HWY 80 Gas Station

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

PURSER & COMPANY | 601.376.9647 DRAWINGS@PURSERANDCOMPANY.COM

4020 US-80, Jackson, MS 39209

New Construction

Construction Documents

Revision	#	Rev Date

Cover Sheet

000 G

Project Directory

Project Information

Name: Dhunna Gas Station - Jackson
Address: 4020 US-80, Jackson, MS 39209

Client

Shivam Dhunna
468 Fairfield Dr.
Madison, MS 39110
(601) 218-8883
Contact: Sunny Dhunna

Architect

Purser & Company, PA
160 McTyere Ave, STE B
Jackson, MS 39202
(601) 376-9647
Contact: Paul Purser (paul@purserandcompany.com)

Drawing Index

Project Notes

PROJECT ALTERNATES
1. No Project Alternates are included in this Contract.

ENERGY CODE REQUIREMENTS
(2021 IECC as adopted by the State of Mississippi and enforced by the City of Jackson)
1. This project shall comply with the **2021 International Energy Conservation Code (IECC)** as adopted by the State of Mississippi and applicable City of Jackson amendments.
2. All mechanical, electrical, and plumbing systems shall comply with applicable provisions of the 2021 IECC, including equipment efficiencies, controls, commissioning (if required), and lighting power densities.
3. All insulation materials shall be installed in accordance with manufacturer's instructions and shall comply with IECC installation requirements to prevent compression, gaps, voids, or misalignment.
4. Roof insulation shall consist of a minimum thermal value meeting or exceeding code-required R-values as indicated in the Thermal Envelope Requirements below.
5. Exterior wall insulation shall meet or exceed required cavity and continuous insulation values as indicated below.
6. A continuous air barrier shall be provided at the building thermal envelope in accordance with IECC Section C402.5. All joints, seams, penetrations, and material transitions shall be sealed. The air barrier shall be installed to resist positive and negative pressure from wind and mechanical systems and shall be durable for the life of the building.
7. All penetrations of the building envelope (mechanical, electrical, structural, etc.) shall be sealed to maintain air barrier continuity.

THERMAL ENVELOPE REQUIREMENTS
(Climate Zone 3 – Jackson, Mississippi)
1. Roofs: Minimum R-38 continuous insulation (ci) or equivalent assembly complying with IECC Table C402.1.3.
2. Wood-Framed Exterior Walls: R-19 cavity insulation plus R-7.5 continuous insulation (ci), or approved equivalent per IECC.
3. Slab-on-Grade: Insulation not required unless otherwise specified by assembly or conditioned slab design.
4. Insulation values listed are minimum code requirements. Higher-performing assemblies are permitted.

FENESTRATION REQUIREMENTS
(IECC 2021 – Climate Zone 3)
1. Vertical Fenestration Maximum U-Factor: 0.40
2. Entrance Doors (Glazed): 0.77 U-Factor maximum
3. Skylights (if applicable): 0.60 U-Factor maximum
4. Maximum Solar Heat Gain Coefficient (SHGC): 0.25

All fenestration products shall be labeled and certified in accordance with NFRC requirements.

GENERAL INFORMATION
1. Do not scale drawings. Written dimensions shall govern. In the event of discrepancy, the Contractor shall obtain written clarification from the Architect prior to proceeding.
2. Contractor shall verify all existing conditions, dimensions, and equipment locations in the field prior to fabrication or installation. Any discrepancies shall be reported to the Architect in writing.
3. Contractor shall examine site conditions and shall be responsible for all work required to complete the project in accordance with the Contract Documents.
4. Contractor shall maintain safe and code-compliant means of egress for occupied areas at all times during construction in accordance with the International Fire Code as adopted by the City of Jackson.
5. All casework and millwork dimensions shall be field verified prior to fabrication.
6. Notes, dimensions, finishes, and fixtures shown on typical plans shall apply to similar, symmetrical, or opposite-hand conditions unless noted otherwise.
7. "Typical" or "Typ." indicates that the condition applies at similar locations throughout unless specifically noted otherwise.
8. Partitions are dimensioned from finished face to finished face unless noted otherwise. Masonry dimensions are to finished face unless specifically indicated.
9. The Owner reserves the right to review and approve materials, fixtures, and equipment within the limits of the Contract; however, such review does not relieve the Contractor of responsibility for compliance with the Contract Documents and applicable codes.

Project Code Requirements

1. Applicable Codes and Standards (City of Jackson)
A. **IBC** – International Building Code (**2018**, City of Jackson amendments)
B. **IMC** – International Mechanical Code (**2018**, City of Jackson amendments)
C. **IPC** – International Plumbing Code (**2018**, City of Jackson amendments)
D. **IFGC** – International Fuel Gas Code (**2018**, City of Jackson amendments)
E. **IFC** – International Fire Code (**2018**, City of Jackson amendments)
F. **NEC (NFPA 70)** – National Electrical Code (**2017**, no amendments noted by City of Jackson)
G. **ADA 2010** – 2010 ADA Standards for Accessible Design (as applicable)

2. Building Code Requirements
A. Occupancy Classification
1. **Group B – Business** (IBC Chapter 3)

B. General Building Height and Area (Wood Frame)
1. **Construction Type: Type V-B** (wood frame), unless fire-resistance-rated assemblies are provided to qualify as Type V-A.
2. **Allowable Stories:** 1 story provided (Type V is permitted to be 1 story and more depending on conditions; project is compliant as 1 story).
3. **Building Area: 3,020 SF (actual)** — well within allowable area limits for Group B, Type V with NFPA 13 sprinklers.

Area increase statement (keep it simple and defensible):
4. Building area compliance is based on **IBC 2018 Chapter 5**, including allowable area provisions and permitted increases for **NFPA 13** sprinkler protection where applicable.

C. Types of Construction (Type V-B – General)
1. Fire-resistance ratings shall comply with **IBC Table 601** and exterior wall ratings shall comply with **IBC Table 602** based on fire separation distance.
2. Provide rated assemblies where indicated on plans; all other assemblies to be minimum code compliant for Type V-B.

D. Means of Egress (Group B; Fully Sprinklered)
1. **Common Path of Egress Travel: 100 ft max** where NFPA 13 sprinklered (IBC Chapter 10 limits).
2. **Exit Access Travel Distance: 300 ft max** where NFPA 13 sprinklered (IBC Chapter 10 limits).
3. Provide code-compliant number of exits, exit widths, and door clear widths per IBC Chapter 10 based on occupant load.

E. Fire Protection Systems
1. **Automatic Fire Sprinkler System: Yes — NFPA 13 throughout**.
2. Fire alarm / notification devices to be provided as required by **IBC 907** and **IFC** as adopted by the City of Jackson. (City of Jackson)
3. Portable fire extinguishers to be provided per **IFC 906** and located per plans/code.

AC	AIR CONDITIONING
ABV	ABOVE
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALM	ALUMINUM
AND	ANODIZED
APRX	APPROXIMATE
AV	AUDIO VISUAL
AVD	AUDIO VISUAL DISPLAY
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOC	BOTTOM OF CURB
BOS	BOTTOM OF STEEL
BW	BOTH WAYS
CAB	CABINET
CB	CATCH BASIN
CC	CENTER TO CENTER
CCT	CONCRETE COUNTER TOP
CG	CORNER GUARD
CH	COAT/CLOTHES HOOK
CHM	CHAMFER
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CR	CRASH RAIL
CT	CERAMIC TILE
CTR	CENTERED
CYP	CYPRESS
DBH	DISPOSAL BAG HOLDER
DBL	DOUBLE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DRW	DECAY RESISTANT WOOD
E	EAST
EA	EACH
EDF	ELECTRIC DRINKING FOUNTAIN
EHD	ELECTRIC HAND DRYER
EIFS	EXTERIOR INSULATING FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVEATION
ELVR	ELEVATOR
EQ	EQUAL
EW	EACH WAY
EWF	ENGINEERED WOOD FLOORING
EXH	EXHUAST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FCF	FINISHED CONCRETE FLOOR
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFE	FINISH FLOOR ELEVATION
FIN	FINISH
FLG	FLOORING
FLOR	FLOURESCENT
FLR	FLOOR
FND	FEMININE NAPKIN DISPENSER
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FIRE PROOF
FRP	FIBERGLASS REINFORCED PANEL
FRT	FIRE RETARDENT
FT	FOOT/FEET
FTG	FOOTING
FWC	FABRIC WALLCOVERING
G	GAS
GA	GAUGE
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GCT	GRANITE COUNTER TOP
GL	GLASS/GLAZING
GT	GRANITE TILE
GWB	GYPSUM DRYWALL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAVY DUTY
HDR	HEADER
HDW	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HOW	HORIZONTAL
HR	HAND RAIL
HTG	HEATING
HVAC	HEATING/VENTILATION/AIR CONDITIONING
HYD	HYDRANT
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JC	JENITORS CLOSET
JST	JOIST
JT	JOINT
KD	KNOCK DOWN
KIT	KITCHEN
KO	KNOCK OUT
KPL	KICKPLATE
L	LENGTH
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE
LAV	LAVATORY
LAWP	LIQUID APPLIED WATER PROOFING
LBL	LABEL
LF	LINEAR FEET
LH	LEFT HAND
LIN	LINOLEUM
LL	LIVE LOAD
LPP	LAVATORY PIPING PROTECTION
LT	LIGHT
LTG	LIGHTING
LVT	LUXURY VINYL TILE
LWC	LIGHTWEIGHT CONCRETE
MAS	MSAONRY
MAX	MAXIMUM
MB	MARKER BOARD
MC	MEDICINE CABINET
MCT	MARBLE COUNTER TOP
MECH	MECHANICAL
MFG	MANUFACTURER/MANUFACTURED
MG	MEDICAL GAS
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLDG	MOULDING
MO	MASONRY OPENING
MR	MOP RACK
MT	METAL THRESHOLD
MTL	METAL
MWK	MILLWORK
N	NORTH
NAT	NATURAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
O	OXYGEN
OA	OUTSIDE AIR
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
OPNG	OPENING
OPP	OPPOSITE
P	PAINT/PAINTED
PAR	PARALLEL
PBD	PARTICLE BOARD
PCF	PRESSED/PATTERNED CONCRETE FLOOR
PCT	PLASTIC COUNTER TOP
PERF	PERFORATED
PL	PLATE
PLAM	PLASTIC LAMINATE
PLST	PLASTER
PLWD	PLYWOOD
PMR	PREFORMED METAL ROOFING
PMS	PREFORMED METAL SIDING
PR	PAIR
PRT	PORCELAIN CERAMIC TILE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PTR	PAPER TOWEL RECPTACLE
QRF	QUARTZ RESINOUS FLOORING
QT	QUARRY TILE
QTR	QUARTER
R	RISER
RAD	RADIUS
RB	RUBBER BASE
RBR	RUBBER
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIDGERATOR
REINF	REINFORCED
REQ	REQUIRED
REV	REVISED
RH	RIGHT HAND
RM	ROOM
RND	ROUND
RO	ROUHG OPENING
ROW	RIGHT OF WAY
RPS	ROOF PAVER SYSTEM
RR	RETURN REGISTER
S	SOUTH
SC	SOLID CORE
SCD	SEAT COVER DISPENSER
SCF	STAINED/SEALED CONCRETE FLOOR
SCH	SCHEDULE
SD	SOAP DISPENSER
SECT	SECTION
SHT	SHEET
SHTH	SHEATHING
SIM	SIMILAR
SJ	SCORE JOINT
SLW	SEAMLESS LIQUID WALL COVERING
SND	SANITARY NAPKIN DISPENSER
SNDU	SANITARY NAPKIN DISPOSAL UNIT
SNTD	SANITARY NAPKIN / TAMPON DISPENSER
SP	SOUNDPROOF
SPCR	SPACER
SPEC	SPECIFICATIONS
SPTC	SPECIMEN PASS THRU CABINET
SQ	SQUARE
SS	SANITARY SEWER
SSD	SHOWER SOAP DISPENSER
SSTL	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
SUPP	SUPPLEMENTAL
SV	SHEET VINYL
SVSK	SERVICE SINK
SWR	SHOWER
SWRC	SHOWER CURTAIN
SYP	SOUTHERN YELLOW PINE
T	TREAD
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TB	TOWEL BAR
TBD	TO BE DETERMINED
TBR	TO BE REMOVED
TEL	TELEPHONE
TEMP	TEMPORARY
TH	THRESHOLD
THK	THICK/THICKNESS
TLT	TOILET
TME	TO MATCH EXISTING
TOC	TOP OF CURB
TOS	TOP OF STEEL
TPD	TOILET PAPER DISPENSER
TPH	TOILET PAPER HOLDER
TR	TRANSOM
TV	TELEVISION
TYP	TYPICAL
UC	UNDERCOUNTER
UNO	UNLESS NOTED OTHERWISE
VB	VAPOR BARRIER
VD	VISUAL DISPLAY
VCB	VISUAL COMMUNICATION BOARD
VCT	VINYL COMPOSITE TILE
VIF	VERIFY IN FIELD
VT	VINYL TILE
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
WB	WOOD BASE
WC	WATER CLOSET
WCT	WOOD COUNTER TOP
WD	WOOD BASE
WDT	WIDTH
WDW	WINDOW
WG	WALL GUARD
WH	WATER HEATER
WP	WATERPROOFING
WR	WATER RESISTANT
WSCT	WAINSCOT

Site Locale

REGISTERED ARCHITECT
Paul
Purser
5582
STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

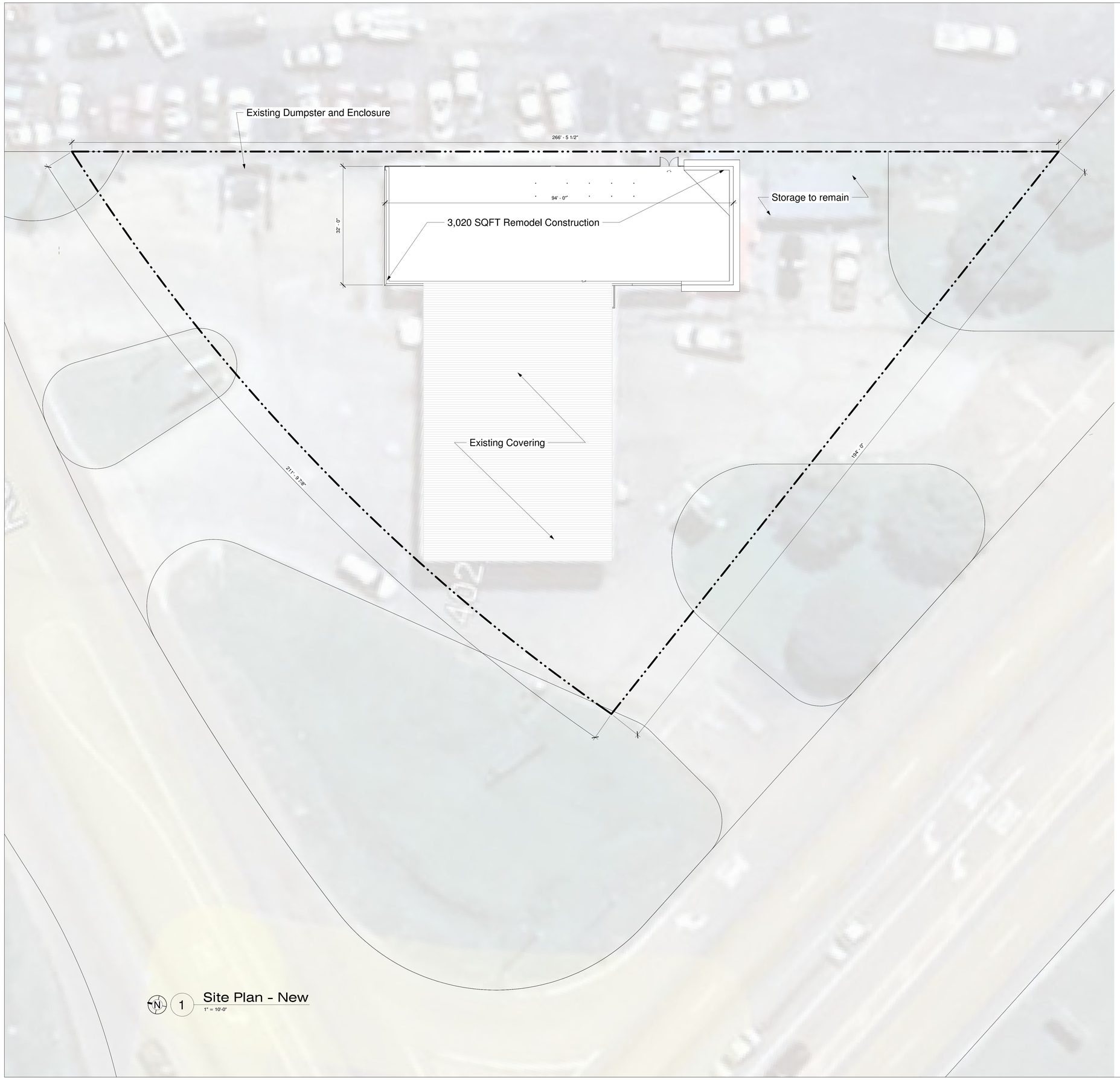
Construction Documents

Revision	#	Rev Date

Reference

001 A

05 4 Civil
AC101



1 Site Plan - New
1" = 10'-0"

General Site Notes

1. Zoned C80-C3 - General Commercial Subdistrict
2. Site area and setback requirements:
   A. Area: None specified.
   B. Front yard setback: A minimum of forty (40) feet from any street.
   C. Side yard setback: A minimum of twenty (20) feet except as otherwise required by Section 706.
   D. Rear yard setback: A minimum of twenty (20) feet except as otherwise required by Section 706.
   E. Maximum height: per IBC based on buildign type.
3. Do not scale drawings. Verify all dimensions, spot grades, and benchmarks in the field; report conflicts before proceeding.
4. Work limits are as shown. Protect improvements **outside** the limits of construction.
5. Existing **curb cuts on HWY 80 and Robinson Rd** to remain. No modifications within the MDOT right-of-way without written approval and permits. Provide traffic control per MUTCD for any work at/near the ROW.
6. Existing concrete paving to remain unless specifically noted for removal. Where removal is indicated, **sawcut to straight lines**, remove full depth, and protect adjacent slabs/curbs.
7. Patch/replace removed paving with matching section, joints, and finish; **dowel into existing** where required. Restore adjacent grades and surfaces to equal or better condition.
8. Maintain positive drainage away from buildings and toward approved inlets/outfalls. No ponding permitted. Match existing grades cleanly at limit lines.
9. Proposed spot grades, slopes, and flow arrows govern. Contractor to verify subgrade and adjust spot grades as needed (notify Architect/Engineer of variances before paving).
10. Coordinate any utility trenching that crosses existing paving. **Backfill and compact** to specified density prior to paving restoration.
11. Protect existing utilities and structures. Call **811** before excavation. Hand-excavate within tolerance of marked utilities; repair any damage immediately at no cost to Owner.
12. Provide **erosion, sediment, and pollution control** (silt fence, inlet protection, stabilized construction entrance) prior to earthwork; maintain until final stabilization.
13. Keep public streets and adjacent drives clear of mud/debris; sweep daily as needed.
14. Accessible parking, access aisles, curb ramps, and accessible route to the building per ADA/City standards. Provide striping, signage, and detectable warnings where shown.
15. Pavement markings, symbols, and signs per **MUTCD**; use specified colors and dimensions. Re-stripe any affected existing markings to provide a continuous, legible scheme.
16. Fire access, hydrant clearances, and any “No Parking—Fire Lane” markings per Fire Department requirements. Confirm locations prior to final striping.
17. Protect existing trees, utilities, poles, and appurtenances to remain with fencing or barriers before starting site work.
18. Coordinate dispenser islands, canopy columns, and any bollards with foundations and paving joints; maintain clear sight triangles at drives.
19. Any work within **HWY 80** right-of-way requires MDOT permits and inspection; coordinate driveway tie-ins, radii, and elevations with MDOT prior to construction.
20. Restore all disturbed areas (topsoil, seed/sod, and irrigation repairs where present).
21. Record field changes to grades, paving limits, and jointing; submit redlines at substantial completion.
22. Structures shall be demolished to concrete slab; concrete foundations shall be reused in new construction with matching footprint.

MS CONSTRUCTION LAW: 1. PURSUANT TO SECTION 73-1-39, PRIVATELY OWNED BUILDINGS THAT ARE THREE (3) STORIES IN HEIGHT OR MORE, OR BUILDINGS THAT ARE MORE THAN 5,000 SQUARE FEET, UNLESS THE PROJECT IS SPECIFICALLY EXEMPTED BY SECTION 73-1-39; 2. PURSUANT TO SECTION 73-1-39, PUBLIC BUILDINGS OWNED BY THE STATE OF MISSISSIPPI OR ANY POLITICAL SUBDIVISION THEREOF TEN THOUSAND (10,000) SQUARE FEET OF GROUND FLOOR AREA, OR IF THE PROJECT IS THREE (3) OR MORE STORIES IN HEIGHT, UNLESS SPECIFICALLY EXEMPTED BY SECTION 73-1-39.

REGISTERED ARCHITECT Paul Purser 5582 STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80

Project No 20251202001 Date 2/27/2026

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

4020 US-80, Jackson, MS 39209

New Construction

Construction Documents

Revision	#	Rev Date

Site Layout

C 101 A

2/27/2026 5:25:24 PM
E:\my stuff\BUSINESS\work\25 1202 HWY 80 Renovation\25 1202 4020 HWY 80 W Store.rvt

07.4 Structural
AS101

Structural Notes

DESIGN CRITERIA

1. Building Code: 2018 International Building Code and ASCE 7-16 (except Chapter 14)
   1.1. Building Risk Category: II
2. Design Loads
   2.1. Uniform Floor Live Loads (reduced per Building Code, UNO)

Partitions	20 psf
General Areas	100 psf
Corridors/Lobbies	100 psf
Offices	50 psf
Team Meeting Room	100 psf
Locker Rooms/Training Rooms	40 psf
Mechanical Rooms	125 psf
Storage	125 psf
Press Box	40 psf

   2.2. Roof Loads
      2.2.1. Uniform Roof Live Load (reduced per Building Code) 20 psf
      Concentrated Roof Live Load 300 lbs
      2.2.2. Rain Loads: Rain Intensity, i = 7.2 in/hr (15-min duration/ 100 yr MRI)
   2.3. Wind Loads:
   Basic Wind Speed V(ult) =114 mph; V(asd) = 88.3 mph
   Wind Exposure C
   Internal Pressure Coefficient, GC_{pi} = +/-0.18 (Enclosed Building)
   Directionality Factor, K_d = 0.85
      2.3.1. Component and Cladding Pressures (psf)

WOOD

1. Structural framing plans depict the primary structural framing system. Contractor shall provide secondary and miscellaneous framing as required to complete the project (see architectural drawings).
2. Dressed Seasoned Lumber: S4S, 19% maximum moisture content at time of dressing.
   2.1. Interior and Exterior Loadbearing Walls:
   Southern Pine, No. 2 grade
   2.2. Lintels, Floor Joists and Beams:
   Southern Pine, No. 2 grade
   2.3. Wood in Contact with Concrete or Masonry or Exposed to Weather:
   Foundation grade pressure-treated.
   Use galvanized nails in pressure-treated wood.
3. Structural Glued Laminated Timber: Comply with American Institute of Timber Construction (AITC). Minimum allowable bending stress = 2,400 psi (dry).
4. Structural Panels
   4.1. Floor Panels: Tongue-and-groove APA rated Sturd-I-Floor (plywood or OSB).
      4.1.1. Panels shall have a Span Rating of 24 and Exposure 1.
      4.1.2. Panels shall be placed with the "Strength Axis" perpendicular to the supports. End joints shall be staggered.
      4.1.3. Floor Panels Shall be both glued and nailed
      4.1.4. Panels shall be nailed with 10d (0.148 dia.) at a maximum of 12 inches at both panel edge supports and at intermediate supports unless noted otherwise. Nailing shall be completed before glue sets.
      4.1.5. Panels shall have glue applied at supports, end joints and tongue and groove joints. Adhesives shall conform to APA Specification AFG-01 or ASTM D3498, and applied in accordance with the adhesive manufacturer's recommendations. For OSB panels with sealed surfaces, use only solvent-based glues in accordance with panel manufacturer's recommendations.
   4.2. Wall Panels: APA rated sheathing
      4.2.1. Panels may be installed either horizontally or vertically.
      4.2.2. Panels shall be a minimum of 24-inches wide.
      4.2.3. There shall be a 1/8-inch gap at panel edges and ends.
   4.3. Roof panels: APA rated sheathing (plywood or OSB).
      4.3.1. Panels shall have a Span Rating of 40/20 and Exposure 1.
      4.3.2. Panels shall be placed with the long direction perpendicular to the supports and shall be a minimum of 24-inches wide and continuous over at least 2 supports.
      4.3.3. Roof panels shall be both glued (exterior glue) and nailed.
      4.3.4. Long panel edges shall be supported with Edge Clips; one located midway between each support. There shall be a 1/8-inch gap at panel edges and ends.
      4.3.5. OSB panels shall be installed with the textured side up.
5. Wood Shearwalls
   5.1. Shearwalls shall be constructed with 15/32" Structural I APA rated wood structural panels. Panels shall be oriented with the long dimension in the vertical direction. Oriented strand board (OSB) may be used in lieu of plywood. OSB panels shall be APA rated and shall comply with Product Standard PS 2.
      5.1.1. Insulating Sheathing Systems shall not be substituted for wood shearwalls.
   5.2. Solid 2x blocking shall be provided at unsupported, horizontal panel edges.
   5.3. Nail panels with 8d nails spaced at 6 inches at the perimeter of the panels and at 12" at intermediate supports, UNO.
   5.4. Double 2x framing studs shall be used at the ends of each shear wall, UNO.

