOTES, DIMENSIONS AND SCOPE OF WORK APPLIES FROM SHEET A-101, UNLESS NOTED OTHERWISE. REFER TO SHEET A-101 FOR CONTROL ROOM INFORMATION.
 2. REFER TO TYPICAL NOTES FOR NEW CONSTRUCTION IN ALL PODS, U.N.O.
 3. FURNITURE AND EQUIPMENTS ARE SHOWN FOR REFERENCE ONLY. THEY ARE TO BE OWNER PROVIDED CONTRACTOR INSTALLED.
 4. ALL DIMENSIONS TO BE FIELD VERIFIED





4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 w / 713.524.5868 f

studio@bravearchitecture.com



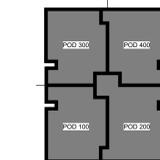
CIVIL
DAILY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TEXAS 77024
Landscape Contact

STRUCTURAL
DAVALY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASE ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE ARCHITECTURE are instruments of service that remain the property of BRAVE ARCHITECTURE. BRAVE ARCHITECTURE shall retain all copyright law, statutory and other reserved rights, including the copyright therein.

SEAL:



Date Signed: 11/08/24

FILE:
DRAWN BY:
CHECKED BY:
ISSUE:
4 11/08/2024 ADDENDUM #04

PLUMBING ABBREVIATIONS AND SYMBOLS

Scale: AS NOTED

PLUMBING SPECIFICATIONS

PLUMBING SPECIFICATIONS

NOTE: ALL SPECIFICATIONS MAY NOT APPLY

NOTICE TO OWNERS, ARCHITECTS AND CONTRACTORS REGARDING PRICING ESTIMATES
1. UNDER NO CIRCUMSTANCES SHALL THESE DRAWINGS BE "FINAL" OR "HARD BID" UNTIL THE PROJECT IS FULLY PERMITTED.
2. ALL PRELIMINARY PRICING EFFORTS SHALL BE CONSIDERED AS ESTIMATES ONLY AND SHALL INCLUDE SUCH CONTINGENCIES, ALLOWANCES, ALTERNATIVES, ETC. TO ACCOUNT FOR MODIFICATIONS AND ADDITIONS THAT WILL OCCUR TO THE DRAWINGS DURING FINALIZATION OF THE DESIGN AND PERMITTING PROCESS.

SCOPE OF WORK
1. ALL WORK REQUIRED CONSISTS OF PERFORMING ALL LABOR AND FURNISHING ALL MATERIALS, FIXTURES AND EQUIPMENT REQUIRED TO PROVIDE COMPLETE PLUMBING INSTALLATION AS INDICATED ON THE DRAWINGS. IT SHALL FURTHER INCLUDE FURNISHING AND INSTALLING ALL MISCELLANEOUS ITEMS REQUIRED FOR THE OPERATION OF THE SYSTEMS. WHETHER SPECIFICALLY CALLED FOR OR NOT. CONNECT ALL EQUIPMENT FURNISHED UNDER OTHER TRADES AS REQUIRED. DETERMINE IN ADVANCE THE SHUT-DOWN OF EXISTING UTILITIES.
2. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
3. SPECIAL INSPECTIONS: WHERE THE PLANS INDICATE SPECIAL INSPECTIONS AND REPORT, OR AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ), THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, HIRE AN INDEPENDENT THIRD PARTY INSPECTOR OR TESTING AGENCY TO PERFORM THE REQUIRED INSPECTIONS FOR THE TYPES OF WORK REQUIRED OR IDENTIFIED ON THE SPECIAL INSPECTION FORM. THE INSPECTOR SHALL SUBMIT A FINAL, SIGNED REPORT TO THE REGISTERED DESIGN PROFESSIONAL ENGINEER, PROVIDING TEST RESULTS AND STATING WHETHER THE ITEMS REQUIRING SPECIAL INSPECTION WERE IN COMPLIANCE WITH THE INSPECTION REQUIREMENTS. PROVIDE ADDITIONAL COST FOR ENGINEER'S SEALED LETTER OF APPROVAL.

CODES
1. ALL MATERIALS, EQUIPMENT AND INSTALLATION MUST COMPLY WITH ALL APPLICABLE LAWS, CODES, RULES, AND REGULATIONS, REQUIRED BY CITY, COUNTY, STATE, AND FEDERAL AGENCIES.

PERMITS
1. THIS CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES AND FEES REQUIRED BY STATE AND LOCAL AUTHORITIES.
2. COMBUSTIBLE MATERIALS SHALL NOT BE USED IN A NON-COMBUSTIBLE CONSTRUCTION TYPE BUILDING AS DEFINED BY THE BUILDING CODE. COMBUSTIBLE MATERIALS SHALL BE PROTECTED AS SPECIFIED BY THE ENGINEER AND ARCHITECT OF RECORD.

INSPECTION
1. FURNISH OWNER WITH CERTIFICATE OF INSPECTION AND APPROVAL BY LOCAL AUTHORITIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL WORK MUST BE INSPECTED.

EXISTING CONDITIONS
1. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE WORK TO BE PERFORMED, IN ADDITION TO WHAT IS SHOWN HEREIN, AND INCLUDE IN BID AN AMOUNT TO DO SUCH WORK.
2. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW SYSTEM.
3. PRIOR TO COMMENCING WORK, PLUMBING CONTRACTOR SHALL CLEAN, TEST AND INSPECT ALL EXISTING ABOVE AND BELOW GROUND SEWER LINES TO INSURE THAT EXISTING PIPING IS IN SATISFACTORY WORKING CONDITION. CONTRACTOR SHALL REPORT ANY DEFECTS/DEFICIENCIES TO OWNER/ARCHITECT IMMEDIATELY. SUBMIT ADDENDUM BID TO ACCOMMODATE ANY REPAIR/REPLACEMENTS AS REQUIRED.
4. CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.

SHOP DRAWING SUBMITTALS
1. PRIOR TO PROCUREMENT, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW FOR ALL EQUIPMENT, INCLUDING THE FOLLOWING:
A. DOMESTIC WATER, GAS, SANITARY AND STORM PIPING AND FITTINGS.
B. BALL, BUTTERFLY VALVES, PRESSURE REDUCING VALVES AND SOLENOID VALVES.
C. THERMAL INSULATION.
D. WATER HEATERS AND PUMPS.
E. OIL AND GREASE INTERCEPTORS.