Connections for Structural Timber: Galvanized strong-tie connectors by the Simpson Company or approved

CONCRETE CONSTRUCTION	INSPECTION FREQUENCY	REFERENCED STANDARD
1. Inspection of reinforcing steel placement and installation. Grade, size, quantity, quality, location, spacing, clearances.	P	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3 / IBC 1908.4
2. Inspection of anchors cast in concrete. Verify compliance of the following: diameter, grade, type, length, number, placement, and embedment depth.	C	ACI 318 17.8.2 / AISC 360 N5.7
3. Inspection of post-installed mechanical anchors installed in hardened concrete members: verify anchor type, anchor dimensions, hole diameter and cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque.	C	ACI 318 17.8.2 Use of post installed anchors must be approved by Structural Engineer
4. Inspection of post-installed adhesive anchors and reinforcing steel installed in hardened concrete members: Verify adhesive type, anchor rod dimensions, hole diameter and cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque.	C	ACI 318 17.8.2.4 Use of post installed anchors must be approved by Structural Engineer
5. Verify use of required design mix.	P	ACI 318 Ch. 19, 26.4.3 26.4.4 / IBC 1904.1, 1904.2, 1908.2, 1908.3
6. Sampling fresh concrete from concrete discharge. Mold one set of specimens for compressive strength testing for each 150 cubic yards or each 5,000 square feet of slab or wall surface area for each mix design placed in any one day. No fewer than five tests for a given class of concrete for the entire project. a. Mold (5) 4x8-inch compressive strength cylinders, break and report (1) at 7-days, (3) at 28-days, or mold (4) 6x12-inch compressive strength cylinders, break and report (1) at 7-days, (2) at 28-days. b. Remaining specimens(s) shall be broken as directed by the Structural Engineer if compressive strengths do not appear adequate. c. For each set molded, record: i. Slump ii. Air Content iii. Unit Weight iv. Temperature, ambient and concrete v. Batch and discharge times vi. Location and placement vii. Any pertinent information, such as addition of water, addition of admixtures, etc. d. Report in writing on the same day as tests are performed. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of concrete testing agency, concrete design compressive strength, location of concrete placement in structure, concrete mix proportions and materials, compressive breaking strength and type of break. e. Verify compliance with construction documents.	C	ACI 318 26.5, 26.12 / IBC 1908.10 ASTM C172, ASTM C31
7. Inspection of concrete conveying and placement for proper application techniques.	C	ACI 318 26.5 / IBC 1908.6-1908.8
8. Inspection for maintenance of specified curing temperature and techniques.	P	ACI 318 26.5.3-26.5.5 / IBC 1908.9
9. Inspection of formwork for shape, location, and dimensions of the concrete member being formed.	P	ACI 318 26.11.1.2(b)
10. Perform testing of Floor Flatness and Levelness of concrete slab placements in accordance with ASTM E1155. See specifications.	P	ACI 117-10

GENERAL

1. Reference to standards or specifications of technical societies, organizations, or associations means the standard or specification referenced by the governing Building Code shown on the Drawings, unless specifically noted otherwise.
2. Material, workmanship, and design shall conform to the referenced Building Code.
3. For dimensions not shown in the Structural Drawings, see the Architectural Drawings.
4. Contractor responsibilities include, but are not limited to, the following:
   4.1 Coordinate the Structural Documents with the Architectural, Mechanical, Electrical, Plumbing, and Civil Documents. Architect/Structural Engineer shall be notified of any discrepancy or omission prior to installation of associated work.
   4.2 Coordinate Structural Documents with Architectural and MPE Documents for location and quantity of miscellaneous framing for items such as roof drains, suspended or supported mechanical units, etc. Refer to Architectural and MPE Documents for additional miscellaneous structural elements that may not appear in the Structural Documents.
   4.3 Equipment/Framing Verification
      4.3.1 Mechanical Equipment: Submit actual weights of equipment to be used for review at least 3 weeks prior to fabrication and construction. Coordinate opening sizes and locations with Mechanical Contractor.
      4.3.2 Miscellaneous Framing: Verify framing shown on the Structural Drawings for mechanical equipment, Owner-furnished items, partitions, etc. is consistent with the requirements of such items.
   4.4 The structure is stable only in its completed form. Temporary supports required for stability during all intermediate stages of construction shall be designed, furnished, and installed by the Contractor.
   4.5 Contractor has sole responsibility for jobsite safety and complying with all health and safety precautions as required by any regulatory agency. In performing construction observation visits to the jobsite, the Structural Engineer will have no control over, nor responsibility for, the Contractor's means, methods, sequences, techniques, or Procedures in performing the work.
   4.6 Contractor is responsible for locating concrete reinforcement prior to installation of post-installed anchors, through bolts, or other post-installed items in concrete. Existing reinforcement including post-tensioning tendons shall not be cut or otherwise damaged while installing post-installed anchors.
5. Contractor shall field verify all existing conditions, elevations, and site conditions prior to construction and fabrication. Contractor shall immediately notify Structural Engineer of any existing conditions that are in conflict with the Structural Documents.

REINFORCEMENT

1. Reinforcing Bars: ASTM A615, Grade 60
   1.1 Reinforcing bars are not to be welded.
2. Welded Wire Reinforcement (WWR): ASTM A1064, 8" minimum side and end laps
3. Reinforcement Placement (UNO)
   3.1 Concrete Reinforcement Cover

Below Grade:	Unformed	3" clear
	Formed	2" clear
Slabs		3/4" clear

   3.2 Masonry reinforcing steel: Place in the center of CMU cells, unless otherwise noted in drawings.
4. Reinforcement Splices
   4.1 Reinforcement marked "Continuous" can be spliced at locations determined by Contractor. All other reinforcement shall be spliced only at locations shown or noted, unless approved in writing by Structural Engineer.
   4.2 Splice Lengths (UNO)
   Concrete Reinforcement: Class B Tension Lap
   Masonry Reinforcement: #4 - 24" / #5 - 30" / #6 - 48" / #7 - 60"

GENERAL SPECIAL INSPECTION NOTES

This Structural Quality Assurance Plan includes:
1. The Statement of Special Inspections which defines the scope of testing and inspection that is required for this project.
2. The responsibilities of the Contractor.
3. Structural Observations

Refer to other portions of the Construction Documents for Special Inspections required of architectural, mechanical, electrical, or other building components.

Special Inspector shall be hired by the Contractor and shall be approved by the Building Official and the Architect. Contractor shall submit to owner the name and qualifications of the Structural Inspector(s).

Special Inspector shall maintain records of inspections in accordance with Chapter 17 of the Building Code and shall distribute these records to the Building Official, Architect, and Structural Engineer on a weekly basis, unless noted otherwise below. Reports shall indicate that work inspected/tested was done in conformance to the Construction Documents. Discrepancies shall be brought to the immediate attention of the Contractor for correction. If the discrepancies are not corrected, they shall be brought to the attention of the Building Official, Architect, and Structural Engineer prior to completion of that phase of the work.

At the conclusion of the project, the Special Inspector shall submit a final report documenting required special inspections and correction of any discrepancies noted in the inspections.

STATEMENT OF SPECIAL INSPECTIONS

Special Inspector shall perform the following tests and inspections of all structural elements included within this Statement of Special Inspections.
1. The following elements are part of the Seismic-Force-Resisting (SFR) System. and require additional Special Inspections or Testing for Seismic Resistance:
   A. Moment Frames and their Foundations
   B. Floor and Roof Diaphragms
2. The following tables contain material, components and work that require special inspection or testing:
   A. Inspection Frequency, C – Continuous special inspection. Special inspection by the special inspector who is present when and where the work to be inspected is being performed.
   B. Inspection Frequency, P – Periodic special inspection. Special inspection by the special inspector who is intermittently present where the work to be inspected has been or is being performed. For structural steel, observe the items on a random basis.
   C. See Steel section for additional information for inspection tasks.

MS CONSTRUCTION LAW: 1. PURSUANT TO SECTION 73-1-39, PRIVATELY OWNED BUILDINGS THAT ARE THREE (3) STORIES IN HEIGHT OR MORE, OR BUILDINGS THAT ARE MORE THAN 5,000 SQUARE FEET, UNLESS THE PROJECT IS SPECIFICALLY EXEMPTED BY SECTION 73-1-39. 2. PURSUANT TO SECTION 73-1-39, PUBLIC BUILDINGS OWNED BY THE STATE OF MISSISSIPPI IF THE PROJECT CONTAINS MORE THAN TEN THOUSAND (10,000) SQUARE FEET OF GROUND FLOOR AREA, OR IF THE PROJECT IS THREE (3) OR MORE STORIES IN HEIGHT, UNLESS SPECIFICALLY EXEMPTED BY SECTION 73-1-39.

REGISTERED ARCHITECT
Paul
Purser
5582
STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

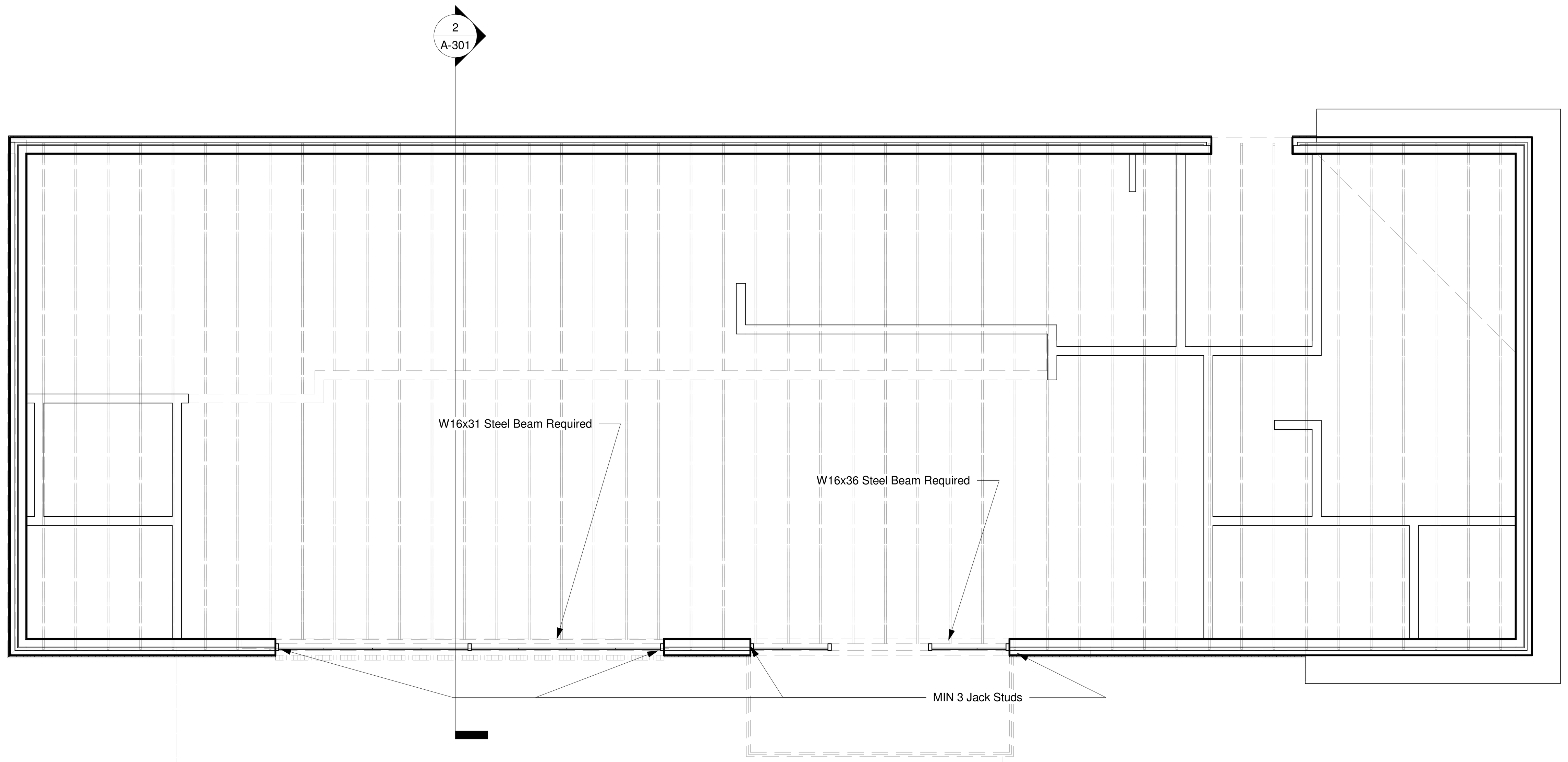
Revision	#	Rev Date

Structural Notes

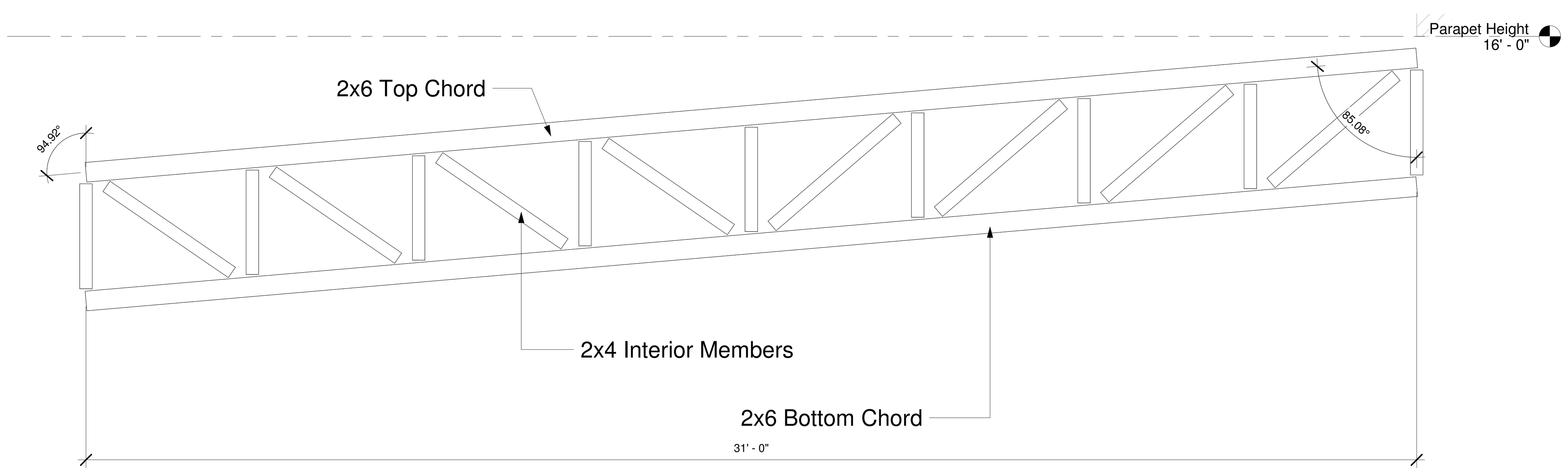
S 101
A

2/27/2026 5:25:24 PM
E:\my stuff\BUSINESS\work\25 1202 HWY 80 Renovation\25 1202 4020 HWY 80 W Store.rvt

07.4 Structural
AS103



1 First Floor Framing
3/16" = 1'-0"



3 Truss Design
1/2" = 1'-0"

General Notes

1. **Material & Grade**
   A. All wood framing members shall be **#2 Southern Pine or better**; engineered lumber (LVL/PSL/Glulam) where shown. Moisture content ≤19% at install. Pressure-treat all wood **in contact with concrete/masonry** or exposed to weather.
2. **Layout & Bearing**
   A. Provide full, plumb bearing at supports. Where horizontal members cannot bear on plates, provide **approved steel hangers/ties** sized for the reaction. Shim with steel only (no stacks of wood shims).
3. **Stud Framing**
   A. Typical interior/exterior stud walls: **2×4 @ 16" o.c.** unless noted. Crown studs the same way; keep walls straight/true. Provide **fire-blocking** at 10' max vertical intervals and at concealed horizontal spaces.
4. **Headers & Beams**
   A. Typical openings: **2×6 box header** unless noted. Built-up beams shall be **glued & screwed** or nailed per schedule: min **(2) rows 10d @ 12" o.c. staggered** each face (unless engineered otherwise). Provide solid bearing and squash/cripple studs under point loads.
5. **Joists, Rafters, Ceiling Framing**
   A. Size/spacing per plans; install **solid blocking at all joist/rafter ends**. For members **larger than 2×8**, provide intermediate blocking/bridging at **6'-0" o.c.** max. Keep crowns up; maintain slope and lines.
6. **Rim, Sills & Plates**
   A. Rim/ledger members continuous and fully fastened. **Sill plates PT**; anchor to concrete with **½" dia. bolts @ 6'-0" o.c.** max, **7" embed**, first bolt within **12"** of ends; add plate washers where shear walls require.
7. **Connectors & Fasteners**
   A. Use connectors (hangers, straps, ties, post bases/caps) **per manufacturer load tables**. Provide **all required nails/bolts**—no "some nails." Use **10d common** unless specified; structural screws where noted (no drywall/deck screws in structural work). Pre-drill near ends to avoid splitting.
8. **Uplift/High-Wind Hardware**
   A. **Hurricane ties at every exterior joist/rafter to top plate** and at interior beams where shown. Provide **foundation hold-downs** per foundation/ shear wall plan. Install **metal X-brace ties @ 9'-0" o.c.** between ceiling joists where indicated.
9. **Trusses (Manufactured)**
   A. **Engineered truss submittals** (sealed) required for review **before fabrication**. Truss design shall comply with **IBC 2018 §2304.4** (or adopted code).
   B. **Lateral support:** provide blocking or approved hangers at truss end supports (including overhang adjacencies). Install continuous **2×4 lateral bracing at bottom chord @ 6'-0" o.c.** the full length where required by the truss drawings.
   C. **Minimum bearing: 3"** at all supports unless truss calcs say otherwise.
   D. **Bracing:** Temporary bracing during set; **permanent bracing** per **BCSI-1** and truss engineer notes.
10. **Floor/Roof Sheathing**
    A. APA-rated panels installed **per APA**: long dimension perpendicular to framing, **stagger joints**, **⅛" gap** at all panel edges. Nail per schedule (typ **6"/12"** roof, **6"/12"** floor unless noted). Glue-and-nail floors for stiffness.
11. **Shear Walls & Diaphragms**
    A. Sheathing type, thickness, nailing pattern, edge nailing, and hold-downs **per shear wall schedule/details**. Do not substitute fasteners. Provide full-height **collector/drag** members where shown.
12. **Notching & Boring (IRC/IBC limits)**
    A. Do not notch or bore engineered members unless detailed. For sawn lumber: follow code limits (stud/joist/rafter notches/holes) and keep holes away from bearing points. When in doubt—ask.
13. **Deflection & Straightness**
    A. Keep lines true. Typical in-service deflection targets: **L/360 floors**, **L/240 ceilings/partitions** unless engineered otherwise. Shim to level, not to hide sags.
14. **Lateral & Diagonal Bracing**
    A. Provide temporary bracing during erection; do not remove until diaphragms and shear elements are fully nailed and inspected. Add kickers/strongbacks where noted.
15. **Corrosion & Termites**
    A. Use **hot-dip galvanized** connectors where PT wood or exterior conditions exist. Provide **termite protection** per local practice (treated sill, shields, or chemical barriers).
16. **Ledgers & Attachments**
    A. Ledger connections to framing or concrete/masonry **per engineered detail** (no lag-only into brick). Through-bolts or approved structural screws with proper edge distances; continuous flashing where exposed.
17. **Ceiling/Bottom-Chord Restraint**
    A. Where ceiling acts as diaphragm, keep **continuous gypsum** and provide perimeter blocking. Where open ceilings, provide chord bracing per plan.
18. **Trims & Over-Framing**
    A. Over-framing (valleys/hips) to bear and tie into main roof framing with approved hardware; no toe-nailed "floating" rafters at valleys.
19. **Field Verification & Coordination**
    A. Verify all dims with **Architectural** before detailing. **Field-verify** conditions; report differences **in writing** to Architect/Engineer **before** proceeding.
20. **Quality & Inspection**
    A. Install per drawings, details, and manufacturer instructions. Provide access for required **special inspections** (if any). Do not cover framing until inspected/released.

MS CONSTRUCTION LAW: 1. PURSUANT TO SECTION 73-1-39, PRIVATELY OWNED BUILDINGS THAT ARE THREE (3) STORIES IN HEIGHT OR MORE, OR BUILDINGS THAT ARE MORE THAN 5,000 SQUARE FEET, UNLESS THE PROJECT IS SPECIFICALLY EXEMPTED BY SECTION 73-1-39. 2. PURSUANT TO SECTION 73-1-39, PUBLIC BUILDINGS OWNED BY THE STATE OF MISSISSIPPI IF THE PROJECT CONTAINS MORE THAN TEN THOUSAND (10,000) SQUARE FEET OF GROUND FLOOR AREA, OR IF THE PROJECT IS THREE (3) OR MORE STORIES IN HEIGHT, UNLESS SPECIFICALLY EXEMPTED BY SECTION 73-1-39.

REGISTERED ARCHITECT
Paul
Purser
5582
STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

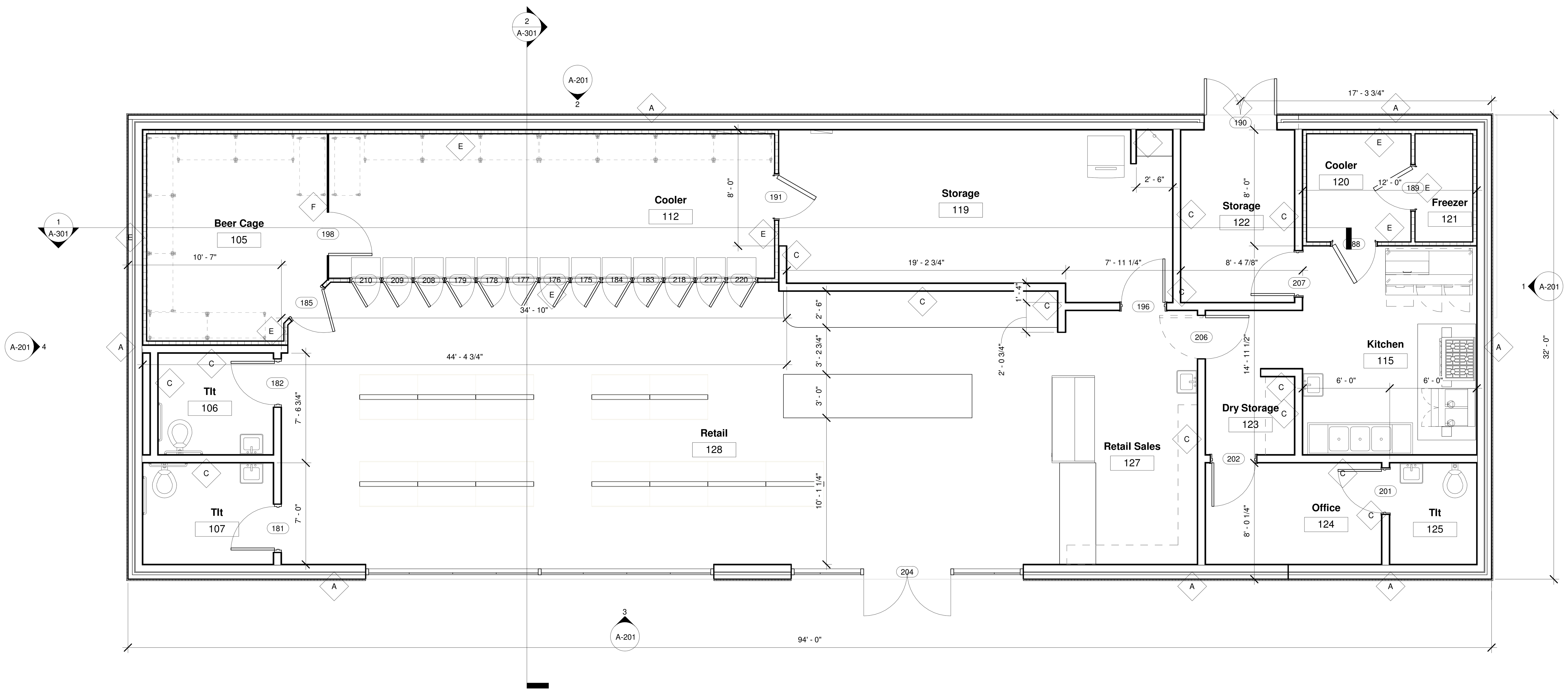
Construction Documents

Revision	#	Rev Date

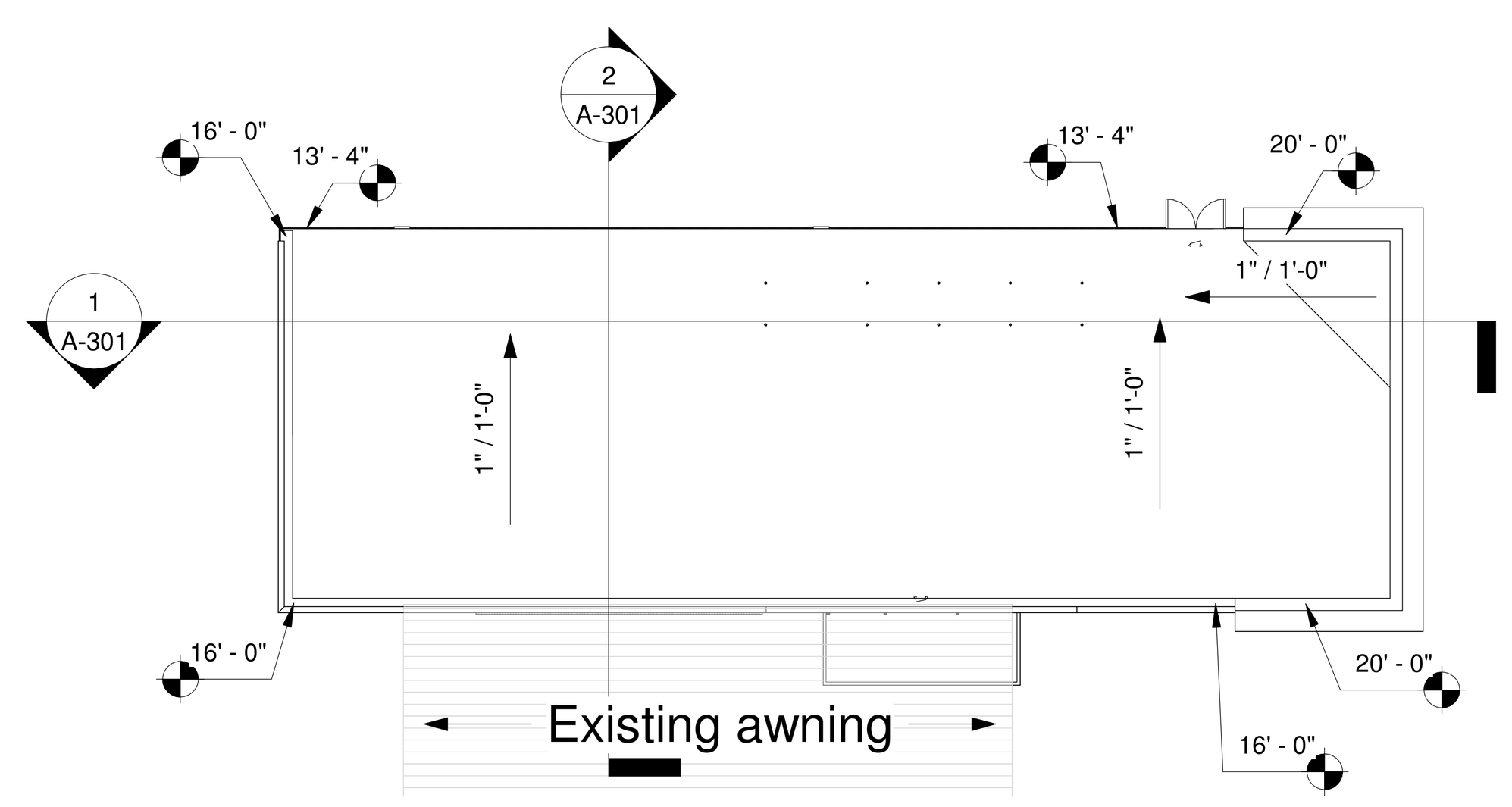
Framing & Section Details

S 103 A

2/27/2026 5:25:25 PM
E:\my stuff\BUSINESS\work\25 1202 HWY 80 Renovation\25 1202 4020 HWY 80 W Store.rvt



1 Floor Plan
1/4" = 1'-0"



2 Roof Plan
1/16" = 1'-0"

Door Schedule

Mark	Height	Width	Frame Material	Description	Finish	Operation	Hinges	Locket Type	#
181	7' - 0"	3' - 0"	Steel	Hollow Metal Panel	Painted	Swing	Full Height Hinge	Passage w Closer & DB (include exterior Privacy indicator)	181
182	7' - 0"	3' - 0"	Steel	Hollow Metal Panel	Painted	Swing	Full Height Hinge	Passage wCloser & DB (include exterior Privacy indicator)	182
185	7' - 0"	3' - 0"	Per Manf.	Thin Framed Full Height Lite	Prefinished	Swing	1-1/2 Pair	Passage w Weather Seal & Closer	185
188	7' - 0"	3' - 0"	Per Manf.	Insulated Door Solid Door Panel	Per Manf.	Swing	1-1/2 Pair	Passage	188
189	7' - 0"	3' - 0"	Per Manf.	Insulated Door Solid Door Panel	Per Manf.	Swing	1-1/2 Pair	Passage	189
190	7' - 0"	5' - 0"	Steel	Hollow Metal Panel	Painted	Swing	1-1/2 Pair	Panic Hardware w Keyed Lever Ext. & Flush Bolt	190
191	7' - 0"	3' - 0"	Per Manf.	Insulated Door Solid Door Panel	Per Manf.	Swing	1-1/2 Pair	Passage	191
196	7' - 0"	3' - 0"	Steel	Hollow Metal Panel	Painted	Swing	1-1/2 Pair	Keyed Storage	196
198	6' - 0"	3' - 0"	Fencing	Fencing	Fencing	Swing	1-1/2 Pair	Passage	198
201	7' - 0"	3' - 0"	Steel	Wood Veneered Panel	Sealed	Swing	1-1/2 Pair	Privacy	201
202	7' - 0"	3' - 0"	Steel	Wood Veneered Panel	Sealed	Swing	1-1/2 Pair	Privacy	202
204	7' - 0"	6' - 0"	Aluminum	Thin Framed Full Height Lite	Prefinished	Swing	Full Height Hinge	Passage w Closer, DB, & Flush Bolt	204
206	7' - 0"	3' - 0"	Steel	Stainless Double Action Door	Per Manf.	Double Action Swing	DBL ACTION	Deadbolt	206
207	7' - 0"	3' - 0"	Steel	Hollow Metal Panel	Painted	Swing	1-1/2 Pair	Passage	207

Wall Schedule

Type Mark	Area	Description	Length
A	3511 SF	2x6 Stud (insulated) with 5/8" Sheathing & Drywall and Brick Exterior	240'
C	1592 SF	2x4 Stud with 5/8" Drywall both Sides	219'
E	1180 SF	Metal PreInsulated Sandwich Panel	161'
F	63 SF	Aluminum Fencing	10'

General Floor Plan Notes

1. Do not scale drawings. Verify all dimensions and levels in the field and report conflicts before proceeding.
2. All dimensions are taken from face of wall covering unless noted otherwise; grids and centerlines govern layout.
3. ± dimensions allow construction tolerance; if any dimension varies more than 2% from that indicated, notify the Architect.
4. Where plan, elevations, and schedules differ, the largest code-compliant dimension governs—notify the Architect of discrepancies.
5. Coordinate all window and door openings at exterior walls with elevations.
6. Construct partitions per Partition Types; extend rated and acoustical partitions to structure or rated lid as indicated; provide deflection head where required; maintain continuous seals at head, base, and perimeter.
7. Partition fire ratings shall match tags on plan; maintain continuity through concealed spaces and at intersections; protect penetrations and joints with listed fire-/smoke-resistive assemblies; rated openings to match adjacent wall rating.
8. Doors, frames, and glazing shall match sizes, swings, and clear widths shown; verify egress swing and approach clearances at each door; provide safety glazing in hazardous locations and vision lites where indicated; thresholds on accessible routes shall be flush (≤ 1/4" vertical or 1/2" beveled).
9. Maintain required egress widths and turning clearances; no projections into required widths beyond code allowances.
10. Coordinate new wall and opening locations with structure; do not cut structural members; headers/lintels per structural documents at locations shown on plan.
11. Set finish floor elevations to maintain flush transitions between finish materials at doorways and across rooms as shown; substrate flatness/levelness to meet finish requirements.
12. Provide acoustical sealant at base and head of sound-rated partitions and at room perimeters as indicated; seal gaps at frames and glazing stops to meet required STC values.
13. Provide clear floor spaces and door approach clearances as dimensioned on plan; mounting heights for architectural items shall comply with 2010 ADA Standards where applicable.
14. Coordinate all plumbing, mechanical, and electrical fixtures with their respective plans; any discrepancies between fixture locations on MPE and architectural drawings shall be brought to the Architect promptly.
15. Reconcile door numbers, room names, partition tags, and finish tags between plan, schedules, and details before layout; field-verify all items noted VIF prior to framing.
16. Execute new work plumb, level, and true with aligned reveals and consistent joints; protect completed work during construction and deliver finished surfaces free of damage.

General Roof Notes

1. Do not scale drawings. Roof elevations are to finished floor (AFF) unless noted; slopes shown on plan govern.
2. Standing-seam metal roof panels with **1-3/4" minimum seam height**; concealed-clip, floating system; gauge/profile/finish per schedules and details.
3. Provide minimum roof slope per the panel manufacturer's tested system, **not less than 1/2:12** unless noted otherwise.
4. Install continuous **high-temperature underlayment**; self-adhered at eaves, valleys, rakes, ridges, and all penetrations; synthetic or self-adhered elsewhere as required by the panel manufacturer.
5. Substrate to be continuous sheathing per structural documents; verify deck flatness and fastener withdrawal values prior to panel installation.
6. Clips/fasteners: corrosion-resistant; spacing and pattern to satisfy required **wind-uplift pressures by zone** (field, perimeter, corner). Provide manufacturer's attachment layout with submittals.
7. Edge metal, eaves, and rakes to comply with **ANSI/SPRI ES-1**; provide closures, hemmed edges, and sealant tapes per manufacturer.
8. Flashings at ridges, hips, valleys, eaves, rakes, walls, and curbs to be factory- or shop-formed; use butyl sealant tapes and fasteners as approved by the panel manufacturer; do not field-improvise details.
9. Penetrations: **locate in panel flats**, not in seams; maintain minimum clearances from ribs and laps; use flexible pipe boots or factory curb flashings compatible with the panel system. No exposed fasteners through panel flats except where specifically detailed.
10. Provide **crickets/diverters upslope of all curbs or penetrations** wider than 24" and at chimneys/large stacks to maintain drainage.
11. **Roof equipment shall NOT be mounted directly to roof panels.** Support all equipment on curbs or structural frames bearing on structure; provide curb height **min 8" above finished roof** unless noted otherwise.
12. Provide **walkway pads/strips** from roof access to and around equipment service sides; locate to avoid ponding and maintain drainage.
13. Separate dissimilar metals and isolate from copper runoff; remove all drilling swarf/filings daily to prevent finish corrosion.
14. Coordinate gutter, downspout, and overflow details and sizes with schedules; preserve intended drainage paths—no blocking of valleys or seams.
15. **Open-cell spray polyurethane foam insulation** at the underside of the roof deck, **6" minimum thickness**, continuous at ridges, eaves, and wall intersections; seal all joints to create a continuous air barrier.
16. Provide required **thermal/ignition barriers** over spray foam per code; coordinate with interior finishes and any attic/service zones.
17. Assembly is **unvented** unless noted; close off soffit/ridge vents and seal all exterior air pathways at the roof line where spray foam is used.
18. Provide permanent roof **tie-off anchors** where shown on drawings; coordinate anchor locations with structure and roofing to maintain watertightness.
19. Maintain required clearances from roof edges for equipment and from access paths; provide guards where indicated.
20. All cutting/penetrations through roofing require Architect approval **before** work; field-cut panels only where detailed; no penetrations within the distance of seams/ribs as limited by the manufacturer.
21. Color/finish of exposed metal components to match schedules (PVDF 70% fluoropolymer where specified); keep lines straight and seams uniformly seamed.
22. Install roofing strictly per the **panel manufacturer's published instructions** and project details to qualify for the specified warranties; submit manufacturer's inspection/letter of compliance at closeout.

MS CONSTRUCTION LAW: 1. PURSUANT TO SECTION 73-1-39, PRIVATELY OWNED BUILDINGS THAT ARE THREE (3) STORIES IN HEIGHT OR MORE, OR BUILDINGS THAT ARE MORE THAN 5,000 SQUARE FEET, UNLESS THE PROJECT IS SPECIFICALLY EXEMPTED BY SECTION 73-1-39. 2. PURSUANT TO SECTION 73-1-39, PUBLIC BUILDINGS OWNED BY THE STATE OF MISSISSIPPI IF THE PROJECT CONTAINS MORE THAN TEN THOUSAND (10,000) SQUARE FEET OF GROUND FLOOR AREA, OR IF THE PROJECT IS THREE (3) OR MORE STORIES IN HEIGHT, UNLESS SPECIFICALLY EXEMPTED BY SECTION 73-1-39.

REGISTERED ARCHITECT
Paul
Purser
5582
STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

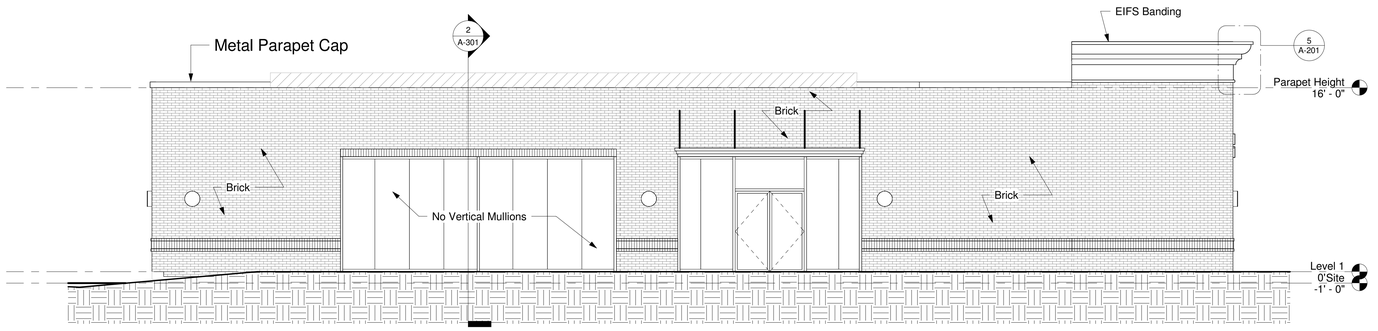
PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

Construction Documents

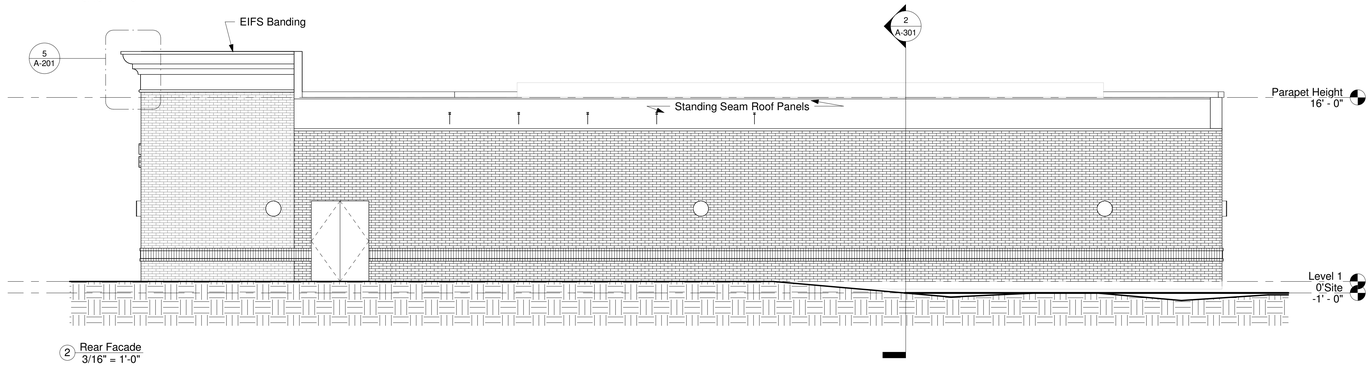
Revision	#	Rev Date

Main Floor

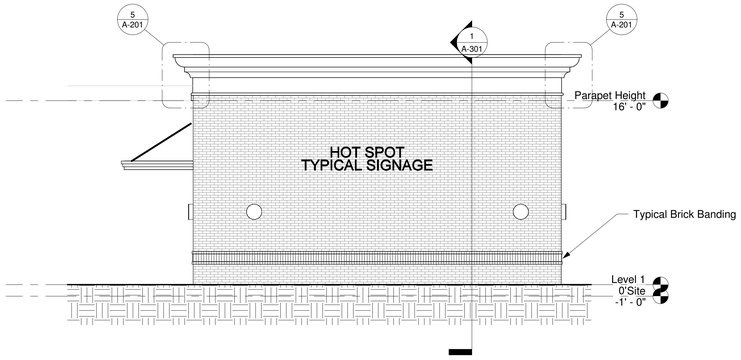
101 A



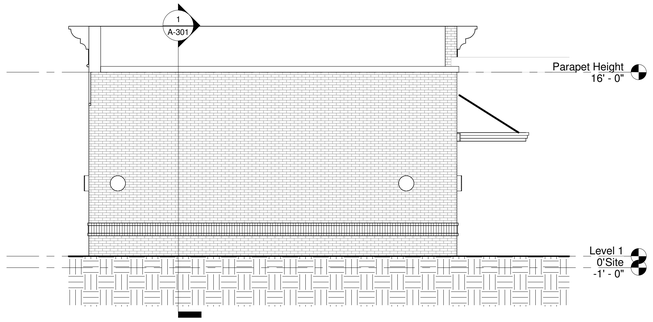
3 Front Facade
3/16" = 1'-0"



2 Rear Facade
3/16" = 1'-0"



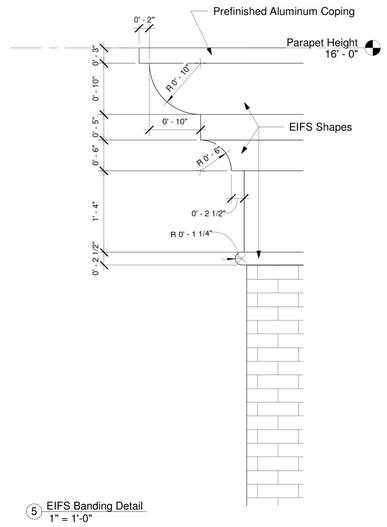
1 Right Side Facade
3/16" = 1'-0"



4 Left Side Facade
3/16" = 1'-0"

Exterior Wall Material Schedule

Material: Mark	Material: Name	Material: Description	Material: Area	Material: Comments	#
EF1	Brick 01	Brick at Main Building Structure	1054 SF		EF1



5 EIFS Banding Detail
1" = 1'-0"

General Notes

1. Coordinate **brick color** with Owner; submit samples and mockup for approval before ordering.
2. Coordinate **EIFS color/texture** with Owner; provide manufacturer's color chips and finish samples for approval.
3. Coordinate **awning color/finish** (fabric or metal) with Owner; submit shop drawings and finish samples.
4. Provide **mounting brackets through brick veneer to structure** for awnings/canopies; do not fasten to veneer alone. Provide thermal isolation, through-wall flashing, and sealant at all penetrations.
5. Establish primary **datum lines** (finish floor, head and sill datums, parapet heights) and align storefront, windows, trims, and features to these datums across elevations.
6. Keep exterior planes **plumb, true, and in one plane**; align joints, reveals, coursing, and trim lines uniformly around corners.
7. **Brick veneer:** provide expansion joints where indicated and per structural/manufacturer guidance at changes in plane/height; install **through-wall flashing with end dams** at shelf angles, lintels, and at sills; provide weeps and cavity drainage as detailed.
8. **Lintels/shelf angles:** hot-dip galvanized or stainless as specified; prime/finish exposed steel; provide end dams and drip edges; maintain required bearing each end.
9. **EIFS:** provide control/expansion joints at substrate joints, changes in plane, and per manufacturer; back-wrap at openings; maintain required clearances above paving/grade and at roof intersections; use drainage EIFS where specified.
10. **Sealants:** color-match adjacent materials; provide backer rod and bond-breaker as required; seal all transitions between dissimilar materials, at control/expansion joints, and at perimeter of frames, trims, and penetrations.
11. **Windows/storefront/doors:** align heads and sills across elevations; provide **pan flashing at sills**, head flashing with end dams, and jamb jamb-to-WRB tie-ins to maintain continuous air/water barrier.
12. **Parapets and edge metal:** install sloped cap flashing toward roof; continuous cleats and hemmed drip edges; comply with **ANSI/SPRI ES-1**; integrate with roofing and air/water barriers.
13. **Roof-to-wall** interfaces: provide kick-out flashing and step/apron flashings as detailed; keep cladding clear of roofing per manufacturer.
14. **Downspouts/scuppers/overflows:** locate per drawings; align with façade joints; provide splash blocks or connections as detailed; maintain separation from pedestrian paths where required.
15. **Awnings/canopies:** submit engineered shop drawings showing loads, bracket spacing, and attachment to structure; provide **crickets/drip edges** above to divert water; coordinate clearances from doors and signage.
16. Provide concealed **blocking/backing** in exterior walls for awnings, handrails/guards, signage, address numerals, and other mounted items; do not attach these items directly to EIFS.
17. Maintain **air/water barrier continuity** at all transitions (sheathing to frames, frames to cladding, cladding to roof/parapet); use compatible primers, tapes, and flashings; no unsealed laps.
18. Tolerances: maintain straight joints/reveals, uniform gaps, and consistent coursing; adjust unit layout to avoid sliver cuts at returns and parapet caps.
19. **Cleaning and protection:** use manufacturer-approved cleaners for each material; protect finished surfaces from staining, lime run, and galvanic contact; remove protective films at substantial completion.
20. Provide a **façade mockup** (brick/EIFS/window/flashings/sealants) in a representative location for review and approval before proceeding with full elevation work.
21. Coordinate final **signage locations** and penetrations with Owner; provide sealed penetrations and internal blocking; route power (if any) through concealed paths shown on architectural drawings.
22. Submit complete **exterior finish schedule** (materials, colors, gloss) for Owner confirmation prior to fabrication/installation.

MS CONSTRUCTION LAW: 1. PURSUANT TO SECTION 73-1-39, PRIVATELY OWNED BUILDINGS THAT ARE THREE (3) STORIES IN HEIGHT OR MORE, OR BUILDINGS THAT ARE MORE THAN 5,000 SQUARE FEET, UNLESS THE PROJECT IS SPECIFICALLY EXEMPTED BY SECTION 73-1-39. 2. PURSUANT TO SECTION 73-1-39, PUBLIC BUILDINGS OWNED BY THE STATE OF MISSISSIPPI OR ANY POLITICAL SUBDIVISION THEREOF WITH TEN THOUSAND (10,000) SQUARE FEET OF GROUND FLOOR AREA, OR IF THE PROJECT IS THREE (3) OR MORE STORIES IN HEIGHT, UNLESS SPECIFICALLY EXEMPTED BY SECTION 73-1-39.

REGISTERED ARCHITECT
Paul Purser
5582
STATE OF MISSISSIPPI

STAMP NOT VALID WITHOUT SIGNATURE

Dhunna Gas Station - HWY 80

Project No 20251202001 Date 2/27/2026

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

4020 US-80, Jackson, MS 39209

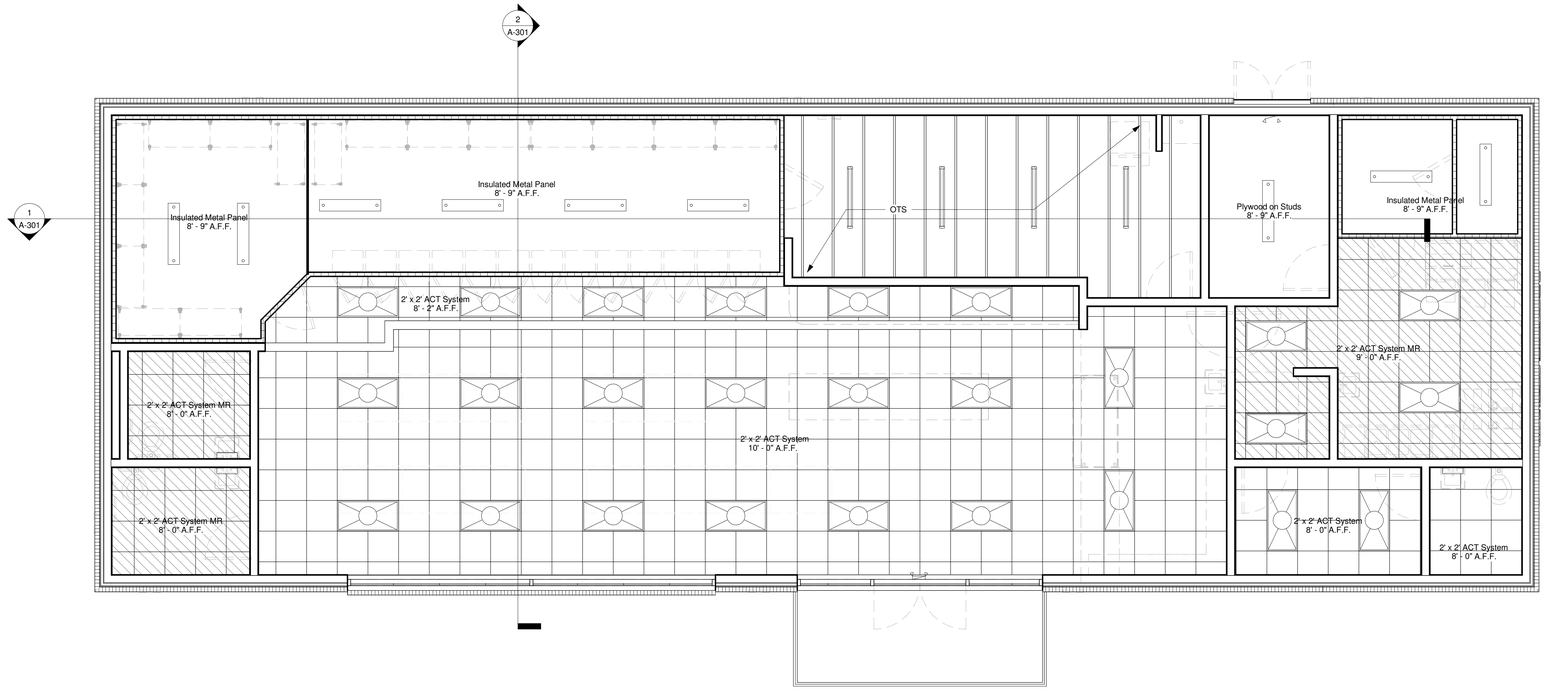
New Construction

Construction Documents

Revision	#	Rev Date

Exterior Elevations

201 A



1 Reflected Ceiling Plan
1/4" = 1'-0"

General RCP Notes

1. Do not scale drawings. Ceiling elevations are to **finished floor (AFF)** unless noted; elevation tags indicate the bottom of ceiling finish or cloud.
2. Verify structure and plenum conditions before layout; maintain required clearances to structure and above-ceiling systems.
3. Suspend ceilings from **building structure only**; do not hang from MEP or fire-protection piping, conduit, or light fixture housings.
4. Lay out grids from room centerlines/primary axes; align grids with storefronts/feature walls where shown.
5. Center and align **light fixtures, diffusers/returns, sprinklers, speakers, detectors, sensors, and access panels** within the ceiling module unless noted otherwise.
6. Avoid border tiles less than **1/2 tile** in either direction; shift grid to achieve compliant tile cuts.
7. Ceiling types, heights, and edges per legend/schedule and details; provide perimeter trim/reveals where indicated and keep ceilings level and true.
8. Soffits/bulkheads: frame to dimensions/elevations shown; provide control joints and corner reinforcement; finish to match adjacent ceilings unless noted.
9. In rated or smoke-resistive assemblies, maintain ceiling membrane continuity; seal penetrations and joints with **listed systems** to preserve required ratings.
10. Provide **flush, finish-matched access panels** at all concealed valves, junction boxes, and devices above hard ceilings; minimum clear opening 16"×16" unless noted; coordinate locations with the Architect.
11. Sprinklers: center heads in tiles where possible; fit tight escutcheons to finish; maintain code-required separations from fixtures and obstructions and coordinate coverage with Fire Protection.
12. Lighting: keep rows straight and aligned to grid/room datum; verify plenum depth for recessed fixtures/air slots; driver/transformer locations to maintain an accessible ceiling where required.
13. Diffusers/grilles: align to grid centerlines and avoid placement in narrow border tiles; use transitions/necks to maintain alignment without distorting the ceiling plane.
14. Provide suspended-ceiling **seismic bracing/perimeter angles/splay wires** as required by code and manufacturer for the project's seismic design category.
15. Maintain minimum **80" headroom** along all egress and accessible routes; no pendant fixtures or signage shall encroach.
16. Finish coordination: match colors/sheens across ceiling components (tiles, trims, access panels, grilles, sprinkler escutcheons, fixture trims) per schedule.
17. The reflected ceiling plan governs the location of ceiling-mounted architectural devices; resolve any inter-discipline conflicts **prior to rough-in** and notify the Architect of discrepancies.