MATERIALS
WATER PIPING
1. ALL PIPING SHALL CONFORM TO THE REQUIREMENTS OF THE ANSI SAFETY CODE AND BE FREE FROM ALL DEFECTS AND BE PROPERLY IDENTIFIED.
2. ABOVE GROUND SHALL BE:
1.1 TYPE "K" OR TYPE "M" HARD DRAWN COPPER TUBING CONFORMING TO ASTM B 88-72
2.2 CPVC PLASTIC PIPE CONFORMING TO ASTM D 2848, ASTM F 441-442, CSA B137.6
2.3 CROSSLINKED POLYETHYLENE (PEX) PLASTIC TUBING, IF ALLOWED BY THE AUTHORITY HAVING JURISDICTION, CONFORMING TO ASTM F 875, ASTM F 877, CSA B137.5
3. BELOW GROUND (INSTALLED IN CONCRETE OR UNDER CONCRETE) TYPE "K" SOFT DRAWN COPPER TUBING, CONFORMING TO ASTM B 88-72, SPIRALLY WRAP PIPING BELOW GRADE OR FLOORS WITH 3 LAYERS OF 20 MIL POLYETHYLENE TAPE WITH 1/2 OVERLAP. INSTALL NO PIPING JOINTS BELOW FLOOR.
4. ALL COPPER TUBING SHALL UTILIZE SWEAT FITTINGS SOLDERED WITH ASTM B 32, ALLOY 58NS, 58NA, OR E, LEAD FREE SOLDER.

SOIL, WASTE, VENT AND STORM PIPING:
1. ALL SOIL AND WASTE PIPING SHALL SLOPE MINIMUM OF 1/4" PER FOOT. PIPING 4" AND LARGER MAY SLOPE 1/8" PER FOOT SLOPE IF SITE CONDITIONS WONT ALLOW 1/4" PER FOOT SLOPE.
2. CHANGES IN DIRECTION, WHERE SPACE PERMITS, SHALL BE MADE WITH LONG SWEEP BENDS, Y-FITTINGS AND 1/8 OR 1/16 BENDS OR COMBINATION AND 1/8 BENDS.
3. SANITARY TEE BRANCHES AND 1/4" BENDS MAY BE USED FOR CONNECTION OF BRANCH LINES TO FIXTURES AND FROM STACKS TO HORIZONTAL DRAINAGE.
4. MATERIALS:
4.1 CAST IRON: NO-HUB CAST IRON, CSPI DESIGNATION 301-12 FOR ALL SOIL, WASTE AND VENT PIPING WITH STANDARD WEIGHT FITTINGS. USE STAINLESS STEEL NO-HUB CAST IRON COUPLINGS THROUGHOUT THE PROJECT. INSTALL PIPE AND FITTINGS PER CSPI DESIGNATION 301-12. RESTRAIN PIPE AND FITTINGS USING ENGINEERED (HOLDTIRE OR EQUAL) ASSEMBLIES INSTALLED PER MANUFACTURERS INSTRUCTIONS.
4.2 GALVANIZED IRON: SCHEDULE 40 STANDARD WEIGHT CONFORMING TO ASTM A72-68. USE WROUGHT IRON SCREWED FITTINGS TO MATCH PIPE. MAKE ALL SCREWED JOINTS WITH TEFLON TAPE. (NO GALVANIZED IRON OR STEEL PIPE SHALL BE USED UNDERGROUND.)
4.3 ABS: ABS PIPING CONFORMING TO ASTM D2687-78 FOR ALL SOIL, WASTE AND VENT PIPING WITH MATCHING FITTINGS. ABS ABOVE AND BELOW GRADE FOR COMBUSTIBLE CONSTRUCTION OR ALLOWED BY LOCAL JURISDICTION. ABS FOR NON-COMBUSTIBLE CONSTRUCTION BELOW GRADE ONLY.
4.4 PVC: SCHEDULE 40 SOLID WALL PIPE AND DWV FITTING SYSTEM. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM PVC COMPOUND WITH A CELL CLASS OF 1254 PER ASTM D 1784 AND CONFORM WITH NATIONAL SANITATION FOUNDATION (NSF) STANDARD 14. PIPE AND FITTINGS SHALL BE IRON PIPE SIZE (IPS) CONFORMING TO ASTM D 1785 AND ASTM D 2865. ALL PIPE AND FITTINGS TO BE PRODUCED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. SOLVENT CEMENTS SHALL CONFORM TO ASTM D 2564. PRIMER SHALL CONFORM TO ASTM F 656. THE SYSTEM IS INTENDED FOR NON-PRESSURE DRAINAGE APPLICATIONS WHERE THE TEMPERATURE WILL NOT EXCEED 140° F.

PIPE HANGERS
1. PIPE HANGERS SHALL BE MICHIGAN #400 FOR STEEL PIPING, #402 FOR GAS AND COPPER PIPING. SUPPORT PIPING 1-1/4" AND SMALLER 1/2" O.C. AND PIPING 1-1/2" AND LARGER 10" O.C. WASTE PIPING SHALL BE SUPPORTED AT 4'-0" O.C. PROVIDE 3/8" DIA. THREADED ROD PROPERLY BRACED FOR SEISMIC RESTRAINT ZONE 2.

PIPE INSULATION:
1. ALL DOMESTIC COLD WATER PIPING SHALL HAVE 1/2 INCH THICK FIBERGLASS INSULATION WHERE DAMAGE TO ANY BUILDING COMPONENTS WILL OCCUR AS A RESULT OF CONDENSATION FORMING ON COLD WATER PIPING.
2. ALL DOMESTIC HOT WATER AND HOT WATER RETURN PIPING SHALL HAVE 1 INCH THICK FIBERGLASS INSULATION.
3. PIPE INSULATION SHALL HAVE AN ASJ JACKET AND A THERMAL CONDUCTIVITY (K-FACTOR) NOT EXCEEDING 0.27 AT 75 DEGREES MEAN TEMPERATURE.
4. THE MAXIMUM FIRE HAZARD CLASSIFICATION OF THE INSULATION SYSTEM SHALL NOT HAVE MORE THAN A FLAME SPREAD OF 25. A FUEL CONTRIBUTED RATING OF 50, AND A SMOKE DEVELOPED RATING OF 50 WHEN TESTED IN ACCORDANCE WITH U.L. REQUIREMENTS. PIPE COVERING SHALL BEAR THE U.L. LABEL.
5. INSULATE ALL FITTINGS, VALVE BODIES ETC. WITH SINGLE OR MULTIPLE LAYERS OF INSULATION WITH PREFABRICATED FITTINGS WITH P.V.C. JACKETS.
6. SUBMIT SHOP DRAWINGS FOR ALL INSULATION MATERIALS.

CLEAN OUTS: (ZURN, JOSAM, SAME)
1. CLEAN OUTS SHALL BE THE SAME SIZE AS THE LARGEST DOWNSTREAM PIPE IT IS SERVING. NO PLASTIC CLEAN OUTS WILL BE ACCEPTED. PLUGS SHALL BE BRONZE.

PIPE EXPANSION:
1. ALL PIPE CONNECTIONS SHALL BE INSTALLED TO ALLOW FOR FREEDOM OF MOVEMENT OF THE PIPING DURING EXPANSION AND CONTRACTION.
2. EXPANSION LOOPS AND EXPANSION JOINTS WITH PROPER ANCHORS AND GUIDES SHALL BE PROVIDED AS REQUIRED. ANCHORS AND JOINTS SHALL BE SUBJECT TO THE REVIEW OF THE ARCHITECT.
3. ALL SUPPORTS SHALL BE INSTALLED TO PERMIT THE MATERIALS TO CONTRACT AND EXPAND FREELY WITHOUT PUTTING A STRAIN OR STRESS ON ANY PART OF THE SYSTEM. PROVIDE ANCHORS AS REQUIRED.