General Ceiling Notes

1. Any Ceiling Patterns not identified below are open to the structure above and do not require finishing.

- 2x2 Lay In Tile w Tegular Edge
- 2x2 Lay In Tile w Vinyl Covering

OTS • Open to Structure Above

Room Schedule

Number	Name	Area	Perimeter	Ceiling Finish	Wall Finish	Floor Finish	Base Finish	Comments	#
105	Beer Cage	170 SF	51' - 8 3/4"	Insulated Metal Panel	Insulated Metal Panel	Quarry Tile	Cove Base		105
106	Tlt	56 SF	29' - 10 1/2"	Vinyl Covered ACT	Full Height Wall Tile	Floor Tile	Cove Base		106
107	Tlt	63 SF	32' - 0"	Vinyl Covered ACT	Full Height Wall Tile	Floor Tile	Cove Base		107
112	Cooler	306 SF	81' - 5"	Insulated Metal Panel	Insulated Metal Panel	Quarry Tile	Cove Base		112
115	Kitchen	201 SF	66' - 9"	Vinyl Covered ACT	Grey FRP	Quarry Tile	Cove Base		115
119	Storage	294 SF	82' - 9 3/8"	Unfinished	Painted Plywood	Quarry Tile	Cove Base		119
120	Cooler	54 SF	29' - 3 3/4"	Insulated Metal Panel	Insulated Metal Panel	Quarry Tile	Cove Base		120
121	Freezer	30 SF	22' - 10 3/4"	Insulated Metal Panel	Insulated Metal Panel	Quarry Tile	Cove Base		121
122	Storage	93 SF	39' - 5 3/8"	Painted Plywood	Painted Plywood	Quarry Tile	Cove Base		122
123	Dry Storage	34 SF	23' - 7"	2x2 ACT	5/8" Drywall	Floor Tile	Rubber Base		123
124	Office	85 SF	38' - 3 1/4"	2x2 ACT	5/8" Drywall	Floor Tile	Rubber Base		124
125	Tlt	42 SF	26' - 0"	2x2 ACT	Full Height Wall Tile	Floor Tile	Cove Base		125
127	Retail Sales	166 SF	54' - 0"	2x2 ACT	5/8" Drywall	Floor Tile	Rubber Base		127
128	Retail	1025 SF	144' - 2"	2x2 ACT & WD Look Tile	5/8" Drywall	Floor Tile	Rubber Base		128

Dhunna Gas Station - HWY 80

Project No 20251202001 Date 2/27/2026

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

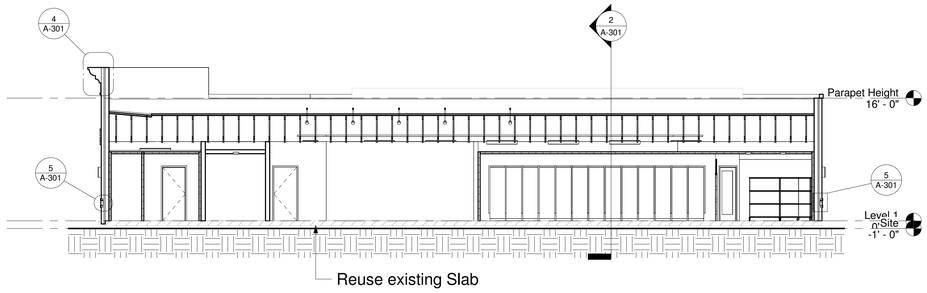
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

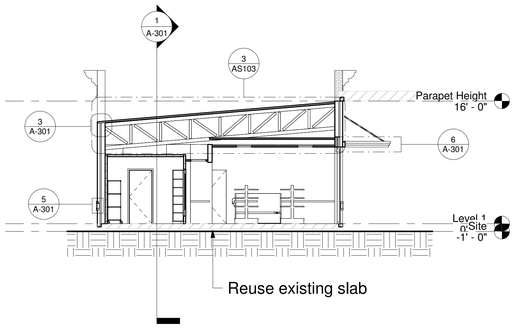
Revision	#	Rev Date

Reflected Ceiling Plan & Schedules

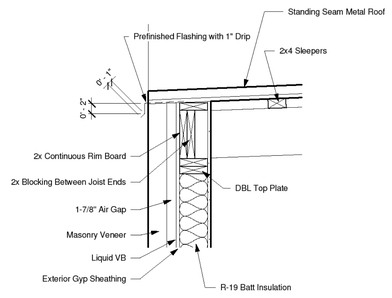
141 A



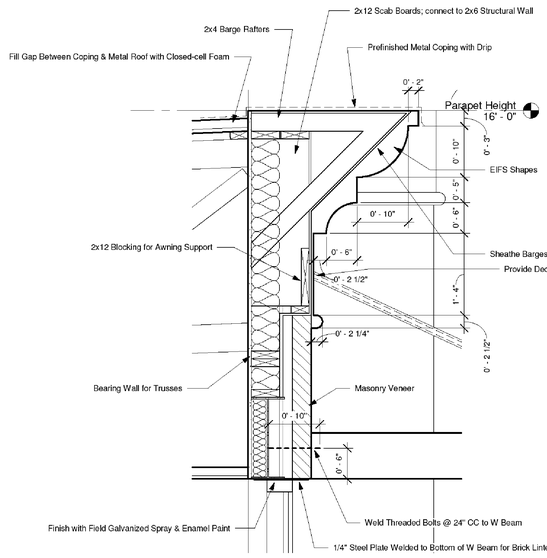
1 E/W Building Section
1/8" = 1'-0"



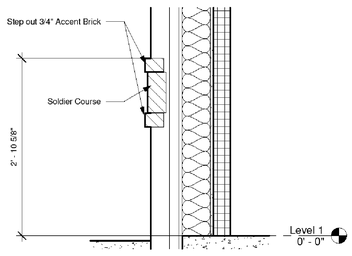
2 N/S Building Section
1/8" = 1'-0"



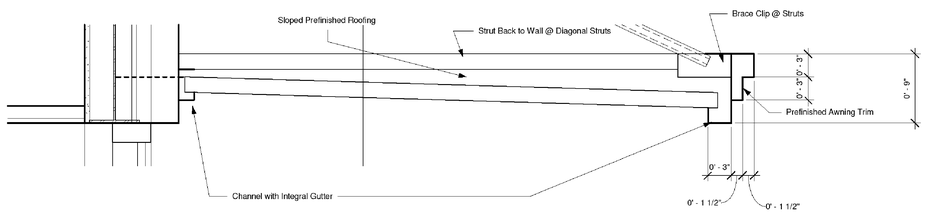
3 Typical Lower Soffit Detail
1" = 1'-0"



4 Typical Upper Soffit Detail
1" = 1'-0"



5 Typical Wall Detail
1" = 1'-0"



6 Typical Awning Detail
1 1/2" = 1'-0"

General Section Notes

1. Build straight, plumb, and in plane. Coordinate control/expansion joints, window head/sill heights, and coursing so lines wrap cleanly at corners.
2. Substrate: install exterior gypsum sheathing tight to framing; stagger joints; fasten per mfr/schedule. Tape/treat joints where required by the AB manufacturer.
3. Air/Water Control: apply **liquid-applied AB** to continuous, uniform mil thickness; extend into rough openings and onto compatible flashings. Turn **AB** to terminate at foundations and roof/parapet transitions; no holidays or pinholes.
4. AB Continuity: tie AB to roof underlayment at parapets/roof-to-wall, to foundation waterproofing at base, and to door/window frames at perimeter using compatible primers/tapes.
5. Vapor Control (mixed-humid): use **Class II/III interior vapor retarder** (e.g., standard latex paint on the warm-in-winter side). Do **not** install interior polyethylene.
6. Wood framing: #2 SPF/SP or better; provide sheathing blocking at openings, corners, and at EIFS shape anchor points where required. Fire-block at 10' max vertical intervals and at concealed horizontal spaces.
7. Brick veneer; provide **1" min (2" preferred) drained cavity** between veneer and AB; install **cavity drainage mat** where detailed. Keep cavity clean—no mortar bridges.
8. Through-wall flashings: self-adhered or flexible stainless/laminate with end dams at **every shelf angle, lintel, relieving angle, and continuous horizontal interruption**. Lap into the AB; turn up at back; extend through veneer with exposed drip.
9. Weeps: provide vents or rope at **24" o.c.** above flashings and at base of walls; keep unobstructed.
10. Shelf angles/lintels: size/finish per schedule; provide thermal shims/thermal break where shown; prime/finish exposed steel; maintain bearing each end; provide end dams in flashing over.
11. Window/door rough openings: form **sill pan** (prefab or field-formed) with end dams; slope to exterior. Sequence jamb/head flashings **over** the pan and **under** the WRB/AB shingle-fashion. Seal frame perimeters with backer rod + sealant (no face-only caulk).
12. Kick-out/step/apron flashings: provide at all roof-to-wall interfaces; keep cladding clear of roofing per manufacturer.
13. EIFS shapes (bands, trims, cornices): use **drainage-type EIFS** components and mfr-approved adhesives/mechanical fastening. **Do not mount through EIFS to framing without designed blocking and thermal isolation.** Provide back-wrap, mesh reinforcement at edges, and sealant joints where shapes meet dissimilar materials.
14. Separation of systems: **do not attach awnings, canopies, or signage to brick veneer or EIFS alone.** Provide engineered brackets bearing to structure; coordinate through-wall flashings and sealed penetrations.
15. Sealants: use mfr-compatible, low-modulus sealants with backer rod; joint design per ASTM C1193. Seal all dissimilar transitions (brick-to-EIFS, EIFS-to-metal, frame perimeters, control joints). Color-match adjacent finish.
16. Control/expansion joints: brick control joints at spacing per engineer/mfr and at returns/offsets; EIFS control joints per mfr at substrate joints, changes in plane, and long runs. Align joints across materials where feasible.
17. Termite/Moisture: provide **termite shields** or treated sill; maintain brick/EIFS clearances to grade/paving per mfr; do not bury weeps or base flashings.
18. Fasteners/Corrosion: use stainless or hot-dip galvanized ties, anchors, and lath/mesh where exposed to moisture or PT wood. Maintain specified embedment and spacing of brick ties; keep ties out of mortar joints (bed into mortar with full key).
19. Insulation (if cavity or interior batt is included): maintain ventilation/drainage path at cavity; do not block weeps. Fit batts snug without compression; keep service penetrations sealed at AB plane.
20. Parapets/tops of walls: slope cap flashing to roof; continuous cleats and hemmed edges; integrate with roof underlayment/AB; provide air seal at top plate.
21. Penetrations: sleeve and flash all penetrations through AB; use boots/collars compatible with cladding. Maintain slope to exterior; no unsealed foam.
22. Tolerances/Finish: uniform joints/reveals, consistent EIFS textures, straight brick lines; avoid sliver cuts. Clean masonry and EIFS with **approved** cleaners only.
23. Mockup: provide on-site mockup (brick + EIFS shape + window + flashings + sealants) for review of color, texture, coursing, jointing, and detailing prior to full production.
24. Testing/Verification: coordinate AB adhesion/wet-mil checks and field water testing of first installed opening (per ASTM E1105 or local standard) if directed.
25. Documentation: submit manufacturer system letters for EIFS, AB, flashings, and brick accessories confirming compatibility; provide warranties per spec.

Dhunna Gas Station - HWY 80

Project No 20251202001 Date 2/27/2026

PURSER & COMPANY | 601.203.4060 DRAWINGS@PURSERANDCOMPANY.COM

4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	#	Rev Date

Building Sections & Details

301 A

PLUMBING SYMBOLS & ABBREVIATIONS

ABBREVIATIONS

A.S.M.E.	AMERICAN SOCIETY OF MECH. ENGINEERS	HR.	HOUR
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIAL	H.W.	HOT WATER
A/C	AIR CONDITIONING	I.D.	INSIDE DIAMETER
ABV.	ABOVE	IND.	INDIRECT
APPROX.	APPROXIMATE	INV.	INVERT
BLDG.	BUILDING	I.W.	INDIRECT WASTE
BOT.	BOTTOM	KIT.	KITCHEN
BRKR.	BREAKER	K.W.	KILOWATT
B.W.V.	BACK WATER VALVE	MECH.	MECHANICAL
℄	CENTER LINE	MIN.	MINUTE
C.O.	CLEAN OUT	M.H.	MANHOLE
C.P.	CHROME PLATED	MOD.	MODEL
C.V.	CHECK VALVE	N.I.C.	NOT IN CONTRACT
CONC.	CONCRETE	N.T.S.	NOT TO SCALE
CONT.	CONTINUATION	ø	DIAMETER
COND.	CONDENSATE	O.D.	OUTSIDE DIAMETER
CONN.	CONNECTION	O.S.&Y.	OUTSIDE SCREW & YOKE VALVE
CAP.	CAPACITY	P.&T.	PRESSURE & TEMPERATURE
CLG.	CEILING	PLUMB.	PLUMBING
C.I.P.	CAST IRON PIPE	PROP.	PROPERTY
C.W.	COLD WATER	R.D.	ROOF DRAIN
DN.	DOWN	RED.	REDUCER
DR.	DRAIN	REINF.	REINFORCING
DET.	DETAIL	REQ'D.	REQUIRED
DIAG.	DIAGRAM	R.F.	ROOF
DIAM.	DIAMETER	R.M.	ROOM
DIM.	DIMENSION	R.P.M.	REVOLUTIONS PER MINUTE
DOM.	DOMESTIC	R.W.L.	RAIN WATER LEADER
DWG.	DRAWING	SAN.	SANITARY
EA.	EACH	SCH.	SCHEDULE
E.D.F.	ELECTRIC DRINKING FOUNTAIN	SECT.	SECTION
ELEC.	ELECTRICAL	SHT.	SHEET
ELEV.	ELEVATION	SPECS.	SPECIFICATIONS
EMERG.	EMERGENCY	SPKR.	SPRINKLER
E.W.H.	ELECTRIC WATER HEATER	S/S	STAINLESS STEEL
EXIST.	EXISTING	S.S.	SERVICE SINK
F.D.	FLOOR DRAIN	TEMP.	TEMPERATURE
FL.	FLOOR	T.O.P.	TOP OF PIPE
F.O.	FUEL OIL	TYP.	TYPICAL
FT.	FOOT	T.S.	TAMPER SWITCH
F.U.	FIXTURE UNIT	VAC.	VACUUM
F.C.O.	FLUSH CLEAN OUT	V.C.P.	VITRIFIED CLAY PIPE
FIN.	FINISHED	V.T.R.	VENT THRU ROOF
FIXT.	FIXTURE	V.	VENT
FUT.	FUTURE	VS.	VENT STACK
GA.	GAUGE	W/	WITH
G.V.	GATE VALVE		
GAL.	GALLONS		
GALV.	GALVANIZED		
GEN.	GENERAL		
G.P.H.	GALLONS PER HOUR		
G.P.M.	GALLONS PER MINUTE		
H.B.	HOSE BIBB		
HD.	HEAD		
H.P.	HORSE POWER		

PIPING SYMBOLS

- ACID WASTE
- ACID VENT
- SANITARY SEWER
- SANITARY VENT
- GW — GREASE WASTE
- STORM DRAIN
- DA — DENTAL COMPRESSED AIR
- DV — DENTAL VACUUM
- A — COMPRESSED AIR
- T — TEMPERED WATER
- COLD WATER
- HOT WATER (120°)
- HOT WATER RECIRCULATION (120°)
- (140) HOT WATER (140°)
- (140) HOT WATER RECIRCULATION (140°)
- (180) HOT WATER (180°)
- (180) HOT WATER RECIRCULATION (180°)
- F — FIRE PROTECTION WATER
- SP — AUTOMATIC FIRE SPRINKLER
- T — FIRE TEST DRAIN
- G — GAS
- FOS — FUEL OIL SUPPLY
- FOR — FUEL OIL RETURN
- FOV — FUEL OIL VENT
- CUT-OFF VALVE (ABOVE GRADE)
- CUT-OFF VALVE (BELOW GRADE)
- PRESSURE REDUCING VALVE
- CHECK VALVE
- BALANCING VALVE
- O.S.&Y. VALVE
- PRES. AND TEMP. RELIEF VALVE
- GAS COCK
- WATER FLOW MEASURING DEVICE

- UNION
- CLEAN OUT PLUG
- FLOOR CLEAN OUT
- IN LINE STRAINER
- WATER HAMMER SHOCK ABSORBER (PLAN VIEW)
- WATER HAMMER ARRESTOR (ELEVATION)
- PIV — POST INDICATOR VALVE
- FLOW SWITCH
- FIRE DEPT. SIAMESE CONNECTION
- SEMI-RECESSED CHROME PENDENT
- UPRIGHT FIRE SPRINKLER HEAD
- INSTITUTIONAL TYPE PENDENT SPRINKLER
- INSTITUTIONAL TYPE SIDEWALL
- INSTITUTIONAL TYPE EXTENDED COVERAGE SIDEWALL
- DRY PENDENT SPRINKLER
- EXTRA LARGE ORIFICE 286° UPRIGHT
- PRESSURE GAUGE WITH COCK
- P-1 — PLUMBING RISER
- CONNECTION OF NEW TO EXISTING
- HOSE BIBB W/ VACUUM BREAKER
- RISER DOWN
- FLOW IN DIRECTION OF ARROW
- RISER UP
- PIPE RISE OR DROP
- TOP CONNECTION BRANCH
- BOTTOM CONNECTION BRANCH
- SIDE CONNECTION BRANCH
- CAP ON END OF PIPE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER

GENERAL NOTES:

CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL PLUMBING INSTALLATIONS WITH OTHER TRADES SUCH AS ELECTRICAL, STRUCTURAL, HVAC, LIGHTING, CEILING CONSTRUCTION AND SUPPORTS, ETC. ANY CONFLICTS ARISING OUT OF A LACK OF CONSTRUCTION COORDINATION OR DUE TO LACK OF CONSIDERATION FOR THE NEEDS OF OTHER TRADES SHALL BE RESOLVED AT NO EXPENSE TO THE OWNER.

ALL PIPING SHALL BE INSTALLED IN SUCH A MANNER THAT CONFLICTS WITH AIR CONDITIONING DUCTS AND WITH CEILING LIGHTS WILL NOT OCCUR. SOME PIPING SHALL BE INSTALLED WITH SLEEVES THROUGH WALLS. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING THE SIZES OF SLEEVES AND THE ELEVATIONS AT WHICH OPENINGS ARE TO BE MADE PRIOR TO INSTALLATION OF STRUCTURAL MEMBERS.

FOR EVERY PIPE SLEEVE PENETRATING FIRE RATED WALLS AND SLABS, USE A FIRE BARRIER WRAP STRIP, FIRE RATED CAULK AND PUTTY, ASTM E-814, U.L. LISTED, CAPABLE OF RAPID EXPANSION WHEN EXPOSED TO HEAT. COMPLIES WITH BOCA, ICBO AND SSBC. PROVIDES 3 HOUR FIRE RATING. SEE FIRESTOPPING SPECIFICATION.

ALL SANITARY AND STORM DRAINAGE PIPING SHALL BE INSTALLED AT 1/8" PER FOOT SLOPE UNLESS OTHERWISE NOTED. FIXTURE ARMS AND SMALL BRANCHES SHALL BE SLOPED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE.

PROVIDE ACCESS PANELS FOR SHOCK ABSORBERS AND GATE VALVES AND CLEANOUT COVERS FOR CLEANOUT PLUGS AS SPECIFIED. EACH ITEM SHALL BE PROVIDED WITH ITS ACCESS PANEL OR COVER. ACCESS PANELS AND CLEANOUT COVERS SHALL BE EASILY ACCESSIBLE AND CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING THESE ITEMS SO THAT SHOCK ABSORBER, VALVE, OR CLEANOUT LIES WITHIN WALL OR CEILING IMMEDIATELY BEHIND COVER OR PANEL. CONTRACTOR SHALL COORDINATE THE LOCATION OF PANELS AND COVERS WITH OTHER TOILET ACCESSORIES AND FIXTURES AS WELL AS ARCHITECTURAL LAYOUT.

DURING FINAL PUNCH LIST INSPECTION, CONTRACTOR SHALL HAVE ALL CLEANOUT COVERS AND ACCESS PANELS OPENED AND ITEMS EXPOSED FOR VERIFICATION AS TO THEIR INSTALLATION BY CONTRACTING OFFICER.

PROVIDE AUTOMATIC TRAP PRIMERS FOR ALL FLOOR DRAINS.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

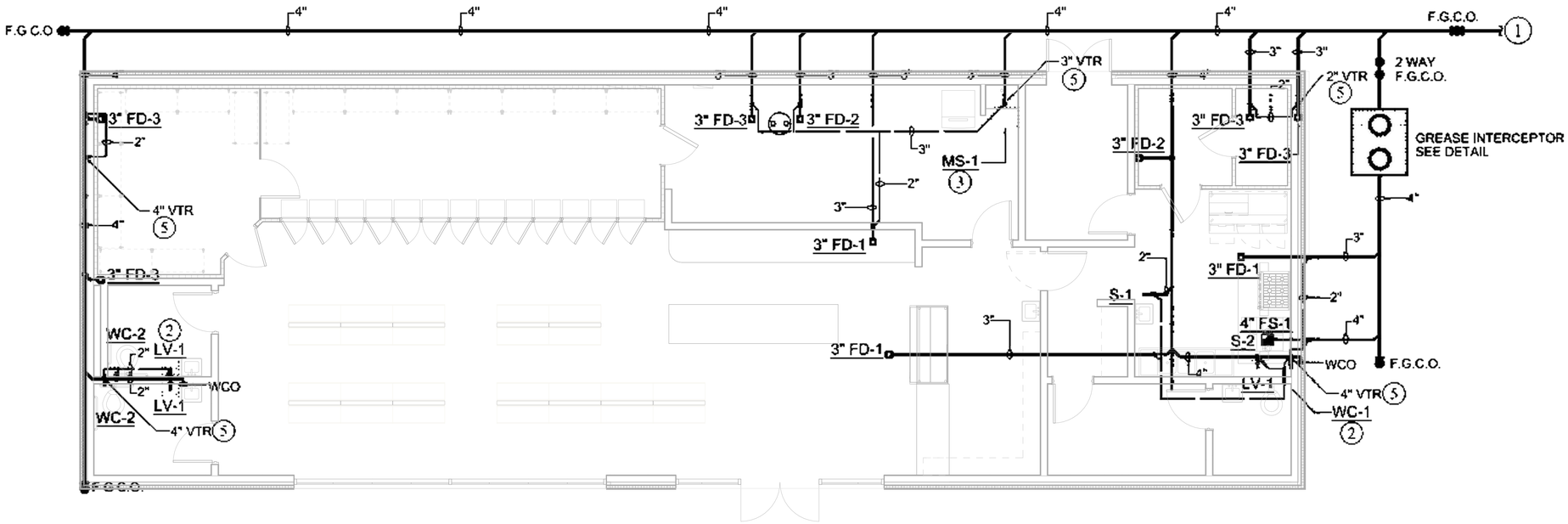
New Construction

Construction Documents

Revision	Rev Date

Symbols & Abbreviations

101 P



1 Floor Plan Plumbing Waste
1/4" = 1'-0"

GENERAL NOTES:

CONTRACTOR TO INSTALL PLUMBING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

SLOPE AND SUPPORT ALL PIPING PER CODE REQUIREMENTS. PROVIDE AND INSTALL UL LISTED FIRE STOP COLLARS AND FIRE CAULK ALL PLUMBING PENETRATIONS AT RATED WALL AND FLOOR ASSEMBLIES.

NOTIFY THE ENGINEER 48 HOURS BEFORE THE WASTE AND VENT PIPING SYSTEM WILL BE PRESSURE TESTED ACCORDING TO 2018 INTERNATIONAL PLUMBING CODE.

NOTIFY THE ENGINEER 48 HOURS BEFORE ANY PIPING ABOVE THE SLAB IN THE WALLS OR CEILINGS IS COVERED. FAILURE TO NOTIFY ENGINEER FOR INSPECTION WILL CAUSE ALL PIPING TO BE UNCOVERED AND PRESSURE TESTED IN THE PRESENCE OF THE ENGINEER.

ALL BELOW GRADE SANITARY SEWER WASTE AND VENT PIPING TO BE SCHEDULE 80 PVC WITH SOLVENT WELD JOINTS. ALL ABOVE GRADE WASTE AND VENT TO BE SCHEDULE 40 PVC WITH SOLVENT JOINTS. INSTALL PIPING, JOINTS, AND FITTINGS PER MANUFACTURER'S RECOMMENDATIONS. WASTE PIPING SHOWN ON THIS DRAWING IS ROUTED BELOW THE FLOOR AND INSIDE THE WALLS TO FIXTURE ROUGH IN LOCATIONS.

ALL VENT PIPING SHOWN IS IN THE WALL AND ABOVE CEILING EXCEPT WHERE OTHERWISE NOTED.

ALL BELOW GRADE PIPE TRENCHES SHALL BE BACKFILLED WITH SELECT SANDY CLAY MATERIAL, AND STAMPED TO PROVIDE CONTINUOUS PIPE SUPPORT. SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE INTERNATIONAL PLUMBING CODE.

SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE.

ALL WASTE PIPING TO BE SLOPED AT 1/8" OR 1/4" PER FOOT AS REQUIRED FOR THE PIPE SIZE IN CONFORMANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE.

ALL PLUMBING ON THIS PROJECT WILL BE CONCEALED BELOW FLOOR, ABOVE CEILING, IN WALL, IN CHASE, OR ELSE AS PER ENGINEER.

COORDINATE VENT STACK THRU ROOF TO BE MINIMUM 15 FEET FROM ANY FRESH AIR INTAKE.

SUPPLY WATER PIPING TO BE HARD DRAWN TYPE 'L' COPPER TUBING WITH SOLDERED FITTINGS.

ALL DOMESTIC WATER PIPING TO BE INSULATED WITH 1" PREFORMED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. APPLY ADHESIVE LABELS ON PIPING ABOVE CEILING TO SHOWN CONTENTS AND FLOW. LABELS TO BE INSTALLED EVERY TWENTY FEET.

PIPING TO BE SUPPORTED WITH CLEVIS TYPE HANGERS AT SPACING AS REQUIRED BY THE 2018 IPC. FOR DOMESTIC WATER PIPING, THE HANGERS SHALL BE LARGE ENOUGH FOR THE PIPE AND INSULATION TO PASS THROUGH. INSTALL SHEET METAL SADDLE AT ALL HANGER LOCATIONS AT BOTTOM OF PIPE.

ROUGH IN PLUMBING CONNECTIONS FOR THE NEW FIXTURES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. ALL NEW SUPPLY WATER PIPING TO BE SOLDERED TYPE L COPPER.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

CONTRACTOR IS RESPONSIBLE FOR ITEMS INCLUDING FIXTURE MOUNTING HEIGHTS, GRAB BARS, FAUCET HANDLES, SEATS, PIPING INSULATION, LAVATORY BARRIERS, AND ELSE REQUIRED TO ENSURE THE ACCESSIBLE FIXTURES ON THIS PROJECT MEET THE REQUIREMENTS OF THE ADA GUIDELINE. CONSULT ENGINEER OR ARCHITECT FOR INFORMATION AS REQUIRED.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

PENETRATIONS THROUGH PARTITIONS AND FLOORS SHALL BE SLEEVED AND SEALED TO MAINTAIN INTEGRITY OF PARTITION AND FLOOR RATING.

NUMBERED NOTES:

1. ROUTE SANITARY WASTE PIPING BELOW GRADE TO APPROVED POINT OF CONNECTION ON PUBLIC SANITARY SEWER SYSTEM. PLUMBING CONTRACTOR RESPONSIBLE FOR INSTALLING COMPLETE PLUMBING SYSTEM AS SHOWN TO A POINT APPROXIMATELY FIVE FEET FROM THE BUILDING FOUNDATION. PLUMBING CONTRACTOR TO COORDINATE IN ADVANCE WITH THE SITE CONTRACTOR IN REGARD TO ALL UTILITY CONNECTION POINTS. FIELD VERIFY THE INVERT ELEVATION OF ANY EXISTING SYSTEMS IF APPLICABLE AND ROUTE NEW PIPING ACCORDINGLY. SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION AND COORDINATE WITH UTILITY PROVIDER FOR THE CONNECTION POINT TO PUBLIC SANITARY SEWER. INSTALL FINISH GRADE CLEANOUTS AT EACH CHANGE OF DIRECTION AND EVERY 75 FEET ALONG ROUTE AS REQUIRED.
2. PROVIDE AND INSTALL NEW PLUMBING FIXTURES AS SHOWN. ROUTE NEW SANITARY SEWER PIPING BELOW GRADE TO EACH FIXTURE. ROUGH IN 4" WASTE PIPING TO EACH WATER CLOSET AND 2" WASTE TO LAVATORIES. VENT EACH FIXTURE TRAP UP IN WALL TO CONNECT TO PLUMBING VENT PIPING. SEE PLUMBING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
3. ROUGH-IN 3" WASTE PIPING TO NEW SERVICE SINK. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. CONTINUE PLUMBING VENT PIPING UP TO ABOVE THE CEILING AND CONNECT TO VENT PIPING THRU THE ROOF.
4. PROVIDE AND INSTALL NEW 3" FLOOR DRAIN WITH WITH SURESEAL TRAP SEAL.
5. ROUTE VENT PIPING UP THROUGH GALVANIZED ROOF JACK FLASHING AND TERMINATE 12" ABOVE ROOF LEVEL. COORDINATE WITH ARCHITECTURAL.
6. CONTRACTOR TO STUB UP AND ROUGH IN APPROPRIATE SIZED WASTE PIPING FOR FUTURE FIXTURE CONNECTION (S) . CAP AND PLUG PIPE AT PENETRATION. TYPICAL.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

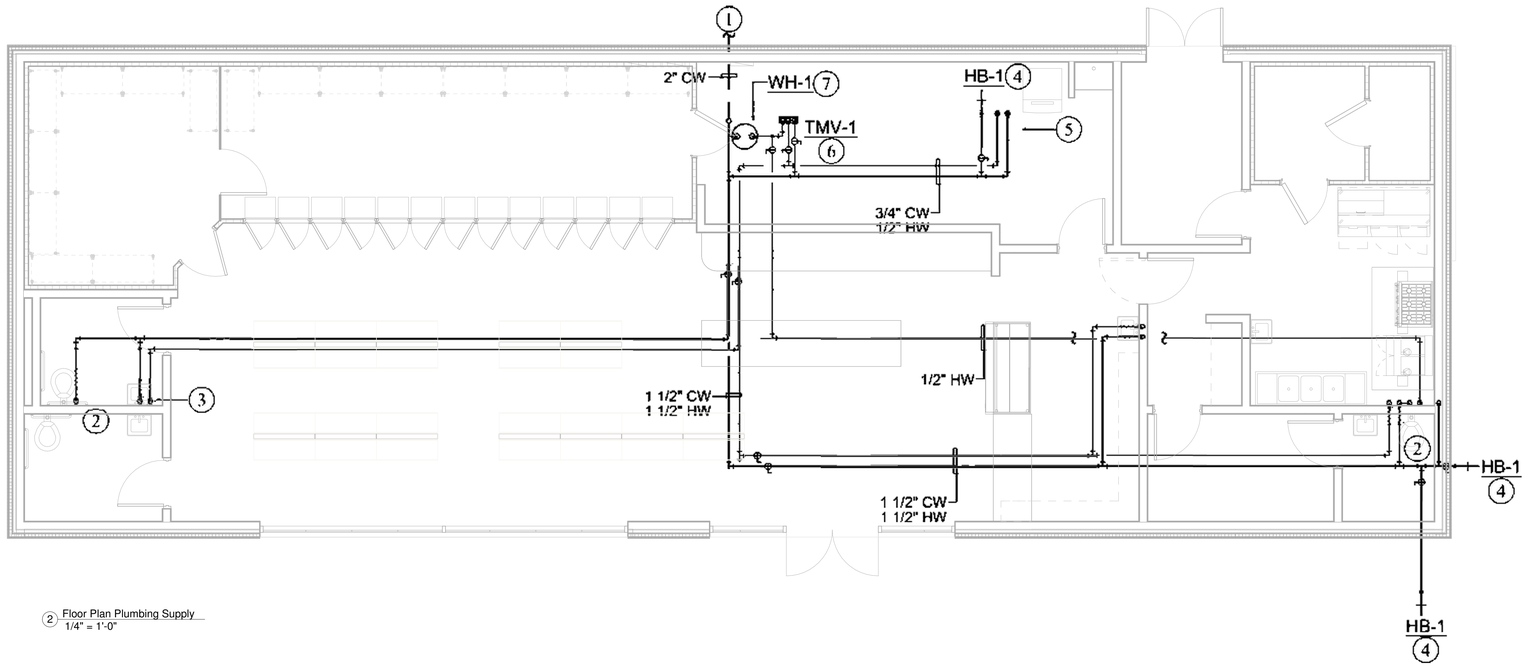
New Construction

Construction Documents

Revision	Rev Date

Plumbing Waste

102 P



2 Floor Plan Plumbing Supply
1/4" = 1'-0"

GENERAL NOTES:

CONTRACTOR TO INSTALL PLUMBING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

SLOPE AND SUPPORT ALL PIPING PER CODE REQUIREMENTS. PROVIDE AND INSTALL UL LISTED FIRE STOP COLLARS AND FIRE CAULK ALL PLUMBING PENETRATIONS AT RATED WALL AND FLOOR ASSEMBLIES.

NOTIFY THE ENGINEER 48 HOURS BEFORE THE WASTE AND VENT PIPING SYSTEM WILL BE PRESSURE TESTED ACCORDING TO 2018 INTERNATIONAL PLUMBING CODE.

NOTIFY THE ENGINEER 48 HOURS BEFORE ANY PIPING ABOVE THE SLAB IN THE WALLS OR CEILINGS IS COVERED. FAILURE TO NOTIFY ENGINEER FOR INSPECTION WILL CAUSE ALL PIPING TO BE UNCOVERED AND PRESSURE TESTED IN THE PRESENCE OF THE ENGINEER.

ALL BELOW GRADE SANITARY SEWER WASTE AND VENT PIPING TO BE SCHEDULE 80 PVC WITH SOLVENT WELD JOINTS. ALL ABOVE GRADE WASTE AND VENT TO BE SCHEDULE 40 PVC WITH SOLVENT JOINTS. INSTALL PIPING, JOINTS, AND FITTINGS PER MANUFACTURER'S RECOMMENDATIONS. WASTE PIPING SHOWN ON THIS DRAWING IS ROUTED BELOW THE FLOOR AND INSIDE THE WALLS TO FIXTURE ROUGH IN LOCATIONS.

ALL VENT PIPING SHOWN IS IN THE WALL AND ABOVE CEILING EXCEPT WHERE OTHERWISE NOTED.

ALL BELOW GRADE PIPE TRENCHES SHALL BE BACKFILLED WITH SELECT SANDY CLAY MATERIAL, AND STAMPED TO PROVIDE CONTINUOUS PIPE SUPPORT. SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE INTERNATIONAL PLUMBING CODE.

SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE.

ALL WASTE PIPING TO BE SLOPED AT 1/8" OR 1/4" PER FOOT AS REQUIRED FOR THE PIPE SIZE IN CONFORMANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE.

ALL PLUMBING ON THIS PROJECT WILL BE CONCEALED BELOW FLOOR, ABOVE CEILING, IN WALL, IN CHASE, OR ELSE AS PER ENGINEER.

COORDINATE VENT STACK THRU ROOF TO BE MINIMUM 15 FEET FROM ANY FRESH AIR INTAKE.

SUPPLY WATER PIPING TO BE HARD DRAWN TYPE 'L' COPPER TUBING WITH SOLDERED FITTINGS.

ALL DOMESTIC WATER PIPING TO BE INSULATED WITH 1" PREFORMED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. APPLY ADHESIVE LABELS ON PIPING ABOVE CEILING TO SHOWN CONTENTS AND FLOW. LABELS TO BE INSTALLED EVERY TWENTY FEET.

PIPING TO BE SUPPORTED WITH CLEVIS TYPE HANGERS AT SPACING AS REQUIRED BY THE 2018 IPC. FOR DOMESTIC WATER PIPING, THE HANGERS SHALL BE LARGE ENOUGH FOR THE PIPE AND INSULATION TO PASS THROUGH. INSTALL SHEET METAL SADDLE AT ALL HANGER LOCATIONS AT BOTTOM OF PIPE.

ROUGH IN PLUMBING CONNECTIONS FOR THE NEW FIXTURES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. ALL NEW SUPPLY WATER PIPING TO BE SOLDERED TYPE L COPPER.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

CONTRACTOR IS RESPONSIBLE FOR ITEMS INCLUDING FIXTURE MOUNTING HEIGHTS, GRAB BARS, FAUCET HANDLES, SEATS, PIPING INSULATION, LAVATORY BARRIERS, AND ELSE REQUIRED TO ENSURE THE ACCESSIBLE FIXTURES ON THIS PROJECT MEET THE REQUIREMENTS OF THE ADA GUIDELINE. CONSULT ENGINEER OR ARCHITECT FOR INFORMATION AS REQUIRED.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

PENETRATIONS THROUGH PARTITIONS AND FLOORS SHALL BE SLEEVED AND SEALED TO MAINTAIN INTEGRITY OF PARTITION AND FLOOR RATING.

LICENSED GAS CONTRACTOR TO BE EXPERIENCED IN DESIGN AND INSTALLATION OF LP GAS PIPING SYSTEM PER NFPA 58, NFPA 54, AND INTERNATIONAL FUEL GAS CODE, CURRENT EDITIONS.

ALL NATURAL GAS PIPING ON THIS PROJECT SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH THREADED FITTINGS. EXPOSED PIPING TO BE WIRE BRUSHED, CLEANED, PAINTED WITH TWO COATS OF RUST RESISTANT PRIMER, AND THEN PAINTED TO MATCH THE NEW GAS METER.

VALVES TO BE BRONZE FULL PORT BALL VALVES WITH THREADED FITTINGS.

METALLIC PIPE EXPOSED TO CORROSIVE ACTION, SUCH AS SOIL CONDITION OR MOISTURE, SHALL BE PROTECTED. PROVIDE PROTECTIVE COATING OR WRAPPING APPROVED FOR APPLICATION. WIRE BRUSH AND CLEAN ALL EXPOSED PIPING. SPRAY PRIME AND FINISH PAINT TO MATCH COLOR OF THE ADJACENT SURFACE TO PIPE.

PRIOR TO ACCEPTANCE AND INITIAL OPERATION, CONTRACTOR SHALL BE INSPECT AND PRESSURE TEST ALL PIPING INSTALLATION PER INTERNATIONAL FUEL GAS CODE.

LEGEND	
COLD WATER PIPING	—— – ——
HOT WATER PIPING	—— – – ——

NUMBERED NOTES:

1. CONTRACTOR TO COORDINATE WITH CIVIL SITE PLAN AND PUBLIC UTILITY PROVIDER FOR THE INSTALLATION OF NEW DOMESTIC WATER SERVICE, METER, AND SUPPLY TO BUILDING. ROUTE PIPING A MINIMUM OF 18" BELOW GRADE TO FOUNDATION WALL AND SLEEVE PIPING UP THRU SLAB AND TURN UP IN WALL. INSTALL A MAIN SHUTOFF GATE TYPE VALVE IN RECESSED VALVE BOX BELOW GRADE OUTSIDE BUILDING. CONTINUE PIPING UP AND ROUTE ABOVE THE CEILING AS SHOWN.
2. ROUTE 1" COLD WATER SUPPLY TO EACH WATER CLOSET AND 1/2" HOT AND 1/2" COLD WATER SUPPLY DOWN IN WALL AND CONNECT TO EACH SINK OR LAVATORY. SEE PLUMBING FIXTURE SCHEDULE FOR MORE INFORMATION. INSTALL FIXTURE PER MANUFACTURER'S RECOMMENDATIONS. TYPICAL.
3. ROUTE 1/2" HOT AND 1/2" COLD WATER SUPPLY DOWN IN WALL BEHIND FIXTURE OR AS REQUIRED. INSTALL FIXTURE PER MANUFACTURER RECOMMENDATION. TYPICAL.
4. ROUTE 3/4" COLD WATER DOWN IN WALL TO FREEZELESS HOSE BIBB. CONNECT PER MANUFACTURERS RECOMMENDATIONS. TYPICAL.
5. ROUTE 1/2" HOT AND 1/2" COLD WATER SUPPLY TO MOP SINK FAUCET SET PER MANUFACTURER'S INSTRUCTIONS.
6. THERMOSTATIC MIXING VALVE LOCATED IN MECHANICAL ROOM AS SHOWN. MINIMUM FLOW RATE 1 TO 100 GPM. MAXIMUM PRESSURE DROP OF 5 PSI. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. MANUFACTURER REPRESENTATIVE TO SETUP.
7. PROVIDE DIRECT VENT TYPE GAS WATER HEATER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DIRECT VENT TYPE VENT KIT FOR INTAKE/ EXHAUST PIPING. SEE APPLIANCE DETAIL FOR ADDITIONAL REQUIREMENTS. ROUTE 1" GAS SUPPLY PIPING TO GAS WATER HEATER. PROVIDE AND INSTALL VENTLESS GAS REGULATOR SIZED TO REGULATE PRESSURE FROM 2PSI TO 7 OUNCES OR PER MANUFACTURER'S RECOMMENDATIONS. REDUCE SIZE TO EQUIPMENT CONNECTION. PROVIDE AND INSTALL REQUIRED SHUT-OFF VALVES, PRESSURE RELIEF, EXPANSION TANK, DIRT LEG, GAS COCK, AND UNIONS PER MANUFACTURER'S RECOMMENDATIONS. ROUTE NATURAL GAS PIPING ABOVE CEILING LEVEL AND DOWN ALONG WALL TO WATER HEATER CONNECTION. SUPPORT PIPING ALONG WALL AND AS HIGH AS POSSIBLE TO THE CEILING. COORDINATE POWER OUTLET WITH ELECTRICAL CONTRACTOR. SEE DETAIL.
8. ROUTE 1/2" COLD WATER TO ICE MAKER SUPPLY BOX BEHIND APPLIANCE REQUIRING DOMESTIC COLD WATER SUPPLY. PROVIDE AND INSTALL SHUTOFF VALVE ON SUPPLY PIPING ABOVE THE CEILING. TYPICAL.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

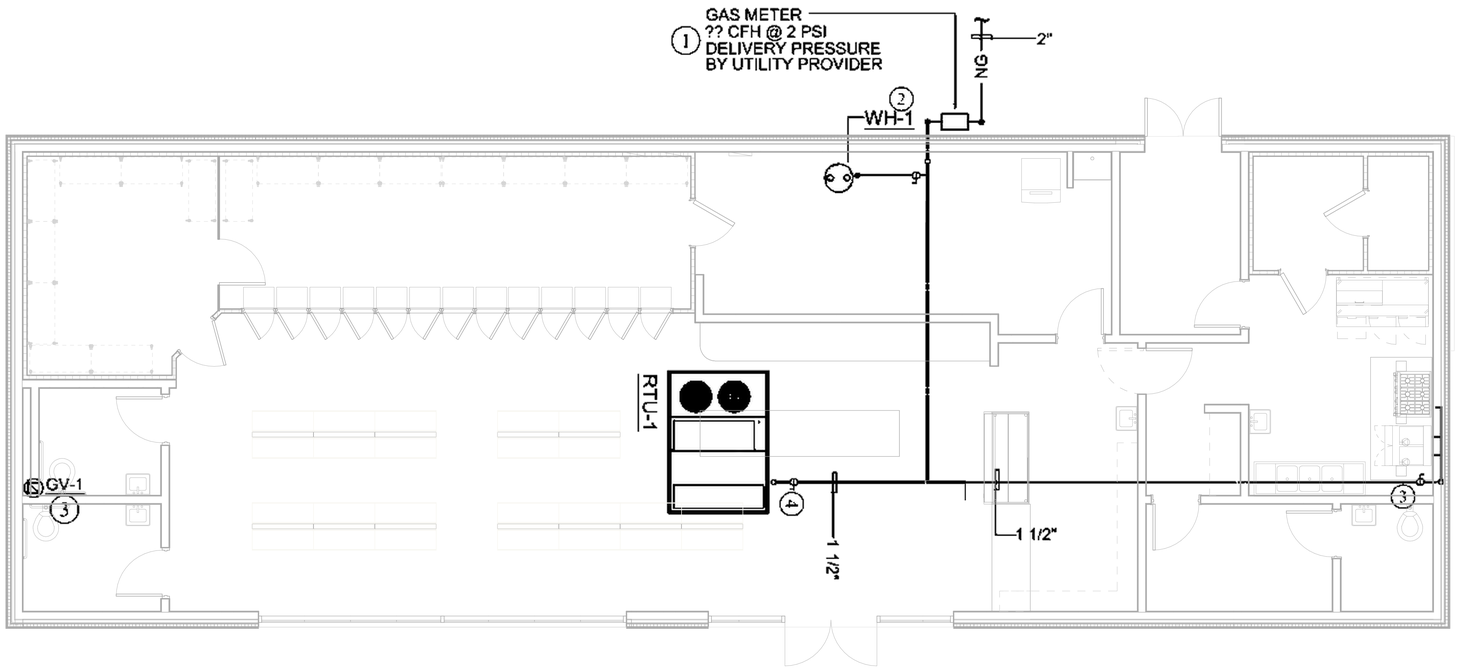
New Construction

Construction Documents

Revision	Rev Date

Plumbing Supply

103 P



2 Floor Plan Plumbing Roof
1/4" = 1'-0"

GENERAL NOTES:

CONTRACTOR TO INSTALL PLUMBING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

SLOPE AND SUPPORT ALL PIPING PER CODE REQUIREMENTS. PROVIDE AND INSTALL UL LISTED FIRE STOP COLLARS AND FIRE CAULK ALL PLUMBING PENETRATIONS AT RATED WALL AND FLOOR ASSEMBLIES.

NOTIFY THE ENGINEER 48 HOURS BEFORE THE WASTE AND VENT PIPING SYSTEM WILL BE PRESSURE TESTED ACCORDING TO 2018 INTERNATIONAL PLUMBING CODE.

NOTIFY THE ENGINEER 48 HOURS BEFORE ANY PIPING ABOVE THE SLAB IN THE WALLS OR CEILINGS IS COVERED. FAILURE TO NOTIFY ENGINEER FOR INSPECTION WILL CAUSE ALL PIPING TO BE UNCOVERED AND PRESSURE TESTED IN THE PRESENCE OF THE ENGINEER.

ALL BELOW GRADE SANITARY SEWER WASTE AND VENT PIPING TO BE SCHEDULE 80 PVC WITH SOLVENT WELD JOINTS. ALL ABOVE GRADE WASTE AND VENT TO BE SCHEDULE 40 PVC WITH SOLVENT JOINTS. INSTALL PIPING, JOINTS, AND FITTINGS PER MANUFACTURER'S RECOMMENDATIONS. WASTE PIPING SHOWN ON THIS DRAWING IS ROUTED BELOW THE FLOOR AND INSIDE THE WALLS TO FIXTURE ROUGH IN LOCATIONS.

ALL VENT PIPING SHOWN IS IN THE WALL AND ABOVE CEILING EXCEPT WHERE OTHERWISE NOTED.

ALL BELOW GRADE PIPE TRENCHES SHALL BE BACKFILLED WITH SELECT SANDY CLAY MATERIAL, AND STAMPED TO PROVIDE CONTINUOUS PIPE SUPPORT. SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE INTERNATIONAL PLUMBING CODE.

SLOPE AND SUPPORT ALL PIPING ACCORDING TO THE 2018 INTERNATIONAL PLUMBING CODE.

ALL WASTE PIPING TO BE SLOPED AT 1/8" OR 1/4" PER FOOT AS REQUIRED FOR THE PIPE SIZE IN CONFORMANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE.

ALL PLUMBING ON THIS PROJECT WILL BE CONCEALED BELOW FLOOR, ABOVE CEILING, IN WALL, IN CHASE, OR ELSE AS PER ENGINEER.

COORDINATE VENT STACK THRU ROOF TO BE MINIMUM 15 FEET FROM ANY FRESH AIR INTAKE.

SUPPLY WATER PIPING TO BE HARD DRAWN TYPE 'L' COPPER TUBING WITH SOLDERED FITTINGS.

ALL DOMESTIC WATER PIPING TO BE INSULATED WITH 1" PREFORMED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. APPLY ADHESIVE LABELS ON PIPING ABOVE CEILING TO SHOWN CONTENTS AND FLOW. LABELS TO BE INSTALLED EVERY TWENTY FEET.

PIPING TO BE SUPPORTED WITH CLEVIS TYPE HANGERS AT SPACING AS REQUIRED BY THE 2018 IPC. FOR DOMESTIC WATER PIPING, THE HANGERS SHALL BE LARGE ENOUGH FOR THE PIPE AND INSULATION TO PASS THROUGH. INSTALL SHEET METAL SADDLE AT ALL HANGER LOCATIONS AT BOTTOM OF PIPE.

ROUGH IN PLUMBING CONNECTIONS FOR THE NEW FIXTURES ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. ALL NEW SUPPLY WATER PIPING TO BE SOLDERED TYPE L COPPER.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

CONTRACTOR IS RESPONSIBLE FOR ITEMS INCLUDING FIXTURE MOUNTING HEIGHTS, GRAB BARS, FAUCET HANDLES, SEATS, PIPING INSULATION, LAVATORY BARRIERS, AND ELSE REQUIRED TO ENSURE THE ACCESSIBLE FIXTURES ON THIS PROJECT MEET THE REQUIREMENTS OF THE ADA GUIDELINE. CONSULT ENGINEER OR ARCHITECT FOR INFORMATION AS REQUIRED.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW FLOOR PENETRATIONS FOR NEW SANITARY SEWER ROUGH IN AND FIRE STOPPING ALL WALL, CEILING, AND FLOOR PENETRATIONS OF FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR WALL RATINGS ON THIS PROJECT. CONTRACTOR TO CONSIDER ALL FLOOR PENETRATIONS AS RATED.

PENETRATIONS THROUGH PARTITIONS AND FLOORS SHALL BE SLEEVED AND SEALED TO MAINTAIN INTEGRITY OF PARTITION AND FLOOR RATING.

LICENSED GAS CONTRACTOR TO BE EXPERIENCED IN DESIGN AND INSTALLATION OF LP GAS PIPING SYSTEM PER NFPA 58, NFPA 54, AND INTERNATIONAL FUEL GAS CODE, CURRENT EDITIONS.

ALL NATURAL GAS PIPING ON THIS PROJECT SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH THREADED FITTINGS. EXPOSED PIPING TO BE WIRE BRUSHED, CLEANED, PAINTED WITH TWO COATS OF RUST RESISTANT PRIMER, AND THEN PAINTED TO MATCH THE NEW GAS METER.

VALVES TO BE BRONZE FULL PORT BALL VALVES WITH THREADED FITTINGS.

METALLIC PIPE EXPOSED TO CORROSIVE ACTION, SUCH AS SOIL CONDITION OR MOISTURE, SHALL BE PROTECTED. PROVIDE PROTECTIVE COATING OR WRAPPING APPROVED FOR APPLICATION. WIRE BRUSH AND CLEAN ALL EXPOSED PIPING. SPRAY PRIME AND FINISH PAINT TO MATCH COLOR OF THE ADJACENT SURFACE TO PIPE.

PRIOR TO ACCEPTANCE AND INITIAL OPERATION, CONTRACTOR SHALL BE INSPECT AND PRESSURE TEST ALL PIPING INSTALLATION PER INTERNATIONAL FUEL GAS CODE.

LEGEND	
COLD WATER PIPING	—— – ——
HOT WATER PIPING	—— – – ——

NUMBERED NOTES:

1. ROUTE NEW NATURAL GAS PIPING UNDERGROUND FROM EXISTING PIPING TO SPECIFIED LOCATION. COORDINATE WITH CIVIL SITE PLAN AND OTHER UTILITIES AS REQUIRED. PROVIDE AND INSTALL NATURAL GAS METER, SHUTOFF VALVE, AND REGULATOR AS REQUIRED. CONSULT LOCAL UTILITY PROVIDER FOR SPECIFIC REQUIREMENTS. SIZE REGULATOR FOR ?? CFH @ 2 PSI PRESSURE (VERIFY WITH FINAL APPROVED EQUIPMENT) . CONTINUE NATURAL GAS PIPING FROM METER AND ROUTE AS SHOWN. SLEEVE PIPE THROUGH EXTERIOR WALL AND SEAL ANNULAR VOID. RISE UP TO ABOVE CEILING LEVEL AND ROUTE AS SHOWN. PROVIDE DIRT LEG, UNION, AND PRESSURE REGULATOR AT EACH APPLIANCE. REDUCE THE NATURAL GAS PRESSURE TO THE APPLIANCE RATED PRESSURE REQUIREMENTS. SEE MANUFACTURER APPLIANCE INSTALLATION MANUAL FOR THE NATURAL GAS PRESSURE RATING AND APPLIANCE INSTALLATION INSTRUCTIONS. PROVIDE THREADED FITTINGS FOR 2-1/2" AND SMALLER PIPE. SLEEVES REQUIRED FOR ALL WALL AND FLOOR PENETRATIONS. SEAL AIR AND WATER TIGHT TO PREVENT WATER INTRUSION.

2. PROVIDE DIRECT VENT TYPE GAS WATER HEATER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DIRECT VENT TYPE VENT KIT FOR INTAKE/ EXHAUST PIPING. SEE APPLIANCE DETAIL FOR ADDITIONAL REQUIREMENTS. ROUTE 1" GAS SUPPLY PIPING TO GAS WATER HEATER (OR PER MANUFACTURER). PROVIDE AND INSTALL VENTLESS GAS REGULATOR SIZED TO REGULATE PRESSURE FROM 2PSI TO 7 OUNCES OR PER MANUFACTURER'S RECOMMENDATIONS. REDUCE SIZE TO EQUIPMENT CONNECTION. PROVIDE AND INSTALL REQUIRED SHUT-OFF VALVES, PRESSURE RELIEF, EXPANSION TANK, DIRT LEG, GAS COCK, AND UNIONS PER MANUFACTURER'S RECOMMENDATIONS. ROUTE NATURAL GAS PIPING ABOVE CEILING LEVEL AND DOWN ALONG WALL TO WATER HEATER CONNECTION. SUPPORT PIPING ALONG WALL AND AS HIGH AS POSSIBLE TO THE CEILING. COORDINATE POWER OUTLET WITH ELECTRICAL CONTRACTOR. SEE DETAIL.