UNIONS
1. PROVIDE A UNION BETWEEN CONNECTIONS TO EACH FIXTURE, DEVICE OR PIECE OF EQUIPMENT FOR DISCONNECTING OF PIPING.
2. CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.

PIPE INSTALLATION
1. INSTALL PIPING TO BEST SUIT FIELD CONDITIONS. COORDINATE LAYOUT OF PIPING WITH DUCT WORK AND OFFSET PIPING AS REQUIRED TO CLEAR NEW WORK.
2. ALL VENTS THROUGH ROOF SHALL BE MINIMUM 10'-0" REMOVED FROM ALL AIR INTAKES, EVAPORATIVE COOLERS, ETC.
3. CONTRACTOR SHALL PROTECT ALL WASTE AND SUPPLY PIPING TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURERS SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL SUPPLIES SHALL BE VALVED.
4. A WATER-HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED. INCLUDES TOILET FLUSH VALVE GROUPS AND CONNECTIONS TO ALL SOLENOID ACTIVATED VALVES. WATER-HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SHALL CONFORM TO ASSE 1010.
5. PROVIDE MEANS OF PREVENTING DISSIMILAR METAL CONTACT BETWEEN ALL PIPING MATERIALS FROM ANY OTHER METAL OR STRUCTURAL MEMBER TO PREVENT GALVANIC ACTION BETWEEN THE TWO METALS.
6. WHEN WATER PIPE AND SEWER ARE Laid PARALLEL TO EACH OTHER, ONE OF THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
A. THE HORIZONTAL DISTANCE BETWEEN THE WATER PIPE AND SEWER SHALL NOT BE LESS THAN SIX (6) FEET.
B. EACH LINE SHALL BE LAID IN A SEPARATE TRENCH, OR IN BETWEEN FILLED WITH COMPACT FILL.
C. THE WATER SERVICE PIPE SHALL BE PLACED IN THE TRENCH WITH THE BUILDING DRAIN AND/OR BUILDING SEWER. PROVIDED THE BOTTOM OF THE WATER SERVICE PIPE, AT ALL POINTS SHALL BE AT LEAST TWELVE (12) INCHES ABOVE THE TOP OF THE SEWER LINE, AND SHALL BE PLACED ON A SOLID SHELVE EXCAVATED AT ONE SIDE OF THE COMMON TRENCH.
D. WATER SERVICE AND SEWER SHALL BE CONSTRUCTED OF MATERIALS APPROVED FOR USE WITHIN A BUILDING AND PRESSURE TESTED TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.

ACCESSIBILITY
1. THE INSTALLATION OF ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER INDICATING OR RECORDING DEVICES, OR SPECIALITIES REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION, REMOVAL, OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.

TESTING
1. FILL DOMESTIC WATER SYSTEM WITH WATER AND PRESSURE TO 125 PSIG AND MAINTAIN FOR (4) FOUR HOURS WITH NO PRESSURE DROP.
2. FILL WASTE, SOL, VENT AND STORM DRAINAGE SYSTEMS WITH WATER TO HIGHEST POINT OF THE SYSTEM. HOLD PRESSURE FOR (4) HOURS WITH NO DROP IN WATER LEVEL.
3. IF THE SYSTEM IS TESTED IN SECTIONS, EACH SECTION SHALL BE FILLED WITH WATER BUT NO SECTION SHALL BE TESTED WITH LESS THAN A TEN FOOT HEAD OF WATER.
4. GAS TESTING:
A. AIR PRESSURE TEST SYSTEM TO 75 PSIG AND MAINTAIN FOR A PERIOD OF (8) HOURS WITH NO PRESSURE DROP.
B. PURGE LINE WITH NITROGEN AT JUNCTION WITH MAIN LINE AT GAS METER TO REMOVE ALL AIR. CLEAR COMPLETE LINE BY ATTACHING A TEST PILOT FIXTURE AT CAPPED STUB-IN LINE AT THE BUILDING LOCATION, AND LET GAS FLOW UNTIL TEST PILOT IGNITES. CAUTION: FAILURE TO PURGE SYSTEM MAY RESULT IN EXPLOSION WITHIN 1' LINE WHEN AIR-TO-GAS IS AT CORRECT MIXTURE.
5. TEST AND OBTAIN APPROVAL ON ALL UNDERGROUND PIPING BEFORE COVERING WORK. PROVIDE WRITTEN TESTING REPORT TO ARCHITECT.

CLEANING
1. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL ACCEPTANCE, ALL PARTS OF THE WORK INSTALLED UNDER THIS SPECIFICATION SHALL BE THOROUGHLY CLEANED. ALL EQUIPMENT, FIXTURES, PIPE, VALVES AND FITTINGS SHALL BE CLEANED OF GREASE, METAL CUTTINGS AND SLUDGE WHICH MAY HAVE ACCUMULATED BY OPERATION OF THE SYSTEM FOR TESTING HEREIN BEFORE SPECIFIED OR FROM OTHER CAUSES.

STERILIZATION
1. STERILIZE THE ENTIRE WATER DISTRIBUTION SYSTEM THOROUGHLY WITH A SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE. FOR CHLORINATING MATERIALS USE SODIUM HYPOCHLORITE SOLUTION CONFORMING TO FEDERAL SPEC. 0-8-441, GRADE D, AND INTRODUCE INTO THE SYSTEM BY USE OF A CORK AT A SLOW, EVEN, CONTINUOUS RATE. ALLOW THE STERILIZING SOLUTION TO REMAIN IN THE SYSTEM FOR A PERIOD OF 24 HOURS, DURING WHICH TIME ALL VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER STERILIZATION, FLUSH THE SOLUTION FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUAL CHLORINE CONTENT IS NO GREATER THAN 0.2 PARTS PER MILLION. PLATE COUNT SHALL INDICATE COUNT LESS THAN 100 BACTERIA PER CC.

GUARANTEE
1. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP FROM DEFECT OF MATERIAL AND WORKMANSHIP, AND SHALL REPLACE OR REPAIR, WITHOUT ADDITIONAL COST TO THE OWNER, ALL DEFECTIVE MATERIAL AND WORKMANSHIP FOR A PERIOD (1) YEAR AFTER COMPLETION AND ACCEPTANCE.

COORDINATION
1. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH OTHER TRADES AFFECTED BY EACH OTHERS WORK AND FOR CUTTING AND REFINISHING OF EXISTING WALLS, FLOORS, SOLID AND SUSPENDED CEILINGS ETC., WHERE REQUIRED BY WORK SHOWN AND NOTED HEREIN. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL AND STRUCTURAL MEMBERS, ITEMS SUCH AS PIPE, FITTINGS, ETC., SHALL NOT BE INSTALLED IN CONFLICT WITH EQUIPMENT. COORDINATE ALL CUTTING AND PATCHING WITH THE GENERAL CONTRACTOR. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HIS WORK. OBTAIN WRITTEN PERMISSION OF ARCHITECT BEFORE PROCEEDING WITH ANY CUTTING OR PATCHING OF STRUCTURAL SYSTEMS.