3. ROUTE 1 1/2" GAS SUPPLY PIPING TO OWNER PROVIDED KITCHEN EQUIPMENT. PROVIDE AND INSTALL VENTLESS GAS REGULATOR SIZED TO REGULATE PRESSURE FROM 2PSI TO 7 OUNCES, OR PER MANUFACTURER'S RECOMMENDATIONS. REDUCE SIZE TO EQUIPMENT CONNECTION. HARD PIPE GAS THROUGH APPLIANCE CASING. PROVIDE AND INSTALL UNION, GAS COCK, SHUT-OFF VALVE, DIRT LEG, AND/OR ELSE RECOMMENDED OR REQUIRED BY MANUFACTURER. COORDINATE WITH ENGINEER PRIOR TO INSTALLING FINAL NATURAL GAS PIPING SIZES TO ALLOW FOR VERIFICAITON OF FINAL EQUIPMENT SELECTION AND CAPACITY. TYPICAL ALL LOCATIONS.

4. ROUTE 1 1/2" GAS SUPPLY PIPING TO ROOFTOP AIR HANDLER. PROVIDE AND INSTALL VENTLESS GAS REGULATOR SIZED TO REGULATE PRESSURE FROM 2PSI TO 7 OUNCES, OR PER MANUFACTURER'S RECOMMENDATIONS. REDUCE SIZE TO EQUIPMENT CONNECTION. HARD PIPE GAS THROUGH APPLIANCE CASING. PROVIDE AND INSTALL UNION, GAS COCK, SHUT-OFF VALVE, DIRT LEG, AND/OR ELSE RECOMMENDED OR REQUIRED BY MANUFACTURER. TYPICAL ALL LOCATIONS.

LEGEND	
NATURAL GAS PIPE	——NG——

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

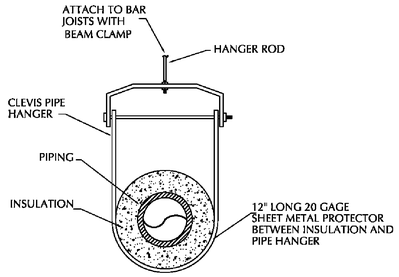
New Construction

Construction Documents

Revision	Rev Date

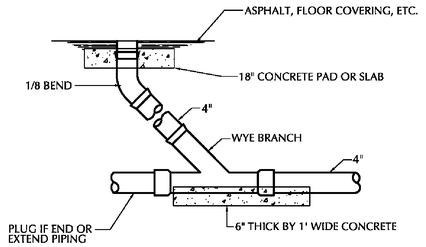
Plumbing Roof

104 P

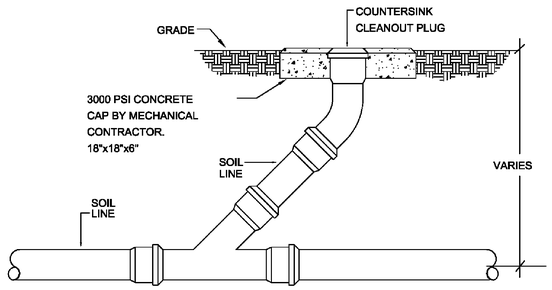


SUPPORT ALL PIPING ACCORDING TO THE IPC
INSULATE ALL PIPING ACCORDING TO THE SPECIFICATIONS
INSULATE ALL COLD PIPING WHICH WILL FORM CONDENSATE ON THE OUTSIDE OF THE PIPE. SEE DRAWINGS AND SPECS.

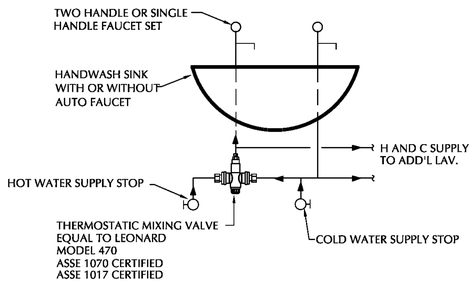
TYPICAL PIPE HANGER DETAIL



TYPICAL SANITARY SEWER CLEANOUT



CLEANOUT DETAIL (FGCO)



VALVE APPROXIMATELY 6"x4"

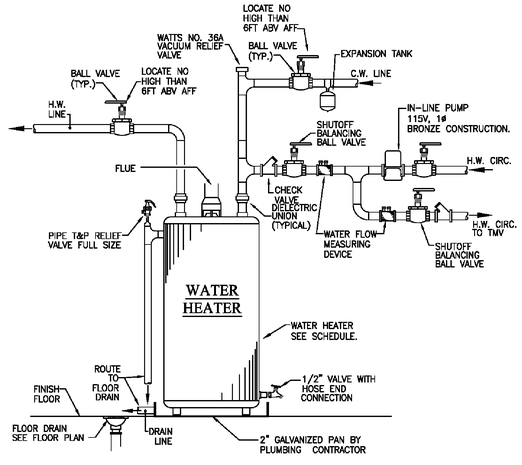
INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE SUPPORT AS REQUIRED.

INSULATE ALL EXPOSED SUPPLY AND WASTE PIPING INCLUDING MIXING VALVE UNDER LAVATORY TO MEET ADA GUIDELINE REQUIREMENTS.

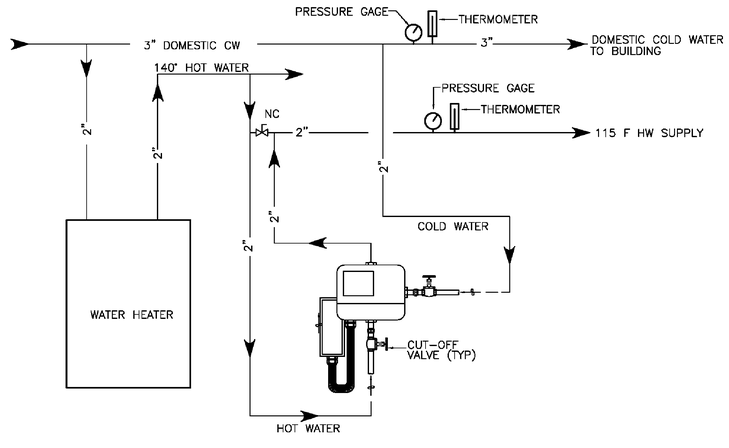
VALVE TO PROVIDE MAXIMUM 109 DEGREE F WATER TO HANDWASH SINKS.

HANDWASH SINK MIXING VALVE DETAIL
NO SCALE



TYPICAL WATER HEATER DETAILS

THE DIVISION 15 CONTRACTOR SHALL PROVIDE AND INSTALL 120V TO 24 V TRANSFORMERS, LOW VOLTAGE CONTROL WIRING, FOR MECHANICAL COMPONENTS SHOWN ON THE DRAWINGS AND IN THE CONTROLS SUBMITTALS. THE MECHANICAL DIVISION 15 CONTRACTOR WILL NOT BE RESPONSIBLE FOR INSTALLING ANY 120 VOLT POWER WIRING TO ANY CONTROLLERS. THAT RESPONSIBILITY IS THE ELECTRICAL DIVISION 16 CONTRACTOR.



PROVIDE AND INSTALL THERMOSTATIC MIXING VALVE UNIT EQUAL TO POWERS MODEL INTLSTN LFIS075VL. VALVE CAPABLE OF FLOW RANGE FROM 1 GPM TO 50 GPM HOT WATER WITH MAX PRESSURE DROP OF 5 PSI.

POWER: 115 V (AC) , 50 / 60 HZ, 20 VA
ACTUATOR LOAD: 24 V (DC), 0.55 A, 13 W

MANUFACTURER'S REPRESENTATIVE MUST INSPECT THE MIXING VALVE INSTALLATION AND PROVIDE INITIAL BALANCING AND OWNER TRAINING FOR VALVE OPERATION. CONTRACTOR MUST ASSIST IN START-UP AND PROVIDE ANY AND ALL ITEMS REQUESTED OR REQUIRED BY MANUFACTURER'S REPRESENTATIVE TO ENABLE SYSTEM TO OPERATE AS INTENDED.

TYPICAL THERMOSTATIC MIXING VALVE DETAIL
NO SCALE

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

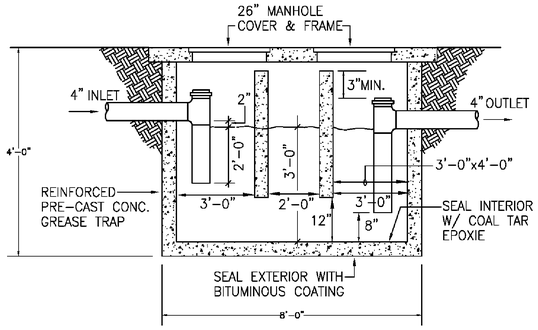
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

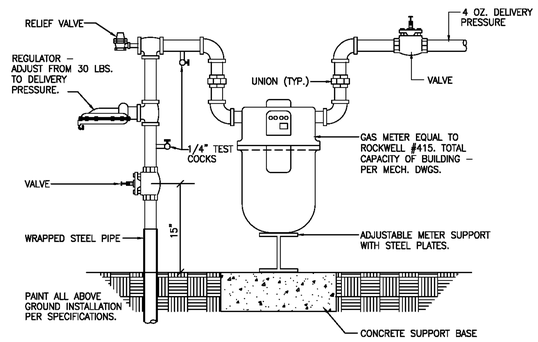
Revision	Rev Date

Plumbing Details

105 P



1000 GALLON
GREASE TRAP DETAIL



GAS METER AND REGULATOR DETAIL

WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	STORAGE GAL	RECOVERY GPH	DISCHARGE TEMP	TEMP RISE	FUEL TYPE	INPUT	CHARACTERISTICS	REMARKS
WH-1	AO SMITH	BTR-197	100	193	120° F	80° F	GAS	199,000 BTUH	120V, 1 PH	COORDINATE ELECTRICAL WITH DIV. 16 CONTRACTOR.

PRODUCTS SHALL BE MADE IN USA PER 2CFR 200.322 ESSER GUIDELINES.

EXPANSION TANK SCHEDULE

MARK	MAKE	SYSTEM	SYSTEM DESIGN PARAMETERS				TANK SIZE	
			TEMP. RANGE	VOLUME	FILL PRESSURE	RELIEF	MODEL	GAL.
ET-1	WATTS	DOMESTIC HOT WATER	40-140 F	4.5 GAL	20	150	PLT-12	4.5

PRODUCTS SHALL BE MADE IN USA PER 2CFR 200.322 ESSER GUIDELINES.

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE TYPE	SUPPLY AND AIR CHAMBER FOR FIXTURE		TRIM REQM'TS.	WASTE/VENT REQM'TS.		MTG. HEIGHT (FLR.to RIM)	LOCATION	REMARKS
		HW	CW		WASTE	VENT			
WC-1	FLOOR MOUNTED WATER CLOSET	-	1"	FLUSH VALVE STOP/SEAT	4"	2"	15"	TOILET	ELONGATED, TOP SPUD, FLOOR OUTLET, STANDARD, SIPHON ACTION, WHITE, CHINA, NOTE 1. FIXTURE EQUAL TO KOHLER K-4350, SLOAN FLUSH VALVE EQUAL TO ROYAL M# 111, CHROME PLATED, 1.6 GPF
WC-2	FLOOR MOUNTED WATER CLOSET	-	1"	FLUSH VALVE STOP/SEAT	4"	2"	17 1/2"	TOILET	ACCESSIBLE, ASME A112.19.2 A.D.A., ELONGATED, TOP SPUD, FLOOR OUTLET, STANDARD, SIPHON ACTION, WHITE, CHINA, NOTE 1. FIXTURE EQUAL TO KOHLER K-4368, SLOAN FLUSH VALVE EQUAL TO ROYAL M# 111, CHROME PLATED, 1.6 GPF
L-1	SINK	1/2"	1/2"	FAUCET, STOPS DRAIN	2"	2"	34"	AS SHOWN	ZURN MODEL #5340, 20" x 18" WALL MOUNTED LAV, VITREOUS CHINA, 4" CENTERS, FOR CONCEALED ARMS SUPPORT, WITH BACKSPLASH. WITH CHICAGO FAUCET MODEL 895-317FCABCP W/ 1.5 GPM LAMINAR FLOW CONTROL FAUCET,GRID DRAIN, CAST BRASS P-TRAP, BRASS STOPS AND RIGID SUPPLIES, AND JR SMITH #0710 SERIES FLOOR MOUNTED CARRIER.
S-1	HANDWASH SINK	1/2"	1/2"	FAUCET, STOPS DRAIN	2"	2"	34"	AS SHOWN	WALL HUNG, STAINLESS, 4"CTRS, HANDWASH SINK, 18"D x 20"W. GOOSENECK FAUCET WITH 4" WRISTBLADE HANDLES, NSF.
S-2	3-COMP POT SINK	1/2"	1/2"	FAUCET, STOPS DRAIN	2"	2"	34"	AS SHOWN	3- COMPARTMENT, 300 SERIES STAINLESS STEEL, 8" CTR HOLE, TILE EDGE SPLASH, ROLLED EDGE, STAINLESS LEGS, NSF, 60" x 15". BACK SPLASH MOUNT FAUCET WITH WRISTBLADES HANDLES.
FFCO	FLOOR CLEANOUT	-	-	-	PER PIPE SIZE	-	-	AS SHOWN	JAY R SMITH MODEL #4021S FLOOR CLEANOUT WITH NICKEL BRONZE COVER AND GASKET SEAL BRONZE PLUG.
MS-1	MOPSINK	1/2"	1/2"	-	3"	2"	-	AS SHOWN	ACORN TERRAZZO-WARE MODEL #TNC-24-SH-SSC CORNER TYPE, FLOOR MOUNTED MOP SINK, DROP FRONT, STAINLESS STEEL CAP, WITH CHICAGO FAUCET MODEL 897-CP FAUCET WITH VACUUM BREAKER SPOUT, PAIL HOOK, AND WALL BRACKET.
TP-1	TRAP PRIMER	-	1/2"	-	-	-	-	AS SHOWN	JOSAM 88300 TRAP PRIMER VALVE AND DISTRIBUTION UNIT
HB-1	HOSE BIBB	-	3/4"	-	-	-	-	AS SHOWN	EQUAL TO WOODFORD MODEL B65 FREEZELESS RECESSED WALL HYDRANT.
IMB-1	ICE MAKER BOX	-	1/2"	-	-	-	-	AS SHOWN	RECESSED BOX IN WALL WITH 1/2" ANGLE STOP FIXTURE EQUAL TO WATER TITE M# W9700
FD-1	FLOOR DRAIN	-	1/2"	-	3"	2"	-	AS SHOWN	ZURN MODEL #ZB-415-B FLOOR DRAIN WITH ADJUSTABLE ROUND NICKEL BRONZE STRAINER.
FD-2	FLOOR DRAIN	-	1/2"	-	4"	2"	-	AS SHOWN	12" ROUND FLOOR DRAIN, BRONZE GRATE, EQUAL TO JR SMITH MODEL# 2230
FD-3	FLOOR DRAIN	-	1/2"	-	3"	2"	-	AS SHOWN	EQUAL TO ZURN M# ZB-415-I, ADJUSTABLE STRAINER HEAD

NOTE:
1. TOILET SEATS TO BE AMERICAN STANDARD 5311.012 MOLDED (OR EQUAL), WHITE, WITH OPEN FRONT IN PUBLIC USE AREAS. SEATS TO BE SOLID PLASTIC W/STAINLESS HINGES.
2. ALL FIXTURES TO BE WHITE IN COLOR UNLESS OTHERWISE SPECIFICALLY NOTED.
3. CONTRACTOR TO PROVIDE AND INSTALL ALL SEATS, GRAB BARS, HAND HELD DEVICES, OFFSET MIXING VALVES, FAUCET HANDLES, INSULATION, AND ETC TO MEET REQUIREMENTS OF THE ADA ACCESSIBILITY GUIDELINE.
4. ALL EXPOSED PLUMBING TO BE CHROME PLATED BRASS. NO PLASTIC IS ACCEPTABLE.

ALL PLUMBING FIXTURES AND COMPONENTS INCLUDING, BUT NOT LIMITED TO, WATER CLOSETS, FLUSH VALVES, SINKS, FAUCETS, ETC. TO HAVE FINAL APPROVAL BY OWNER.

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

Plumbing Detail & Schedules

106 P

HVAC SYMBOLS & ABBREVIATIONS

ABBREVIATIONS

AD	ACCESS DOOR	EWT	ENTERING WATER TEMPERATURE	OPNG	OPENING
AHU	AIR HANDLING UNIT	EUH	ELECTRIC UNIT HEATER	P	PRESSURE
AI	ANALOG INPUT	EXH	EXHAUST	PAT	PREHEAT AIR TEMP
AO	ANALOG OUTPUT	FCU	FAN COIL UNIT	PSI	POUNDS PER SQUARE INCH
AFF	ABOVE FINISH FLOOR	FD	FIRE DAMPER	PTU	PACKAGED TERMINAL UNIT
AFG	ABOVE FINISH GRADE	F/SD	FIRE/SMOKE DAMPER	QTY	QUANTITY
AFMD	AIR FLOW MEASURING DEVICE	FPM	FEET PER MINUTE	RAD	RETURN AIR DAMPER
ARCH	ARCHITECTURAL	FSTAT	FREEZESTAT	REQ'D	REQUIRED
BD	BACKDRAFT DAMPER	GPM	GALLONS PER MINUTE	R/A	RETURN AIR
BI	BINARY INPUT	GUH	GAS UNIT HEATER	RAT	RETURN AIR TEMP.
BO	BINARY OUTPUT	H	HUMIDISTAT	RPM	REVOLUTIONS PER MINUTE
BTUH	BRITISH THERMAL UNITS/HOUR	HWV	HEATING WATER VALVE	SA	SOUND ATTENUATOR
BYP	BYPASS	HWP	HOT WATER PUMP	S/A	SUPPLY AIR
CAT	COOLING AIR TEMP	KW	KILOWATT	SAT	SUPPLY AIR TEMP
CFM	CUBIC FEET PER MINUTE	LAT	LEAVING AIR TEMPERATURE	SD	SPLITTER DAMPER
CHP	CHILLED WATER PUMP	LF	LINEAR FEET	SF	SUPPLY FAN
CHWV	CHILLED WATER VALVE	LG	LONG	SP	STATIC PRESSURE
CLG	CEILING	LVG	LEAVING	S	SENSOR
DB	DRY BULB	LWT	LEAVING WATER TEMP	SS	STAINLESS STEEL
dF	DEGREES FAHRENHEIT	MAT	MIXED AIR TEMP	T	THERMOSTAT
DIFF	DIFFUSER	MAX	MAXIMUM	TSP	TOTAL STATIC PRESSURE
DN	DOWN	MBH	THOUSAND BTU/HR	TYP	TYPICAL
DWG	DRAWING	MBC	MODULAR BUILDING CONTROLLER	UH	UNIT HEATER
EA	EACH	M.D.	MOTORIZED DAMPER	VAV	VARIABLE AIR VOLUME
EAT	ENTERING AIR TEMPERATURE	MECH	MECHANICAL	VFD	VARIABLE FREQUENCY DRIVE
EF	EXHAUST FAN	MVD	MANUAL VOLUME DAMPER	VD	VOLUME DAMPER
ELEC	ELECTRICAL	NC	NORMALLY CLOSED	2W	TWO WAY
EL	ELEVATION	NO	NORMALLY OPEN	2WO	TWO WAY CORNER
EQ	EQUAL	O/A	OUTSIDE AIR	3W	THREE WAY
ESP	EXTERNAL STATIC PRESSURE	OAT	OUTDOOR AIR TEMP	4W	FOUR WAY
EWH	ELECTRIC WALL HEATER	OAD	OUTDOOR AIR DAMPER	WB	WET BULB
		OBD	OPPOSED BLADE DAMPER	WFMD	WATER FLOW MEASURING DEVICE

PIPING SYMBOLS

- AUTOMATIC AIR VENT
- BUTTERFLY VALVE
- BALANCING VALVE
- BOTTOM CONNECTION BRANCH
- CAPPED PIPE END
- CHECK VALVE
- COMBINATION SHUT-OFF/ BALANCING VALVE
- CONCENTRIC REDUCER
- CD — CONDENSATE DRAIN
- CHR — CHILLED WATER RETURN
- CHS — CHILLED WATER SUPPLY
- CUT-OFF VALVE (ABOVE GRADE)
- CUT-OFF VALVE (BELOW GRADE)
- CUT-OFF VALVE (GATE VALVE WITH HOSE COUPLING)
- ECCENTRIC REDUCER
- ELBOW UP
- ELBOW DOWN
- FLEXIBLE PIPE CONNECTION
- FLOW IN DIRECTION OF ARROW
- FOR — FUEL OIL RETURN
- FOS — FUEL OIL SUPPLY
- FOV — FUEL OIL VENT
- GAUGE COCK
- GAS COCK
- HOSE BIB W/ VACCUM BREAKER
- HWR — HOT WATER HEATING RETURN
- HWS — HOT WATER HEATING SUPPLY
- O.S.&Y. VALVE
- PIPE RISE OR DROP
- RL — RETURN LINE
- RISER DN
- RISER UP
- SL — SLURRY LINE
- SOLENOID VALVE
- SIDE CONNECTION BRANCH
- TEE DOWN
- TEE UP
- THERMOMETER
- THERMOMETER WELL
- TOP CONNECTION BRANCH
- UNION
- 2-WAY AUTOMATIC CONTROL VALVE
- 3-WAY AUTOMATIC CONTROL VALVE
- Y-TYPE STRAINER
- Y-TYPE STRAINER
- WATER FLOW MEASURING DEVICE (WFMD)

DUCTWORK SYMBOLS

SYMBOL	DESCRIPTION
UP	RISE IN DUCT, IN DIRECTION OF AIR FLOW
DN	DROP IN DUCT, IN DIRECTION OF AIR FLOW
	SUPPLY AIR DUCT, UP
	SUPPLY AIR DUCT, DN
	RETURN, EXHAUST, OR OUTSIDE AIR DUCT, UP
	RETURN, EXHAUST, OR OUTSIDE AIR DUCT, DN
R	RETURN OR EXHAUST GRILLE, CEILING MTD.
A 200 CFM	DIFFUSER SYMBOL 4-WAY OR A 200 CFM DIFFUSER SYMBOL
A 200 CFM	DIFFUSER SYMBOL 2-WAY
	DUCTWORK
	VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES.
V.D. S.D. V.D.	SPLITTER FURNISH MANUAL VOLUME DPR. IN EACH LEG OF ALL SPLITTERS.
V.D.	MANUAL VOLUME DAMPER
F.D.	FIRE DAMPER
	LINEAR SLOT DIFFUSER
T H S	THERMOSTAT, HUMIDISTAT, SENSOR WALL THERMOSTAT MTD. 5'-0" AFF.
	INDICATES POINT OF CONNECTION BETWEEN NEW AND EXISTING APPURTENANCES.
	INDICATES POINT OF DISCONNECT BETWEEN NEW AND EXISTING APPURTENANCES.

A. INSTALLATION

ALL PIPING OR DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR ABOVE CEILINGS. PROVIDE ACCESS PANELS IN HARD CEILINGS ADJACENT TO OPERABLE MECHANICAL DEVICES INCLUDING DAMPERS, VALVES, CONTROLS, AND TERMINAL UNITS (IF NOT ACCESSIBLE THROUGH ATTIC). PANELS TO MAINTAIN SAME FIRE RATING AS CEILING SYSTEM AND HAVE HINGED AND LATCHED DOOR. PANELS TO BE MINIMUM 12"x12" AND MAXIMUM 24"x24" DEPENDING ON THE DEVICE TO BE ACCESSED.

THERMOSTATS SHALL BE LOCATED 5'-0" ABOVE FLOOR AND SHALL CLEAR ALL EQUIPMENT. THERMOSTATS LOCATED NEXT TO DOORS SHALL BE LOCATED ON LATCH SIDE OF DOOR, AND AT SAME LEVEL AS LIGHT SWITCH. COORDINATE WITH ARCHITECTURAL.

COORDINATE DIFFUSER, GRILLE, AND REGISTER LOCATIONS WITH LAY-IN CEILING GRID AND ARCHITECTURAL CEILING PLAN. EXACT LOCATION OF DEVICES IS NOT CRITICAL BUT SHOULD BE LOCATED WITHIN TWO FEET OF SPOT SHOWN ON DRAWINGS.

THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COORDINATION OF WORK OF ALL TRADES TO ASSURE PROPER INSTALLATION AND CLEARANCES. DRAWINGS ARE ESSENTIALLY DIAGRAMMATICAL AND THEREFORE CONTRACTOR SHOULD PLAN EXACT ROUTING OF DUCT AND PIPE BASED ON FIELD CONDITIONS. PROVIDE ADDITIONAL TRANSITIONS AND OFFSETS AS NECESSARY (AT NO ADDITIONAL COST TO OWNER) TO COMPLETE INSTALLATION AND MAINTAIN REQUIRED CEILING HEIGHTS.

ACCESS PANELS IN DUCTWORK AND NON-ACCESSIBLE CEILINGS SHALL BE PROVIDED FOR OPERATION AND MAINTENANCE OF ALL BOXES, COILS, VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. PROVIDE MINIMUM 24"x24" CEILING ACCESS PANEL FOR VAV BOXES AND 12"x12" FOR DAMPERS. COORDINATE EXACT PLACEMENT OF ACCESS PANELS AND EQUIPMENT SO THAT REASONABLE MAINTENANCE SPACE IS AVAILABLE. NO ACCESS PANELS SHALL BE PROVIDED IN SECURE AREAS.

INSTALLATION OF ALL EQUIPMENT AND SYSTEMS SHALL BE IN ACCORDANCE WITH STANDARD DETAILS, SECTIONS, AND ELEVATIONS SHOWN ON THE DRAWINGS.

CONTRACTOR SHALL MAINTAIN A CLEAR SERVICE AREA AROUND ALL EQUIPMENT FOR MAINTENANCE SUCH AS, FILTER REMOVAL, MOTOR AND DRIVE ADJUSTMENTS, COIL AND TUBE CLEANING OR REMOVAL.

PROVIDE ALL DRAIN PIPING FROM MECHANICAL EQUIPMENT WITH 2" AIR GAP CONNECTION AT WASTE PIPE, FLOOR DRAIN, OR ETC.

B. DUCTWORK

ALL DUCT RUNOUTS TO DIFFUSERS, RETURN AIR GRILLES, AND EXHAUST GRILLES SHALL BE COMPLETE WITH MANUAL VOLUME DAMPERS UNLESS NOTED OTHERWISE. LOCATE DAMPERS SO THEY ARE ACCESSIBLE FROM LAY-IN CEILING, ATTIC, OR ACCESS PANEL.

ROUND SUPPLY RUNOUTS TO DIFFUSERS SHALL BE HARD METAL. MAXIMUM 6'-0" OF FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO DIFFUSER.

DUCT TRANSITIONS SHALL BE PROVIDED AS REQUIRED FROM ALL EQUIPMENT CONNECTIONS TO DUCT SIZES INDICATED ON DRAWINGS.

PROVIDE EASED INLET RECTANGULAR TO ROUND TAPS AT DUCT TAPS IF ROUND DUCT SIZE IS TOO LARGE FOR BELL MOUTH TAP TO TRUNK DUCT.