SUBSTITUTIONS
1. SUBSTITUTIONS OF MATERIALS OR PRODUCTS SHOWN HEREIN SHALL BE AT THE OWNERS, ARCHITECTS OR ENGINEER'S WRITTEN APPROVAL ONLY. WITH COPIES OF APPROVAL SENT TO ARCHITECT FOR PROJECT FILE. DEVIATION FROM THESE DRAWINGS WILL NOT BE ALLOWED. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL SUBSTITUTIONS AND ALL COSTS OF CHANGES INCURRED BY THEMSELVES AND OTHERS DUE TO THE SUBSTITUTIONS.

RECORD DRAWINGS
1. PROVIDE TWO (2) SETS OF "RECORD" DRAWINGS (AS-BUILTS) AND TWO (2) BOUND SETS OF ALL OPERATIONS MANUALS, DIAGRAMS, SERVICE CONTRACTS, GUARANTEES, ETC., ONE FOR THE OWNER AND ONE FOR BUILDING OPERATIONS DEPARTMENT. OBTAIN A COMPLETE SET OF RECORD DRAWINGS OF EXISTING CONSTRUCTION FROM THE OWNERS FOR INFORMATION ON EXISTING CONDITIONS. INCORPORATE ANY EXISTING CONDITIONS ON NEW RECORD DRAWINGS REQUIRED TO SHOW THE "INSTALLED" INSTALLATION.

ORDER OF PRECEDENCE OF DOCUMENTS
1. SHOULD A CONFLICT ARISE BETWEEN CONSTRUCTION DOCUMENTS, THE ORDER OF PRECEDENCE SHALL BE:
A. SPECIAL PROVISIONS
B. GENERAL PROVISIONS
C. SPECIFICATIONS
D. DETAILS ON DRAWINGS
E. PLAN DRAWINGS
2. THE ENGINEER OF RECORD SHALL BE NOTIFIED BEFORE A DECISION IS MADE.

PLUMBING LEGEND

SYMBOL	ABBR.	DESCRIPTION
—	W	WASTE OR SEWER PIPING
—	CWV	COMBINATION WASTE AND VENT
—	GW	GREASE WASTE
---	V	VENT PIPING
---	CW	COLD WATER PIPING
---	HW	HOT WATER PIPING
---	HWR	HOT WATER RETURN PIPING
---	G	NATURAL GAS PIPING
---	FW	FILTERED WATER PIPING
---	RD	ROOF DRAIN LEADER
---	RD	ROOF OVERFLOW DRAIN LEADER
---	DCD	INDIRECT OR CONDENSATE DRAIN
---	-	ISOMETRIC CONTINUATION
○	-	PIPE RISE
○	-	PIPE DROP
○	-	PIPE DROP UNDER A HORIZONTAL PIPE
○	-	PIPE CAP
—	-	PIPE BREAK
⊥	GV	GLOBE VALVE
⊥	GBV	GLOBE VALVE
⊥	BV	BALL VALVE
⊥	CV	CHECK VALVE
⊥	PV	PLUG VALVE
⊥	SV	SOLENOID VALVE
⊥	-	BALANCING VALVE
⊥	BV	BUTTERFLY VALVE
⊥	-	UNION
⊥	-	REDUCER
⊥	HB	HOSE BIBB
⊥	GPR	GAS PRESSURE REGULATOR
⊥	F	FIRE SPRINKLER PIPING
⊥	FS	FLOOR SINK
⊥	FD	FLOOR DRAIN
⊥	FCOISCO	FLOOR OR SURFACE CLEAN OUT
⊥	WCO	WALL CLEANOUT
⊥	RDOOD	ROOF DRAIN / OVERFLOW DRAIN
⊥	VTR	VENT THRU ROOF
⊥	TP	TRAP PRIMER
⊥	WHA	WATER HAMMER ARRESTOR
⊥	PDP	POSITIVE DISPLACEMENT PUMP
⊥	CP	CENTRIFUGAL PUMP
⊥	POC	POINT OF CONNECTION BETWEEN NEW AND EXISTING

NOTE: ALL SYMBOLS MAY NOT APPLY

REFERENCE SYMBOLS

	GENERAL REFERENCE DESIGNATES SHEET NUMBER		EQUIPMENT NAME AND NUMBER
	DETAIL REFERENCE TOP DESIGNATES DETAIL NUMBER BOTTOM DESIGNATES SHEET NUMBER		SHEET KEYNOTE NUMBER
	SECTION REFERENCE TOP DESIGNATES SECTION NUMBER BOTTOM DESIGNATES SHEET NUMBER		REVISION NUMBER
			ELEVATION SYMBOL
			NEW CONNECTION TO EXISTING

2021 IECC COMPLIANCE NOTES

- WATER-HEATING EQUIPMENT NOT SUPPLIED WITH INTEGRAL HEAT TRAPS AND SERVING NON-CIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON SUPPLY AND DISCHARGE PIPING ASSOCIATED WITH EQUIPMENT.
- PROVIDE MINIMUM 1" PIPE INSULATION HAVING A CONDUCTIVITY NOT GREATER THAN 0.27 BTU PER INHR FT2/ DEG F ON AUTOMATIC-CIRCULATING HOT WATER SYSTEMS. PROVIDE MINIMUM 1/2" INSULATION HAVING A CONDUCTIVITY NOT GREATER THAN 0.27 BTU PER IN.HR FT2/ DEG F FOR FIRST 8 FEET OF NON-CIRCULATING SYSTEMS WITHOUT INTEGRAL HEAT TRAPS.
- SERVICE WATER-HEATING EQUIPMENT SHALL BE PROVIDED WITH CONTROLS TO ALLOW A SET POINT OF 110 DEG F FOR EQUIPMENT SERVING DWELLING UNITS AND 90 DEG F FOR EQUIPMENT SERVING OTHER OCCUPANCIES. THE OUTLET TEMPERATURE OF LAVATORIES IN PUBLIC FACILITY RESTROOMS SHALL NOT EXCEED 110 DEG F.
- WATER-HEATING EQUIPMENT AND HOT WATER STORAGE TANKS SHALL MEET THE REQUIREMENTS OF THE CURRENT IECC CODE. THE EFFICIENCY SHALL BE VERIFIED THROUGH DATA FURNISHED BY THE MANUFACTURER OR THROUGH CERTIFICATION UNDER AN APPROVED CERTIFICATION PROGRAM.