ALL EXTERIOR OPENINGS (INTAKE AND EXHAUST DUCTS, LOUVERS, FANS, ETC.) SHALL BE PROVIDED WITH BIRD SCREENING WHICH SHALL BE EASILY REMOVED FOR CLEANING AND ACCESS TO EQUIPMENT.

ALL DUCT SIZES INDICATE OUTSIDE DIMENSIONS OF SHEET METAL. NO ALLOWANCE FOR INSULATION IS SHOWN ON DRAWINGS.

PROVIDE HEMMED EDGES OVER RAW ENDS OF INSULATION AND SEAL WITH MASTIC FOR ALL LINED RETURN AIR DUCTS STUBBED INTO RETURN AIR PLENUMS.

ALL DUCT PLENUMS AND DUCTS (MINIMUM OF 5'-0" FROM LOUVER) CONNECTED TO EXTERIOR LOUVERS SHALL HAVE LIQUID TIGHT SEAMS AND LIQUID TIGHT CONNECTION TO LOUVER. SLOPE DOWN TO LOUVER AND ATTACH SO WATER WILL DRAIN TO OUTSIDE. PROVIDE 24"x24" (OR EQUIVALENT) ACCESS DOOR AT LOUVER IN EASILY ACCESSIBLE LOCATION FOR ACCESS TO LOUVER PLENUM AND LOUVER.

ALL RECTANGULAR DUCT SHALL BE GALVANIZED SHEET METAL WITH 2" EXTERIOR DUCT WRAP FIBERGLASS INSULATION. SEAL ALL DUCT JOINTS AND INSULATION JOINTS AIRTIGHT.

ALL ROUND BRANCH DUCTS SHALL BE GALVANIZED SHEET METAL WITH SAME INSULATION AS ABOVE. FLEXIBLE DUCTS OF NO MORE THAN 6 FEET MAY BE USED FOR DEVICE CONNECTIONS. ALL BRANCH DUCTS MUST HAVE STARTING COLLARS WITH INTEGRAL BALANCING DAMPERS.

SUPPORT ALL DUCT ACCORDING TO THE INTERNATIONAL MECHANICAL CODE AND SMACNA.

C. EQUIPMENT INSTALLATION

SAFE-OFF AIRTIGHT AROUND ALL COILS, SOUND TRAPS, FILTERS, ETC. WITH 16 GAGE GALVANIZED SHEET METAL SET IN NON-HARDENING FIRE RETARDANT MASTIC.

Dhunna Gas Station - HWY 80

Project No 20251202001 Date 2/27/2026

4020 US-80, Jackson, MS 39209

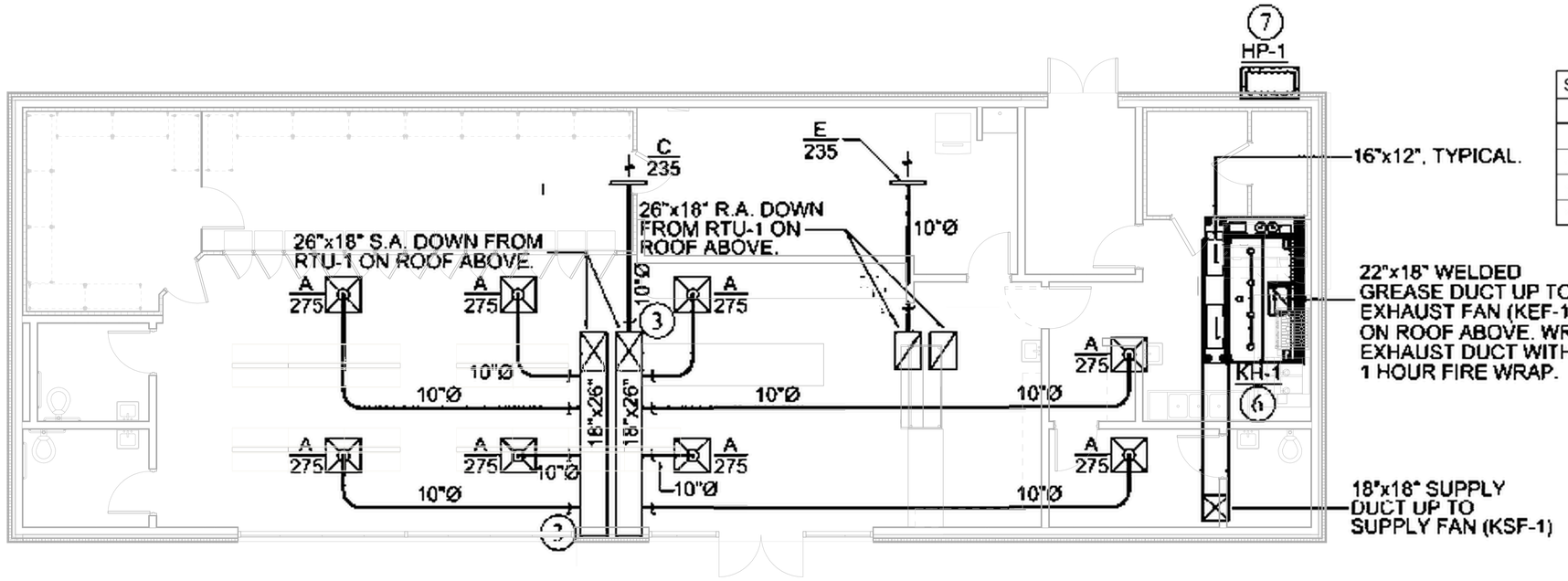
New Construction

Construction Documents

Revision	Rev Date

Symbols & Abbreviations

101 M



SUPPLY AIR DIFFUSER	
AIRFLOW	DUCT/NECK SIZE
0 - 100 CFM	6" ROUND
110 - 220 CFM	8" ROUND
225 - 400 CFM	10" ROUND
410 - 600 CFM	12" ROUND

② Floor Plan HVAC Supply
1/4" = 1'-0"

GENERAL NOTES:

ALL CENTRAL AIR HANDLING UNITS SUPPLYING MORE THAN 2000 CFM AND/OR SERVING AN EXIT CORRIDOR SHALL HAVE SMOKE DETECTION TO INTERRUPT POWER. AHU SMOKE CONTROLS SHALL BE CONNECTED TO THE AUTOMATIC FIRE ALARM SYSTEM AS REQUIRED BY CODE.

ALL INTERIOR DUCT TO BE INSULATED WITH 2" FIBERGLASS DUCT WRAP WITH FOIL BACK VAPOR BARRIER. SEAL ALL SEAMS AND LAPS WITH 2" HIGH PRESSURE FOIL TAPE. SEAL ALL DUCT JOINTS WITH MASTIC DUCT SEALANT.

RECTANGULAR DUCT TO BE GALVANIZED SHEET METAL. LOW PRESSURE ROUND BRANCH DUCT TO BE SNAP LOCK GALVANIZED SHEET METAL TO WITHIN SIX FEET OF THE DIFFUSER CONNECTIONS WHERE FLEXIBLE DUCT MAY BE USED.

ALL DUCT PENETRATING FIREWALLS SHALL BE EQUIPPED WITH DYNAMIC RATED FIRE DAMPERS. PROVIDE ACCESS PANELS AT EACH SIDE OF ALL FIRE DAMPER LOCATIONS. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND THE INTERNATIONAL MECHANICAL CODE.

CONTRACTOR TO COORDINATE ALL ROOF LEVEL MECHANICAL WORK INCLUDING PENETRATIONS AND EQUIPMENT INSTALLATION WITH GENERAL CONTRACTOR.

PROVIDE ACCESS PANELS IN DUCTS AT ALL FIRE AND FIRE/SMOKE DAMPERS WHERE APPLICABLE.

COORDINATE HORIZONTAL ROUTE OF DUCT THROUGH EXTERIOR WALL WITH COLUMNS, WINDOWS, OVERHANGS,ETC.

CONTRACTOR TO CONSULT ENGINEER WITH ALL QUESTIONS BEFORE PROCEEDING WITH WORK.

COORDINATE WORK WITH OWNER. ALL WORK IN THE OCCUPIED SPACE TO BE COMPLETED AT OWNER'S CONVENIENCE.

ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE 2018 INTERNATIONAL CODE SERIES.

DUCT SIZES SHOWN MAY BE MODIFIED BY THE CONTRACTOR TO ACCOMODATE CLEARANCE REQUIREMENTS AS LONG AS THE NET FREE AIRFLOW AREA IS NOT CHANGED. CONSULT ENGINEER FOR ASSISTANCE.

RECTANGULAR DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR. NO ALLOWANCE FOR INSULATION.

MOUNT ALL DUCTWORK AS HIGH AS POSSIBLE. TRANSITION DUCT IN UPWARD DIRECTION TO MAINTAIN MAXIMUM CLEARANCE BETWEEN DUCT AND CEILING. COORDINATE ROUTING OF DUCT WITH BOTH PLUMBING TRADES, ELECTRICAL TRADES, AND STRUCTURE.

THE DESIGN MECHANICAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE RESULTS OF VALUE ENGINEERING BY THE CONTRACTOR/OWNER WHICH INVOLVES MODIFICATION OF THE MECHANICAL AND HVAC SYSTEMS AND THEIR CAPACITIES, ETC.

PROVIDE REDUCERS, TRANSITIONS, AND FITTINGS AS REQUIRED FOR ALL CONNECTIONS AT EQUIPMENT AS SHOWN.

PROVIDE REINFORCED CONCRETE BASE FOR ALL NEW EQUIPMENT AS SHOWN ON DRAWING. CHAMFER PAD EDGES AT 45 DEGREE ANGLE.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

COORDINATE INSTALLATION OF EQUIPMENT AND UTILITIES WITH CONDITIONS AT SITE. CONTRACTOR MAY MODIFY ROUTING OF DUCT AS REQUIRED BY SITE CONDITIONS. IF CHANGES IN SIZE ARE REQUIRED CONSULT ENGINEER.

CONTRACTOR IS RESPONSIBLE FOR ALL WORK REQUIRED TO COMPLETE THE PROJECT IN AGREEMENT WITH THE DESIGN INTENT SHOWN ON THESE DRAWINGS. ANY DUCT DIMENSION SHOWN MAY BE MODIFIED BY CONTRACTOR FOR COORDINATION PURPOSES WHILE ENSURING THAT AIRFLOW AREA DOES NOT DECREASE.

PROVIDE AABC OR NEBB TAB AGENT TO TEST, ADJUST, AND BALANCE THE AIR SYSTEMS MODIFIED ON THIS PROJECT TO WITHIN +/- 10% . PROVIDE COMPLETE TAB REPORT TO ENGINEER BEFORE SCHEDULING FINAL INSPECTION. COMPLETE FINAL BALANCING AND SUBMIT REPORT TO ENGINEER.

THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 120V TO 24 V TRANSFORMERS AND LOW VOLTAGE CONTROL WIRING FOR MECHANICAL COMPONENTS SHOWN ON THE DRAWINGS AND IN THE CONTROLS SUBMITTALS. THE MECHANICAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR INSTALLING ANY 120 VOLT POWER WIRING TO ANY CONTROLLERS. THAT RESPONSIBILITY IS THE ELECTRICAL CONTRACTOR.

ALL BRANCH DUCT STARTING COLLARS SHOULD HAVE BALANCING DAMPERS, ABOVE SUSPENDED CEILINGS.

MAXIMUM LENGTH OF FLEXIBLE DUCT IS SIX FEET. FLEXIBLE DUCT SHOULD NOT BE USED TO MAKE ABRUPT CHANGES IN DIRECTION OR FOR EXHAUST OR RETURN AIR.

MINOR MODIFICATION OF DUCT SIZING AND ROUTING MAY BE REQUIRED DURING INSTALLATION. ANY CHANGES WHICH INCREASES/DECREASES AIRFLOW AREA BY GREATER THAN 10% SHOULD BE PREAPPROVED.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

NUMBERED NOTES:

1. PROVIDE AND INSTALL HORIZONTAL FAN COIL UNIT MOUNTED ABOVE CEILING LEVEL AS SHOWN. ROUTE HORIZONTAL SUPPLY AND RETURN AIR DUCT FROM FCU AND SEAL AIR TIGHT. PROVIDE REFRIGERANT PIPING TO CORRESPONDING CONDENSING UNIT AND CONTROLS TO THERMOSTATS. SUPPORT FROM STRUCTURE ABOVE. SEE SHEET M.6 FOR FAN COIL UNIT DETAL.
2. PROVIDE AND INSTALL NEW LOW PRESSURE SUPPLY DUCT SIZED AND ROUTED AS SHOWN WITH TRANSITIONS BY CONTRACTOR. HOLD DUCT AS HIGH AS POSSIBLE TO STRUCTURE AND CONSTRUCT/ROUTE IN A NEAT AND ORGANIZED MANNER.
3. PROVIDE AND INSTALL MANUAL BALANCING DAMPERS AT ALL BRANCH DUCT TAKE OFFS. ALL TYPICAL.
4. PROVIDE AND INSTALL NEW CEILING MOUNTED SUPPLY GRILLES IN LOCATIONS SHOWN. CONNECT TO NEW DUCT WITH TRANSITION AND FITTING AS REQUIRED. COORDINATE WITH ARCHITECTURAL CEILING LAYOUT AND ELECTRICAL LAYOUT. ALL TYPICAL.
5. PROVIDE AND INSTALL CUBE CORE RETURN AIR GRILLES WITH MANUAL VOLUME DAMPERS IN CEILING AT LOCATIONS SHOWN. SEE GRILLE SCHEDULE FOR SIZES. TYPICAL ALL LOCATIONS.
6. PROVIDE AND INSTALL STAINLESS STEEL KITCHEN HOOD. INCLUDE EXHAUST/SUPPLY FANS, CONTROL PANELS, LIGHTS, FILTERS, FIRE SUPPRESSION, GREASE CUP, TEMPERATURE SENSOR, ANY OTHER CODE REQUIRED COMPONENTS. ROUTE WELDED GREASE EXHAUST DUCT UP EXHAUST COLLAR UP TO UPBLAST GREASE VAPOR TYPE CENTRIFUGAL EXHAUST FAN AND SUPPLY DUCT FROM SUPPLY FAN DOWN TO SUPPLY PLENUM. TRANSITION DUCTS TO FANS AND HOODS AS REQUIRED. EXHAUST DUCT TO BE SEAMLESS, WELDED, 16 GAUGE, STAINLESS STEEL GREASE DUCT. SUPPLY DUCT TO BE GALVANIZED DUCT EXTERNAL INSULATED. INSTALL PER MANUFACTURERS RECOMMENDATIONS, IMC 2018 AND LOCAL CODE. SLOPE EXHAUST DUCT 1/8" PER FOOT TOWARD HOOD.
7. PLACE CONDENSING UNIT AT LOCATION SHOWN. ROUTE NEW REFRIGERANT PIPING ABOVE GRADE TO EXTERIOR WALL AND TURN UP IN WALL TO ABOVE CEILING. ROUTE TO CORRESPONDING AIR HANDLER. INSULATE REFRIGERANT PIPING TO PREVENT CONDENSATION. SEAL PIPING PENETRATIONS WITH WATER PROOF CAULKING TO PREVENT WATER INTRUSION. SIZE AND INSTALL AS PER MANUFACTURER ACCORDING TO LENGTH AND ELEVATION. INSTALL CONDENSING UNITS ON 4" REINFORCED CONCRETE EQUIPMENT PAD.

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

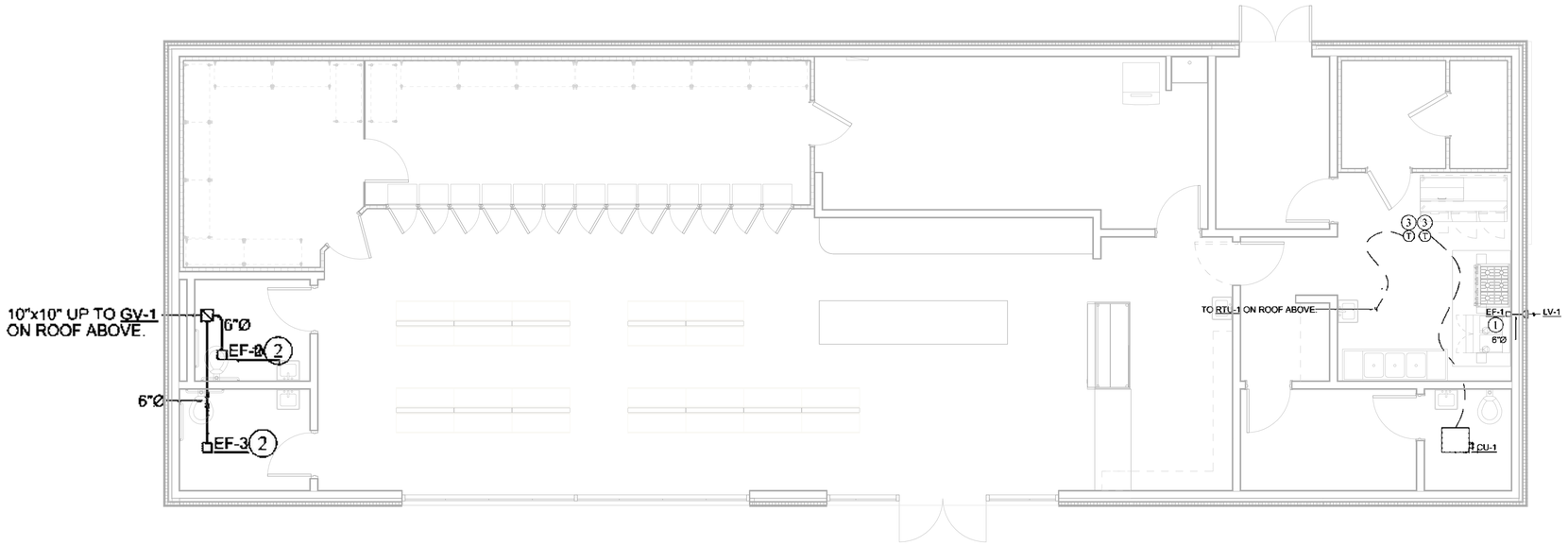
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

HVAC Supply

102 M



2 Floor Plan Exhaust
1/4" = 1'-0"

SUPPLY AIR DIFFUSER	
AIRFLOW	DUCT/NECK SIZE
0 - 100 CFM	6" ROUND
110 - 220 CFM	8" ROUND
225 - 400 CFM	10" ROUND
410 - 600 CFM	12" ROUND

GENERAL NOTES:

ALL CENTRAL AIR HANDLING UNITS SUPPLYING MORE THAN 2000 CFM AND/OR SERVING AN EXIT CORRIDOR SHALL HAVE SMOKE DETECTION TO INTERRUPT POWER. AHU SMOKE CONTROLS SHALL BE CONNECTED TO THE AUTOMATIC FIRE ALARM SYSTEM AS REQUIRED BY CODE.

ALL INTERIOR DUCT TO BE INSULATED WITH 2" FIBERGLASS DUCT WRAP WITH FOIL BACK VAPOR BARRIER. SEAL ALL SEAMS AND LAPS WITH 2" HIGH PRESSURE FOIL TAPE. SEAL ALL DUCT JOINTS WITH MASTIC DUCT SEALANT.

RECTANGULAR DUCT TO BE GALVANIZED SHEET METAL. LOW PRESSURE ROUND BRANCH DUCT TO BE SNAP LOCK GALVANIZED SHEET METAL TO WITHIN SIX FEET OF THE DIFFUSER CONNECTIONS WHERE FLEXIBLE DUCT MAY BE USED.

ALL DUCT PENETRATING FIREWALLS SHALL BE EQUIPPED WITH DYNAMIC RATED FIRE DAMPERS. PROVIDE ACCESS PANELS AT EACH SIDE OF ALL FIRE DAMPER LOCATIONS. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND THE INTERNATIONAL MECHANICAL CODE.

CONTRACTOR TO COORDINATE ALL ROOF LEVEL MECHANICAL WORK INCLUDING PENETRATIONS AND EQUIPMENT INSTALLATION WITH GENERAL CONTRACTOR.

PROVIDE ACCESS PANELS IN DUCTS AT ALL FIRE AND FIRE/SMOKE DAMPERS WHERE APPLICABLE.

COORDINATE HORIZONTAL ROUTE OF DUCT THROUGH EXTERIOR WALL WITH COLUMNS, WINDOWS, OVERHANGS,ETC.

CONTRACTOR TO CONSULT ENGINEER WITH ALL QUESTIONS BEFORE PROCEEDING WITH WORK.

COORDINATE WORK WITH OWNER. ALL WORK IN THE OCCUPIED SPACE TO BE COMPLETED AT OWNER'S CONVENIENCE.

ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE 2018 INTERNATIONAL CODE SERIES.

DUCT SIZES SHOWN MAY BE MODIFIED BY THE CONTRACTOR TO ACCOMODATE CLEARANCE REQUIREMENTS AS LONG AS THE NET FREE AIRFLOW AREA IS NOT CHANGED. CONSULT ENGINEER FOR ASSISTANCE.

RECTANGULAR DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR. NO ALLOWANCE FOR INSULATION.

MOUNT ALL DUCTWORK AS HIGH AS POSSIBLE. TRANSITION DUCT IN UPWARD DIRECTION TO MAINTAIN MAXIMUM CLEARANCE BETWEEN DUCT AND CEILING. COORDINATE ROUTING OF DUCT WITH BOTH PLUMBING TRADES, ELECTRICAL TRADES, AND STRUCTURE.

THE DESIGN MECHANICAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE RESULTS OF VALUE ENGINEERING BY THE CONTRACTOR/OWNER WHICH INVOLVES MODIFICATION OF THE MECHANICAL AND HVAC SYSTEMS AND THEIR CAPACITIES, ETC.

PROVIDE REDUCERS, TRANSITIONS, AND FITTINGS AS REQUIRED FOR ALL CONNECTIONS AT EQUIPMENT AS SHOWN.

PROVIDE REINFORCED CONCRETE BASE FOR ALL NEW EQUIPMENT AS SHOWN ON DRAWING. CHAMFER PAD EDGES AT 45 DEGREE ANGLE.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

COORDINATE INSTALLATION OF EQUIPMENT AND UTILITIES WITH CONDITIONS AT SITE. CONTRACTOR MAY MODIFY ROUTING OF DUCT AS REQUIRED BY SITE CONDITIONS. IF CHANGES IN SIZE ARE REQUIRED CONSULT ENGINEER.

CONTRACTOR IS RESPONSIBLE FOR ALL WORK REQUIRED TO COMPLETE THE PROJECT IN AGREEMENT WITH THE DESIGN INTENT SHOWN ON THESE DRAWINGS. ANY DUCT DIMENSION SHOWN MAY BE MODIFIED BY CONTRACTOR FOR COORDINATION PURPOSES WHILE ENSURING THAT AIRFLOW AREA DOES NOT DECREASE.

PROVIDE AABC OR NEBB TAB AGENT TO TEST, ADJUST, AND BALANCE THE AIR SYSTEMS MODIFIED ON THIS PROJECT TO WITHIN +/- 10% . PROVIDE COMPLETE TAB REPORT TO ENGINEER BEFORE SCHEDULING FINAL INSPECTION. COMPLETE FINAL BALANCING AND SUBMIT REPORT TO ENGINEER.

THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 120V TO 24 V TRANSFORMERS AND LOW VOLTAGE CONTROL WIRING FOR MECHANICAL COMPONENTS SHOWN ON THE DRAWINGS AND IN THE CONTROLS SUBMITTALS. THE MECHANICAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR INSTALLING ANY 120 VOLT POWER WIRING TO ANY CONTROLLERS. THAT RESPONSIBILITY IS THE ELECTRICAL CONTRACTOR.

ALL BRANCH DUCT STARTING COLLARS SHOULD HAVE BALANCING DAMPERS, ABOVE SUSPENDED CEILINGS.

MAXIMUM LENGTH OF FLEXIBLE DUCT IS SIX FEET. FLEXIBLE DUCT SHOULD NOT BE USED TO MAKE ABRUPT CHANGES IN DIRECTION OR FOR EXHAUST OR RETURN AIR.

MINOR MODIFICATION OF DUCT SIZING AND ROUTING MAY BE REQUIRED DURING INSTALLATION. ANY CHANGES WHICH INCREASES/DECREASES AIRFLOW AREA BY GREATER THAN 10% SHOULD BE PREAPPROVED.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

NUMBERED NOTES:

1. PROVIDE AND INSTALL NEW CEILING MOUNTED EXHAUST FAN AT LOCATION SHOWN. SUPPORT EQUIPMENT WITH ALL THREAD ROD AND UNISTRUT FROM STRUCTURE ABOVE. ROUTE NEW LOW PRESSURE EXHAUST DUCT ABOVE CEILING AND TERMINATE WITH FIXED BLADE, EXTRUDED ALUMINUM, DRAINABLE, EXTERIOR WALL LOUVER WITH EXPANDED METAL BIRD SCREEN SIZED AS SHOWN. SEAL PERIMETER OF LOUVER AT OPENING WITH MATCHING MORTAR OR GROUT. BALANCE TO QUANTITY OF EXHAUST AIR PER SCHEDULE.

2. PROVIDE AND INSTALL NEW CEILING MOUNTED EXHAUST FAN AT LOCATION SHOWN. SUPPORT EQUIPMENT WITH ALL THREAD ROD AND UNISTRUT FROM STRUCTURE ABOVE. ROUTE NEW LOW PRESSURE EXHAUST DUCT ABOVE CEILING AND OVER TO 10"x10" EXHAUST DUCT UP TO GRAVITY VENTILATOR GV-1 ON ROOF ABOVE. BALANCE TO QUANTITY OF EXHAUST AIR PER SCHEDULE. ROOF CURB, FLASHING, PATCHING, AND REPAIR OF ROOF BY CONTRACTOR.