CODE INFORMATION

- 2021 IBC, 2021 UPC, 2021 IECC & CITY OF BEAUMONT AMENDMENTS. ALL SYSTEMS SHALL BE IN COMPLIANCE WITH THE ABOVE CODES AS ADOPTED BY THE CITY OF BEAUMONT.
- EQUIPMENT AND APPLIANCES SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL. IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THIS CODE. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION PER THE PLUMBING CODE.
- MATERIALS EXPOSED WITHIN PLENUMS SHALL HAVE A FLAME SPREAD RATING INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE TO ASTM E84.
- ALL MATERIAL INSTALLED WITHIN PLENUMS SHALL BE APPROVED FOR THAT LOCATION AND PLENUM RATED. TYPICAL PER IBC 602.

TEXAS ENGINEER FIRM REGISTRATION #F-15201

ASEIENGINEERING 350 Glenborough Dr. #270 Houston, TX 77067
www.aseiengineering.com o: 713-300-9579
THESE DRAWINGS AND ASSOCIATED DOCUMENTATION CONTAIN INFORMATION, EXERCISES AND DATA THAT ARE THE SOLE PROPERTY OF ASEI ENGINEERING, INC. THIS INFORMATION MAY NOT BE USED FOR ANY PURPOSES OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN CONSENT AND PERMISSION OF THE ENGINEER AND ASEI ENGINEERING, INC.

JOB NO: 240460	DFT: MJ / IF DSK: MJ / IF CHK: DEM
----------------	--



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f

studio@bravearchitecture.com



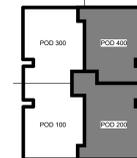
CIVIL
DAILY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

STRUCTURAL
DAILY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE / ARCHITECTURE or instruments of service shall remain the property of BRAVE / ARCHITECTURE. BRAVE / ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright therein.

SEAL:



Date Signed: 11/07/24

FILE:
DRAWN BY:
CHECKED BY:
ISSUE:
4 11/08/2024 ADDENDUM #04

PLUMBING PLAN - WASTE

Scale: AS NOTED

P1.1

GENERAL NOTES (WASTE)

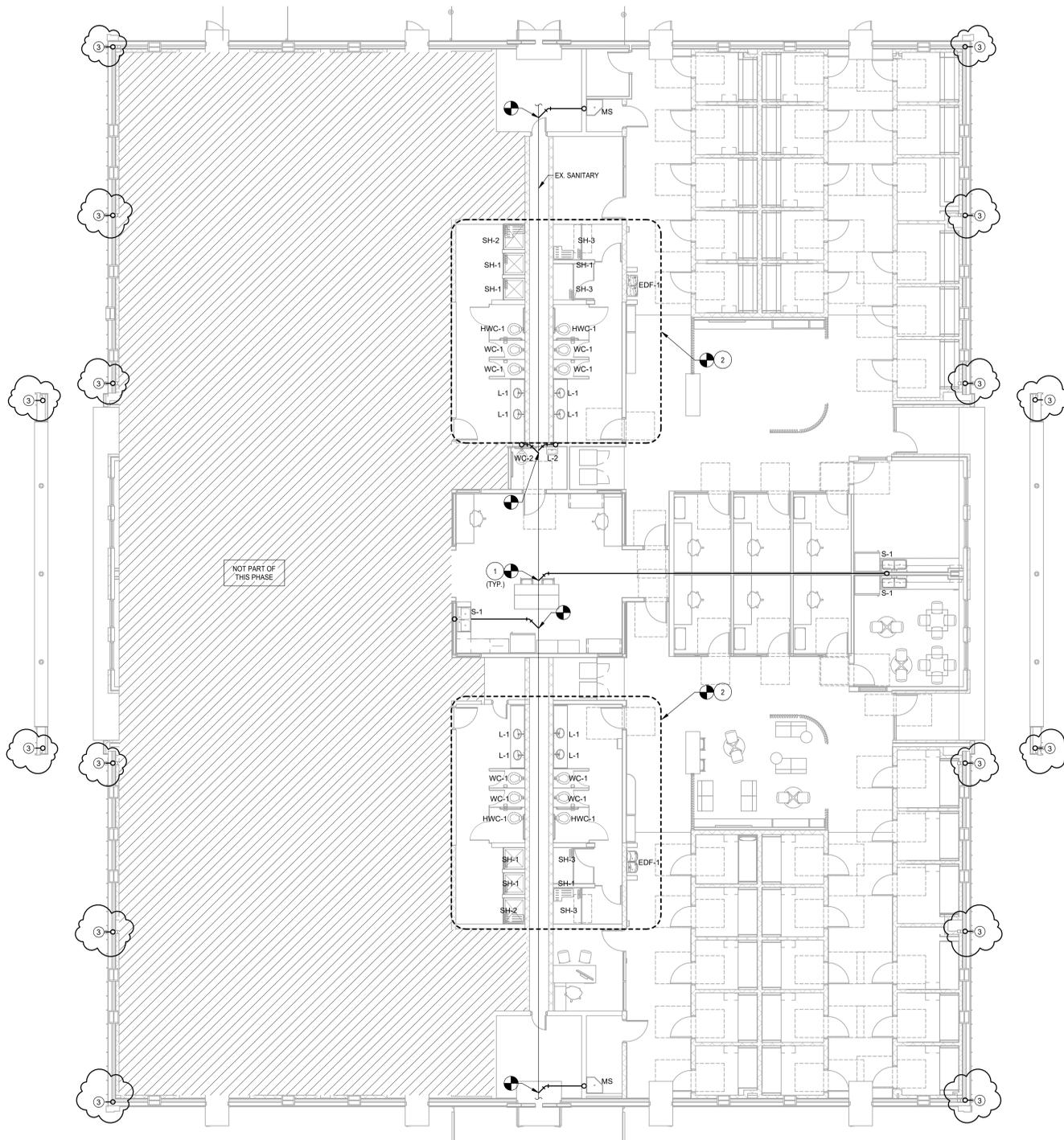
- A. CONTRACTOR SHALL FIELD VERIFY SEWER UTILITY CONNECTION SIZE, LOCATION, SLOPE, DIRECTION OF FLOW AND INVERT PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL FIELD CONDITIONS.
- B. UNDERGROUND NON-METALLIC SANITARY DRAINAGE PIPING LARGER THAN 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR LOCATED ADJACENT TO THE PIPING. THE TRACER WIRE SHALL TERMINATE ABOVE THE GROUND AT EACH END OF THE NON-METALLIC PIPING. THE TRACER WIRE SIZE SHALL BE NOT LESS THAN 18 AWG AND THE INSULATION TYPE SHALL BE SUITABLE FOR DIRECT BURIAL.
- C. ALL PIPE, PIPE FITTINGS, TRAPS, FIXTURES, MATERIAL AND DEVICES USED IN THIS PLUMBING SYSTEM SHALL BE LISTED OR LABELED BY A LISTING AGENCY. EACH LENGTH OF PIPE AND EACH PIPE FITTING, TRAPS, FIXTURE, MATERIAL AND DEVICES USED IN THIS PLUMBING SYSTEM SHALL HAVE CAST, STAMPED, OR INDELIBLY MARKED ON IT. THE MAKERS MARK OR NAME, SUCH MARKING IS REQUIRED BY THE APPROVED STANDARD THAT APPLIES.
- D. ALL FLOOR CLEAN OUTS, FLOOR SINKS, AND FLOOR DRAINS TO SET FLUSH WITH FINISHED FLOOR.
- E. ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAP PRIMERS PROVIDED OR AS DIRECTED BY THE LOCAL JURISDICTION.
- F. ALL INDIRECT WASTE PIPING INSTALLED WITH A LENGTH GREATER THAN 5'-0" SHALL HAVE A CLEANOUT PROVIDED. MAXIMUM LENGTH OF INDIRECT WASTE LINE SHALL BE 15'-0". FOR EACH REQUIRED EQUIPMENT INDIRECT WASTING CONNECTION, ROUTE INDIRECT WASTE PIPING FROM EQUIPMENT TO NEAREST FLOOR SINK. INDIRECT WASTE PIPING SHALL BE COPPER TYPE "DWV" WITH SOLDERED END DRAINAGE FITTINGS.
- G. ALL INDIRECT WASTE PIPING THAT EXCEEDS 30 INCHES IN DEVELOPED LENGTH MEASURED HORIZONTALLY, OR 54 INCHES IN TOTAL DEVELOPED LENGTH SHALL BE TRAPPED.
- H. ALL INDIRECT WASTES, CONDENSATE AND RELIEF VALVE DRAINS SHALL HAVE CODE APPROVED AIR GAPS.
- J. EACH VENT SHALL TERMINATE NOT LESS THAN 10 FT FROM OR 3 FT ABOVE ANY WINDOW, DOOR OPENING, AIR INTAKE OR VENT SHAFT, NOR LESS THAN 3 FT IN EVERY DIRECTION FROM ANY LOT LINE (ALLEY & STREET ACCEPTED).
- K. PROVIDE CHROME PLATED P-TRAP, TAILPIECE AND ESCUTCHEON AT EACH HAND SINK/LAVATORY WITH A DIRECT WASTE CONNECTION.
- L. ALL FLOOR SINKS SHALL HAVE HALF GRATE UNLESS NOTED OTHERWISE. FLOOR SINKS LOCATED BELOW EQUIPMENT SHALL BE A MINIMUM 50% EXPOSED AND SHALL BE INSTALLED FLUSH WITH FINISHED FLOOR OR AS DIRECTED BY LOCAL JURISDICTION.

GENERAL NOTES (WATER & GAS)

- A. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER UTILITY CONNECTION SIZE AND LOCATION PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS.
- B. PLUMBING CONTRACTOR TO COORDINATE EXACT STREET WATER PRESSURE AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE (PRV) IF STREET WATER PRESSURE EXCEEDS 80 PSI. PRV SHALL BE INSTALLED ON BUILDING SIDE OF WATER METER AND SET TO 80 PSI.
- C. CONTRACTOR TO FIELD VERIFY EXISTING DOMESTIC WATER SYSTEM IS PROVIDED WITH A REDUCED PRESSURE BACKFLOW PREVENTER (RBP). IF NOT EXISTING, PROVIDE AN APPROVED RBP ASSEMBLY SIZED TO MATCH BUILDING WATER METER. INSTALL NEW RBP BETWEEN THE WATER METER AND THE BUILDING PER LOCAL JURISDICTION'S REQUIREMENTS.
- D. UNDERGROUND NON-METALLIC WATER AND IRRIGATION SYSTEM PIPING LARGER THAN 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR LOCATED ADJACENT TO THE PIPING. THE TRACER WIRE SHALL TERMINATE ABOVE THE GROUND AT EACH END OF THE NON-METALLIC PIPING. THE TRACER WIRE SIZE SHALL BE NOT LESS THAN 18 AWG AND THE INSULATION TYPE SHALL BE SUITABLE FOR DIRECT BURIAL.
- E. MAKE SHUTOFF VALVES ACCESSIBLE NEAR THE EQUIPMENT THEY SERVE.
- F. ALL HAND SINKS/LAVATORIES SHALL BE PROVIDED WITH A THERMO-STATIC MIXING VALVE TO SUPPLY TEMPERED HW, MAX. 110 DEG. F.
- G. PROVIDE CHROME PLATED STOP VALVES AT EACH REQUIRED EQUIPMENT WATER CONNECTION. PROVIDE AGA COMPLIANT BALL VALVE AT EACH REQUIRED EQUIPMENT GAS CONNECTION.
- H. ALL POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS AND HOSE BIBBS SHALL BE PROTECTED FROM CROSS CONNECTION W/ APPROVED BACKFLOW PREVENTION DEVICES.
- J. MINIMUM DEPTH OF GAS PIPING TO BE 24" BELOW GRADE. COORDINATE WITH LOCAL GAS COMPANY.
- K. GAS PIPING SHALL NOT BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING.
- L. GAS PIPING SHALL NOT BE RUN IN HOLLOW CORE OF BLOCK.
- M. PROVIDE SHUT-OFF COCK, UNION, AND 6" LONG DIRT LEG WITH CAP AT EACH GAS LINE DROP TO APPLIANCE.
- N. DO NOT USE FLEXIBLE PIPE CONNECTIONS TO EQUIPMENT.
- P. ALL GAS PIPING UNDER ASPHALT OR CONCRETE PAVING ADJOINING BUILDING MUST BE SLEEVED IN GAS TIGHT VENTED PIPE IN ACCORDANCE WITH LOCAL GAS CODE.
- Q. ALL GAS PIPING MATERIALS, VALVES, FITTINGS, INSTALLATION AND TESTING SHALL COMPLY WITH LOCALLY ACCEPTED PLUMBING CODE AND GAS COMPANY REGULATIONS.
- R. VERIFY ALL GAS BTUH INPUTS WITH ACTUAL BTUH INPUT OF APPLIANCE SUPPLIED.
- S. A BUILDING SHUT OFF VALVE SHALL BE INSTALLED ON MAIN GAS LINE AT GAS METER.

KEYED NOTES

- 1. CONNECT NEW WASTE LINE TO EXISTING 4" WASTE LINE BELOW FLOOR AT THIS LOCATION. FIELD VERIFY EXACT SIZE, LOCATION, SLOPE, DIRECTION OF FLOW AND INVERT PRIOR TO INSTALLATION.
- 2. EXISTING PLUMBING FIXTURES TO BE REPLACED AT SAME LOCATION. RE-CONNECT PLUMBING LINES. FIELD VERIFY EXACT LOCATION.
- 3. TERMINATE ROOF DRAIN LINES THROUGH WALL WITH BRONZE DOWNSPOUT NOZZLE, JR SMITH 1770 OR EQUAL. SEE CIVIL DRAWINGS FOR CONTINUATION.



1 PLUMBING PLAN - WASTE
SCALE: 1/8" = 1'-0"

TEXAS ENGINEER FIRM REGISTRATION #F-15201

ASEIENGINEERING 350 Glenborough Dr. #270 Houston, TX 77067
www.aseiengineering.com o: 713-300-9579
THESE DRAWINGS AND ASSOCIATED DOCUMENTATION CONTAIN INFORMATION, DESIGN, CALCULATIONS, AND DATA THAT ARE THE SOLE PROPERTY OF ASEI ENGINEERING, INC. THIS INFORMATION MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN CONSENT AND PERMISSION OF THE ENGINEER AND ASEI ENGINEERING, INC.

JOB NO: 240460	DFT: MJ / JF DSN: MJ / JF CHK: DEM
-------------------	--



4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f

studio@bravearchitecture.com



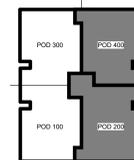
CIVIL
DALLY + ASSOCIATES
9800 RICHMOND AVE SUITE 460
HOUSTON, TEXAS 77042
Civil Contact

LANDSCAPE
KW LANDSCAPE ARCHITECTS
6925 PORTWEST DRIVE, SUITE 100
HOUSTON, TX 77024
Landscape Contact

STRUCTURAL
DALLY + ASSOCIATES
9800 RICHMOND AVE, SUITE 460
HOUSTON, TEXAS 77042
Structural Contact

MEP
ASEI ENGINEERING
350 GLENBOROUGH DR, SUITE 270
HOUSTON, TX 77067
MEP Contact

KEYPLAN:



Ownership of Instruments of Service
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE / ARCHITECTURE, or instruments of service shall remain the property of BRAVE / ARCHITECTURE. BRAVE / ARCHITECTURE shall retain all copyright law, statutory and other reserved rights, including the copyright therein.

SEAL:



Date Signed: 11/07/24

FILE:
DRAWN BY:
CHECKED BY:
ISSUE:
4 11/08/2024 ADDENDUM #04

PLUMBING ROOF PLAN

Scale: AS NOTED

P1.3

GENERAL NOTES (WASTE)

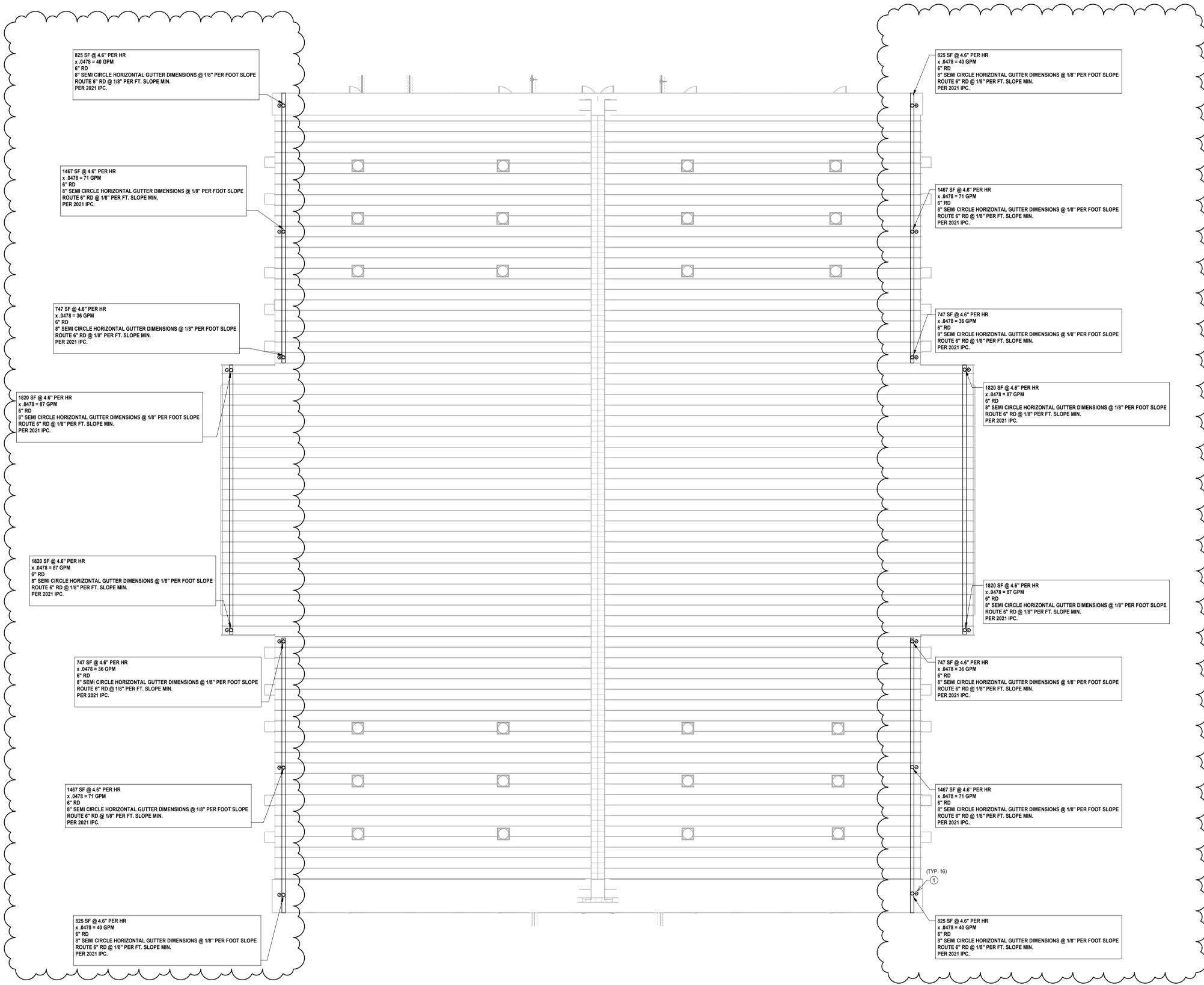
- CONTRACTOR SHALL FIELD VERIFY SEWER UTILITY CONNECTION SIZE, LOCATION, SLOPE, DIRECTION OF FLOW AND INVERT PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL FIELD CONDITIONS.
- UNDERGROUND NON-METALLIC SANITARY DRAINAGE PIPING LARGER THAN 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR LOCATED ADJACENT TO THE PIPING. THE TRACER WIRE SHALL TERMINATE ABOVE THE GROUND AT EACH END OF THE NON-METALLIC PIPING. THE TRACER WIRE SIZE SHALL BE NOT LESS THAN 18 AWG AND THE INSULATION TYPE SHALL BE SUITABLE FOR DIRECT BURIAL.
- ALL PIPE, PIPE FITTINGS, TRAPS, FIXTURES, MATERIAL AND DEVICES USED IN THIS PLUMBING SYSTEM SHALL BE LISTED OR LABELED BY A LISTING AGENCY. EACH LENGTH OF PIPE AND EACH PIPE FITTING, TRAPS, FIXTURE, MATERIAL AND DEVICES USED IN THIS PLUMBING SYSTEM SHALL HAVE CAST, STAMPED, OR INDELBLY MARKED ON IT. THE MAKERS MARK OR NAME, SUCH MARKING IS REQUIRED BY THE APPROVED STANDARD THAT APPLIES.
- ALL FLOOR CLEAN OUTS, FLOOR SINKS, AND FLOOR DRAINS TO SET FLUSH WITH FINISHED FLOOR.
- ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAP PRIMERS PROVIDED OR AS DIRECTED BY THE LOCAL JURISDICTION.
- ALL INDIRECT WASTE PIPING INSTALLED WITH A LENGTH GREATER THAN 5'-0" SHALL HAVE A CLEANOUT PROVIDED. MAXIMUM LENGTH OF INDIRECT WASTE LINE SHALL BE 15'-0". FOR EACH REQUIRED EQUIPMENT INDIRECT WASTE PIPING CONNECTION, ROUTE INDIRECT WASTE PIPING FROM EQUIPMENT TO NEAREST FLOOR SINK. INDIRECT WASTE PIPING SHALL BE COPPER TYPE "DWV" WITH SOLDERED END DRAINAGE FITTINGS.
- ALL INDIRECT WASTE PIPING THAT EXCEEDS 30 INCHES IN DEVELOPED LENGTH MEASURED HORIZONTALLY, OR 54 INCHES IN TOTAL DEVELOPED LENGTH SHALL BE TRAPPED.
- ALL INDIRECT WASTES, CONDENSATE AND RELIEF VALVE DRAINS SHALL HAVE CODE APPROVED AIR GAPS.
- EACH VENT SHALL TERMINATE NOT LESS THAN 10 FT FROM OR 3 FT ABOVE ANY WINDOW, DOOR OPENING, AIR INTAKE OR VENT SHAFT, NOR LESS THAN 3 FT IN EVERY DIRECTION FROM ANY LOT LINE (ALLEY & STREET ACCEPTED).
- PROVIDE CHROME PLATED P-TRAP, TAILPIECE AND ESCUTCHEON AT EACH HAND SINK/LAVATORY WITH A DIRECT WASTE CONNECTION.
- ALL FLOOR SINKS SHALL HAVE HALF GRATE UNLESS NOTED OTHERWISE. FLOOR SINKS LOCATED BELOW EQUIPMENT SHALL BE A MINIMUM 50% EXPOSED AND SHALL BE INSTALLED FLUSH WITH FINISHED FLOOR OR AS DIRECTED BY LOCAL JURISDICTION.

GENERAL NOTES (WATER & GAS)

- CONTRACTOR SHALL FIELD VERIFY EXISTING WATER UTILITY CONNECTION SIZE AND LOCATION PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS.
- PLUMBING CONTRACTOR TO COORDINATE EXACT STREET WATER PRESSURE AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE (PRV) IF STREET WATER PRESSURE EXCEEDS 80 PSI. PRV SHALL BE INSTALLED ON BUILDING SIDE OF WATER METER AND SET TO 80 PSI.
- CONTRACTOR TO FIELD VERIFY EXISTING DOMESTIC WATER SYSTEM IS PROVIDED WITH A REDUCED PRESSURE BACKFLOW PREVENTER (RPBP). IF NOT EXISTING, PROVIDE AN APPROVED RPBP ASSEMBLY SIZED TO MATCH BUILDING WATER METER. INSTALL NEW RPBP BETWEEN THE WATER METER AND THE BUILDING PER LOCAL JURISDICTIONS REQUIREMENTS.
- UNDERGROUND NON-METALLIC WATER AND IRRIGATION SYSTEM PIPING LARGER THAN 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR LOCATED ADJACENT TO THE PIPING. THE TRACER WIRE SHALL TERMINATE ABOVE THE GROUND AT EACH END OF THE NON-METALLIC PIPING. THE TRACER WIRE SIZE SHALL BE NOT LESS THAN 18 AWG AND THE INSULATION TYPE SHALL BE SUITABLE FOR DIRECT BURIAL.
- MAKE SHUTOFF VALVES ACCESSIBLE NEAR THE EQUIPMENT THEY SERVE.
- ALL HAND SINKS/LAVATORIES SHALL BE PROVIDED WITH A THERMO-STATIC MIXING VALVE TO SUPPLY TEMPERED HW, MAX. 110 DEG. F.
- PROVIDE CHROME PLATED STOP VALVES AT EACH REQUIRED EQUIPMENT WATER CONNECTION. PROVIDE AGA COMPLIANT BALL VALVE AT EACH REQUIRED EQUIPMENT GAS CONNECTION.
- ALL POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS AND HOSE BIBBS SHALL BE PROTECTED FROM CROSS CONNECTION W/ APPROVED BACKFLOW PREVENTION DEVICES.
- MINIMUM DEPTH OF GAS PIPING TO BE 24" BELOW GRADE. COORDINATE WITH LOCAL GAS COMPANY.
- GAS PIPING SHALL NOT BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING.
- GAS PIPING SHALL NOT BE RUN IN HOLLOW CORE OF BLOCK.
- PROVIDE SHUT-OFF COCK, UNION, AND 6" LONG DIRT LEG WITH CAP AT EACH GAS LINE DROP TO APPLIANCE.
- DO NOT USE FLEXIBLE PIPE CONNECTIONS TO EQUIPMENT.
- ALL GAS PIPING UNDER ASPHALT OR CONCRETE PAVING ADJOINING BUILDING MUST BE SLEEVED IN GAS TIGHT VENTED PIPE IN ACCORDANCE WITH LOCAL GAS CODE.
- ALL GAS PIPING MATERIALS, VALVES, FITTINGS, INSTALLATION AND TESTING SHALL COMPLY WITH LOCALLY ACCEPTED PLUMBING CODE AND GAS COMPANY REGULATIONS.
- VERIFY ALL GAS BTUH INPUTS WITH ACTUAL BTUH INPUT OF APPLIANCE SUPPLIED.
- A BUILDING SHUT OFF VALVE SHALL BE INSTALLED ON MAIN GAS LINE AT GAS METER.

KEYED NOTES

- ROUTE ROOF DRAIN LEADERS DOWN WITHIN WALL AT THIS LOCATION. SEE SHEET P1.1 FOR CONTINUATION.
- TERMINATE ROOF DRAIN LINES THROUGH WALL WITH BRONZE DOWNSPOUT NOZZLE, JR SMITH 1770 OR EQUAL. SEE CIVIL DRAWINGS FOR CONTINUATION.



1 PLUMBING ROOF PLAN
1/8" = 1'-0"

TEXAS ENGINEER FIRM REGISTRATION #F-15201

ASEIENGINEERING 350 Glenborough Dr. #270 Houston, TX 77067
www.aseiengineering.com o: 713-300-9579

THESE DRAWINGS AND ASSOCIATED DOCUMENTATION CONTAIN INFORMATION, DESIGN, ENGINEERING, AND DATA THAT ARE THE SOLE PROPERTY OF ASEI ENGINEERING, INC. THIS INFORMATION MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN CONSENT AND PERMISSION OF THE ENGINEER AND ASEI ENGINEERING, INC.

JOB NO: 240460
DFT: MJ / IF
DSR: M.J.F.
CHK: DEM