3. PROVIDE AND INSTALL 7 DAY PROGRAMMABLE, 2 STAGE HEAT/COOL ON/OFF LOW VOLTAGE THERMOSTAT AT LOCATION SHOWN. ROUTE CONTROL WIRING ABOVE CEILING AND DOWN IN WALLS FROM AIR HANDLER TO THERMOSTAT. PROVIDE TRANSFORMER, WIRING, THERMOSTAT, AND ELSE REQUIRED FOR COMPLETE INSTALLATION. MOUNT AT SAME HEIGHT AND ADJACENT TO LIGHT SWITCH. TYPICAL AS SHOWN.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

New Construction

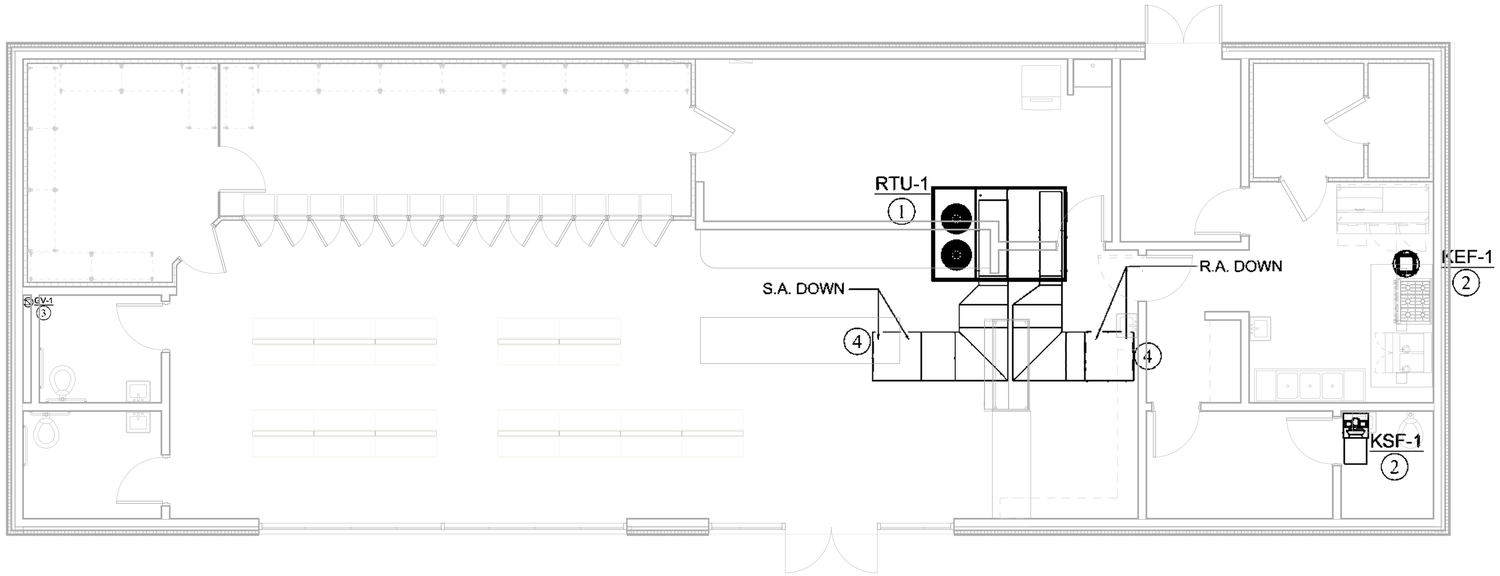
Construction Documents

Revision	Rev Date

Mechanical Exhaust

103 M

SUPPLY AIR DIFFUSER	
AIRFLOW	DUCT/NECK SIZE
0 - 100 CFM	6" ROUND
110 - 220 CFM	8" ROUND
225 - 400 CFM	10" ROUND
410 - 600 CFM	12" ROUND



2 Floor Plan Mechanical Roof
1/4" = 1'-0"

GENERAL NOTES:

ALL CENTRAL AIR HANDLING UNITS SUPPLYING MORE THAN 2000 CFM AND/OR SERVING AN EXIT CORRIDOR SHALL HAVE SMOKE DETECTION TO INTERRUPT POWER. AHU SMOKE CONTROLS SHALL BE CONNECTED TO THE AUTOMATIC FIRE ALARM SYSTEM AS REQUIRED BY CODE.

ALL INTERIOR DUCT TO BE INSULATED WITH 2" FIBERGLASS DUCT WRAP WITH FOIL BACK VAPOR BARRIER. SEAL ALL SEAMS AND LAPS WITH 2" HIGH PRESSURE FOIL TAPE. SEAL ALL DUCT JOINTS WITH MASTIC DUCT SEALANT.

RECTANGULAR DUCT TO BE GALVANIZED SHEET METAL. LOW PRESSURE ROUND BRANCH DUCT TO BE SNAP LOCK GALVANIZED SHEET METAL TO WITHIN SIX FEET OF THE DIFFUSER CONNECTIONS WHERE FLEXIBLE DUCT MAY BE USED.

ALL DUCT PENETRATING FIREWALLS SHALL BE EQUIPPED WITH DYNAMIC RATED FIRE DAMPERS. PROVIDE ACCESS PANELS AT EACH SIDE OF ALL FIRE DAMPER LOCATIONS. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND THE INTERNATIONAL MECHANICAL CODE.

CONTRACTOR TO COORDINATE ALL ROOF LEVEL MECHANICAL WORK INCLUDING PENETRATIONS AND EQUIPMENT INSTALLATION WITH GENERAL CONTRACTOR.

PROVIDE ACCESS PANELS IN DUCTS AT ALL FIRE AND FIRE/SMOKE DAMPERS WHERE APPLICABLE.

COORDINATE HORIZONTAL ROUTE OF DUCT THROUGH EXTERIOR WALL WITH COLUMNS, WINDOWS, OVERHANGS,ETC.

CONTRACTOR TO CONSULT ENGINEER WITH ALL QUESTIONS BEFORE PROCEEDING WITH WORK.

COORDINATE WORK WITH OWNER. ALL WORK IN THE OCCUPIED SPACE TO BE COMPLETED AT OWNER'S CONVENIENCE.

ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE 2018 INTERNATIONAL CODE SERIES.

DUCT SIZES SHOWN MAY BE MODIFIED BY THE CONTRACTOR TO ACCOMODATE CLEARANCE REQUIREMENTS AS LONG AS THE NET FREE AIRFLOW AREA IS NOT CHANGED. CONSULT ENGINEER FOR ASSISTANCE.

RECTANGULAR DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR. NO ALLOWANCE FOR INSULATION.

MOUNT ALL DUCTWORK AS HIGH AS POSSIBLE. TRANSITION DUCT IN UPWARD DIRECTION TO MAINTAIN MAXIMUM CLEARANCE BETWEEN DUCT AND CEILING. COORDINATE ROUTING OF DUCT WITH BOTH PLUMBING TRADES, ELECTRICAL TRADES, AND STRUCTURE.

THE DESIGN MECHANICAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE RESULTS OF VALUE ENGINEERING BY THE CONTRACTOR/OWNER WHICH INVOLVES MODIFICATION OF THE MECHANICAL AND HVAC SYSTEMS AND THEIR CAPACITIES, ETC.

PROVIDE REDUCERS, TRANSITIONS, AND FITTINGS AS REQUIRED FOR ALL CONNECTIONS AT EQUIPMENT AS SHOWN.

PROVIDE REINFORCED CONCRETE BASE FOR ALL NEW EQUIPMENT AS SHOWN ON DRAWING. CHAMFER PAD EDGES AT 45 DEGREE ANGLE.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

COORDINATE INSTALLATION OF EQUIPMENT AND UTILITIES WITH CONDITIONS AT SITE. CONTRACTOR MAY MODIFY ROUTING OF DUCT AS REQUIRED BY SITE CONDITIONS. IF CHANGES IN SIZE ARE REQUIRED CONSULT ENGINEER.

CONTRACTOR IS RESPONSIBLE FOR ALL WORK REQUIRED TO COMPLETE THE PROJECT IN AGREEMENT WITH THE DESIGN INTENT SHOWN ON THESE DRAWINGS. ANY DUCT DIMENSION SHOWN MAY BE MODIFIED BY CONTRACTOR FOR COORDINATION PURPOSES WHILE ENSURING THAT AIRFLOW AREA DOES NOT DECREASE.

PROVIDE AABC OR NEBB TAB AGENT TO TEST, ADJUST, AND BALANCE THE AIR SYSTEMS MODIFIED ON THIS PROJECT TO WITHIN +/- 10% . PROVIDE COMPLETE TAB REPORT TO ENGINEER BEFORE SCHEDULING FINAL INSPECTION. COMPLETE FINAL BALANCING AND SUBMIT REPORT TO ENGINEER.

THE MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 120V TO 24 V TRANSFORMERS AND LOW VOLTAGE CONTROL WIRING FOR MECHANICAL COMPONENTS SHOWN ON THE DRAWINGS AND IN THE CONTROLS SUBMITTALS. THE MECHANICAL CONTRACTOR WILL NOT BE RESPONSIBLE FOR INSTALLING ANY 120 VOLT POWER WIRING TO ANY CONTROLLERS. THAT RESPONSIBILITY IS THE ELECTRICAL CONTRACTOR.

ALL BRANCH DUCT STARTING COLLARS SHOULD HAVE BALANCING DAMPERS, ABOVE SUSPENDED CEILINGS.

MAXIMUM LENGTH OF FLEXIBLE DUCT IS SIX FEET. FLEXIBLE DUCT SHOULD NOT BE USED TO MAKE ABRUPT CHANGES IN DIRECTION OR FOR EXHAUST OR RETURN AIR.

MINOR MODIFICATION OF DUCT SIZING AND ROUTING MAY BE REQUIRED DURING INSTALLATION. ANY CHANGES WHICH INCREASES/DECREASES AIRFLOW AREA BY GREATER THAN 10% SHOULD BE PREAPPROVED.

ALL EQUIPMENT, LABOR, MATERIAL, AND COORDINATION TO COMPLETE THIS PROJECT PER THE DESIGN INTENT SHALL BE PROVIDED BY CONTRACTOR.

FOR EXTERIOR DUCT, PROVIDE 2" RIGID EXTERIOR BOARD TYPE FIBERGLASS DUCT INSULATION WITH FSK VAPOR BARRIER. SEAL ALL SEAMS AND JOINTS TO BE AIR TIGHT. PROVIDE SECONDARY GALVANIZED METAL DUCT JACKET AROUND THE PERIMETER OF THE INSULATED AIR DISTRIBUTION DUCT. SEAL ALL JOINTS AND SEAMS WATER TIGHT.

NUMBERED NOTES:

1. PROVIDE AND INSTALL NEW ROOFTOP AIR HANDLER AS SHOWN. PROVIDE MANUFACTURER'S REQUIRED CURB, DUCT CONNECTIONS, CONTROL CONNECTIONS, START UP, AND BALANCING OF THIS SYSTEM FOR FULLY FUNCTIONAL SYSTEM PERFORMING TO DESIGN REQUIREMENTS. ROOF PENETRATION(S), ROOF CURB, FLASHING, PATCHING, AND REPAIR OF ROOF BY CONTRACTOR.

2. PROVIDE AND INSTALL KITCHEN HOOD EXHAUST FAN / SUPPLY FAN FOR KITCHEN EQUIPMENT AS SHOWN. INSTALL PER MANUFACTURER'S INSTALLION REQUIREMENTS. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. BALANCE TO QUANTITY OF EXHAUST/MAKE-UP AIR PER SCHEDULE. FAN SUPPORTS, DUCT CONNECTIONS, ROOF PENETRATION, FLASHING, PATCHING, AND REPAIR OF ROOF BY CONTRACTOR.

3. PROVIDE AND INSTALL NEW GRAVITY VENTILATOR AS SHOWN. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. PROVIDE DUCT CONNECTIONS, ROOF PENETRATIONS, AND SUPPORTS AS REQUIRED. ALL TYPICAL.

4. PROVIDE AND INSTALL 44"x44" INSULATED DUCT PLENUM ON MANUFACTURER'S ROOF CURB. SEAL PLENUM AIR AND WATER TIGHT ON ALL FOUR SIDES AS REQUIRED. TAP 26"x18" CONNECTIONS INTO BOTTOM OF PLENUM WHERE INDICATED AND ROUTE AS SHOWN ON FIRST FLOOR PLAN. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. PROVIDE DUCT CONNECTIONS, ROOF PENETRATIONS, AND SUPPORTS AS REQUIRED. ALL TYPICAL.

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

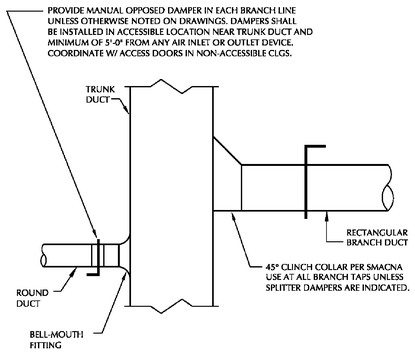
Construction Documents

Revision	Rev Date

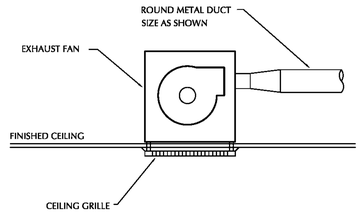
Mechanical Roof

104 M

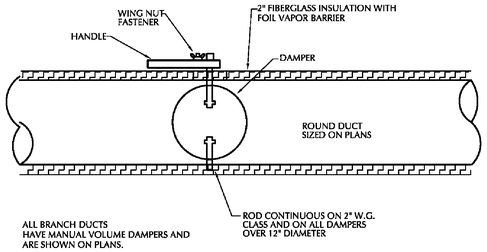
NOTE:
DAMPERS SHALL BE PROVIDED IN ALL BRANCH RUN-OUTS TO DIFFUSERS, R.A AND EHAUST GRILLES, UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS. LOCATE DAMPERS SO THEY ARE ACCESSIBLE FROM LAY-IN CEILING OR ACCESS DOORS.



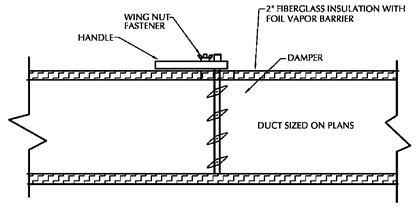
BRANCH DUCT TAP DETAIL



CEILING MOUNTED EXHAUST FAN

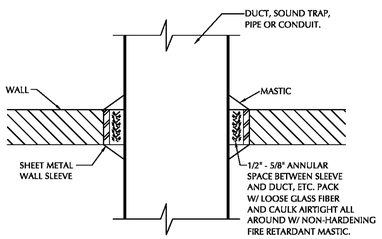


ROUND DUCT MANUAL DAMPER

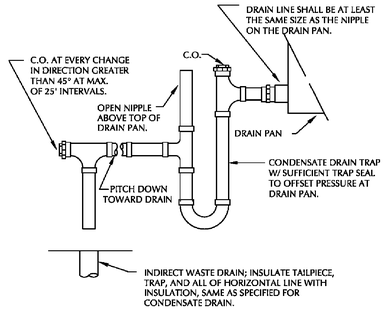


RECTANGULAR DUCT MANUAL DAMPER

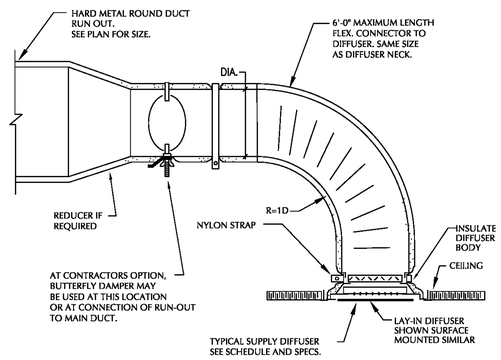
NOTE: THIS DETAIL APPLICABLE AT MECHANICAL ROOM WALL PENETRATIONS, SMOKE TIGHT WALLS, SOUND CONTROL PARTITIONS AND WHERE OTHERWISE INDICATED.



WALL PENETRATION DETAIL



CONDENSATE DRAIN TRAP DETAIL



TYPICAL DIFFUSER MOUNTING

ALL CEILING AIR DEVICES ON THIS PROJECT TO HAVE CEILING RADIATION DAMPERS APPROVED FOR ARCHITECTURAL REQUIRED FIRE RATING.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

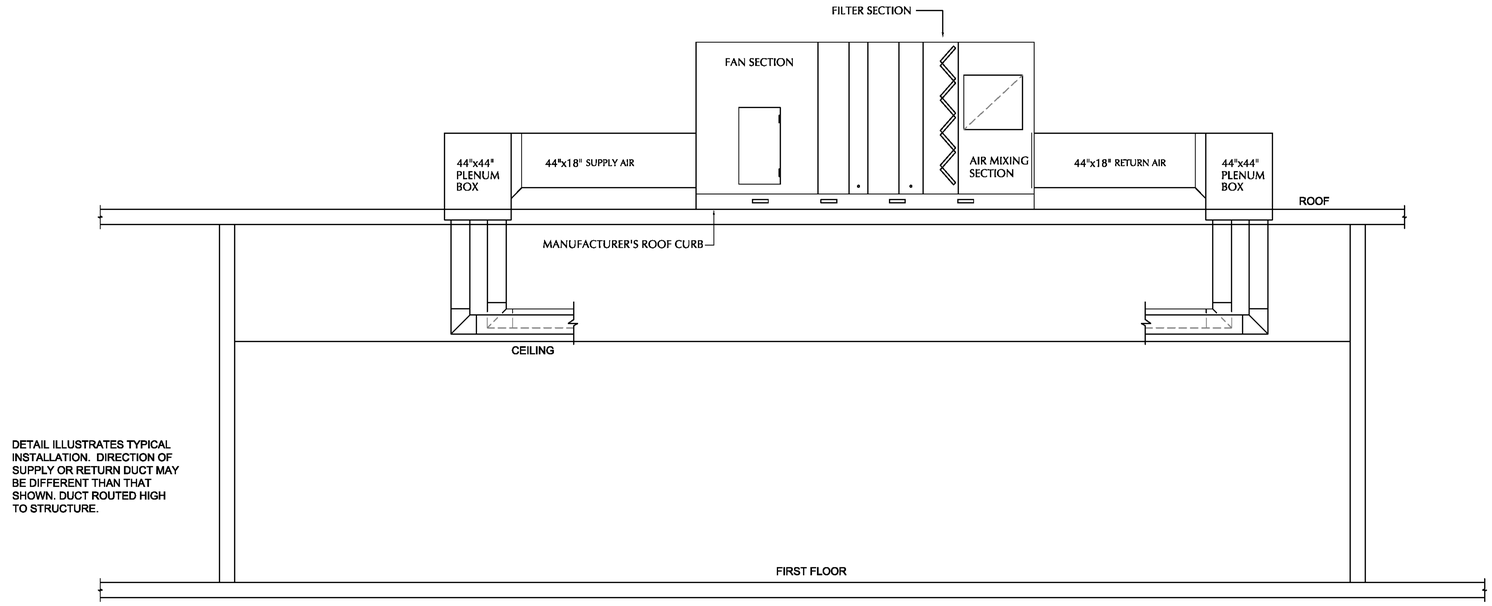
New Construction

Construction Documents

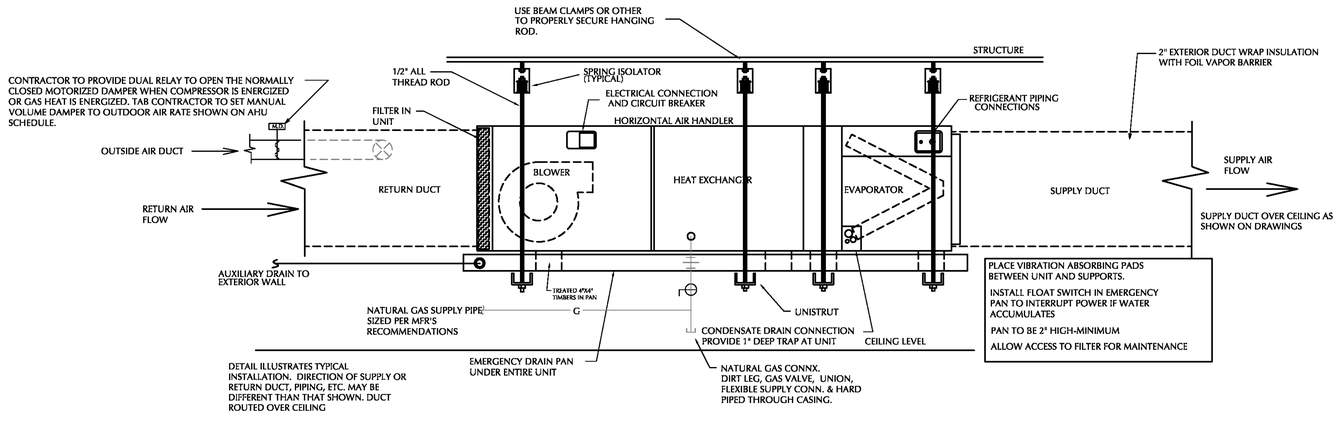
Revision	Rev Date

Mechanical Details

105 M



RTU-1 ELEVATION SCHEMATIC



FCU-1 SIDE VIEW
SCALE: NONE

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

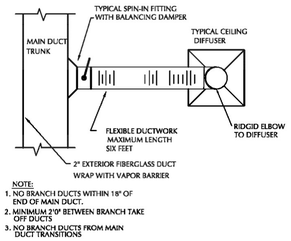
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

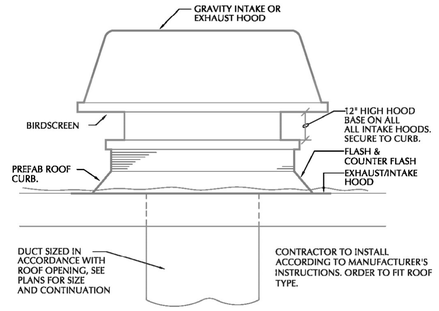
Revision	Rev Date

Mechanical Details

106 M



TYPICAL ROUND BRANCH DUCT TAKE-OFF



ROOF MOUNTED GRAVITY EXHAUST/INTAKE VENTILATOR DETAIL

EXHAUST FAN SCHEDULE

MARK	GREENHECK MODEL	CFM	MAX RPM	STATIC " W.G.	DRIVE TYPE	MOUNTING	ELECTRICAL	REMARKS
EF-1 THRU EF-3	SP-A90	75	878	.25"	DIRECT	CEILING	115V, 14 WATT	CONTROLLED BY LIGHT SWITCH.

PROVIDE ACCESSORIES AS SHOWN OR NOTED. PROVIDE WITH FACTORY MOUNTED DISCONNECT AT ALL FANS.
BACKDRAFT DAMPERS, VIBRATION ISOLATION KIT, FLEXIBLE CONNECTIONS, FACTORY FAN SPEED CONTROL, WHITE ALUMINUM GRILLE, AND MOUNTING HARDWARE WITH ALL FANS.
PRODUCTS SHALL BE MADE IN USA PER 2CFR 200.322 ESSER GUIDELINES.

LOUVER SCHEDULE

MARK	EQUAL TO RUSKIN MODEL	DUTY TYPE	SIZE	MOUNTING	COLOR	REQUIRED CFM	MATERIAL	REMARKS
LV-1	ELF6375DX	EXHAUST AIR	12"x12"	EXTERIOR WALL SURFACE	TO MATCH	AS SHOWN	ALUMINUM	USED AS LOUVERED EXTERIOR WALL GRILLE INCLUDE 3/4" MESH SCREEN, FACTORY KYNAR FINISH, EXTENDED SILL, CHANNEL FRAME.

GRAVITY VENTILATOR SCHEDULE

MARK	MAKE	MODEL	TYPE	FINISH	WIDTH	HEIGHT	FACE VELOCITY	P.D.	REMARKS
GV-1	COOK	12 PR	ROOF TOP GRAVITY VENTILATOR	ALUMINUM	20"	20"	500 FPM	0.05"	

GRILLE, REGISTER, DIFFUSER SCHEDULE

MARK	EQUAL TO TITUS MODEL	DUTY TYPE	SIZE	MOUNTING	COLOR	REQUIRED CFM	MATERIAL	REMARKS
A	TMS AA	SUPPLY	24"x24"	LAY-IN	WHITE	AS SHOWN	ALUMINUM	SUPPLY AIR DIFFUSER
B	TMS AA	SUPPLY	12"x12"	LAY-IN	WHITE	AS SHOWN	ALUMINUM	SUPPLY AIR DIFFUSER
C	300 FL	SUPPLY	18"x12"	WALL SURFACE	WHITE	AS SHOWN	ALUMINUM	LOUVERED INTERIOR SUPPLY AIR WALL GRILLE.
D	50F	RETURN	24"x24"	LAY-IN	WHITE	AS SHOWN	ALUMINUM	CUBE CORE GRILLE
E	350 FL	RETURN	18"x12"	WALL SURFACE	WHITE	AS SHOWN	ALUMINUM	LOUVERED INTERIOR RETURN AIR WALL GRILLE (3/4" BLADE SPACING)

SUPPLY DIFFUSERS WILL HAVE ROUND NECK SIZES AS SHOWN ON DRAWING. NECK SIZE OF DIFFUSER SHOULD MATCH DUCT SIZE WHICH SERVES THAT DIFFUSER. FOR THE SURFACE MOUNTED SUPPLY DIFFUSERS, A PLASTER RING MAY BE USED. NOTE: MECHANICAL CONTRACTOR TO COORDINATE DIFFUSERS WITH CEILING TYPES.

HORIZONTAL FAN COIL UNIT SCHEDULE

MARK	EQUAL TO LENNOX MOD.	TOTAL CFM	MAX O.A. CFM	COOLING			ELECTRICAL	ELECTRIC HEAT		RATED LOAD AMPS	OUTPUT (W)	REMARKS
				CAP	EA DB/WB	LA DB/WB		SIZE	ELECTRICAL			
FCU-1		420	70	24 MBH	80°/67°	55°/55°	208V/1PH	--	--	1.7	160	HORIZONTAL SPLIT SYSTEM, THREE SPEEDMOTOR.

NOTES: EACH UNIT SHOULD BE EQUIPPED WITH THE APPROPRIATE SIZE EVAPORATOR COIL. VERIFY ELECTRICAL REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS.

HEAT PUMP UNIT SCHEDULE

MARK	EQUAL TO LENNOX MOD.	COOLING CAP. TOTAL BTU/H	TYPE HP/CU	HEATING CAPACITY	ELECTRICAL REQ.	MCA	MAX FUSE SIZE	REMARKS
HP-1	########	14.4 MBH	HP	14.4 MBH	208/1PH	25.0	40 A	2-STAGE HEAT PUMP

NOTES: INSTALL ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.

PACKAGED UNIT SCHEDULES

MARK	MAKE	MODEL	FAN DATA			COOLING	GAS HEAT		COMPRESSORS	ELECTRICAL			PRE-FILTER	REMARKS
			CFM	OA	ESP	TOT BTUH	INPUT BTU	OUTPUT BTU		VOLTS	MCA	MOP		
RTU-1	LENNOX		3,000	1,000	0.5"	84,600	86,400	86,400	2	208/3PH	61.0	80	MERV 8	SEE NOTES INDICATED BELOW

NOTES:
1.) UNIT SHALL BE SUPPLIED WITH MODULATING OA/RA DAMPER CONTROL FOR ECONOMIZER .
2.) PROVIDE WITH MANUFACTURER'S ROOF CURB TO MATCH DUCT DROP ORIENTATION(S).
3.) DIRECT DRIVE PLENUM FAN WITH EC MOTOR
4.) HUMIDITROL HOT GAS REHEAT
5.) CS7500 COLOR TOUCHSCREEN PROGRAMMABLE TSTAT
6.) DUAL ENTHALPY ECONOMIZER WITH BARAMETRIC RELIEF
7.) FACTORY 120V CONVENIENCE OUTLET
8.) FACTORY DISCONNECT
9.) SUPPLY AND RETURN SMOKE DETECTORS
10.) CONDENSER HAIL GUARDS
11.) WARRANTY: 1 YEAR UNIT PARTS, 5 YEAR COMPRESSOR PARTS.

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

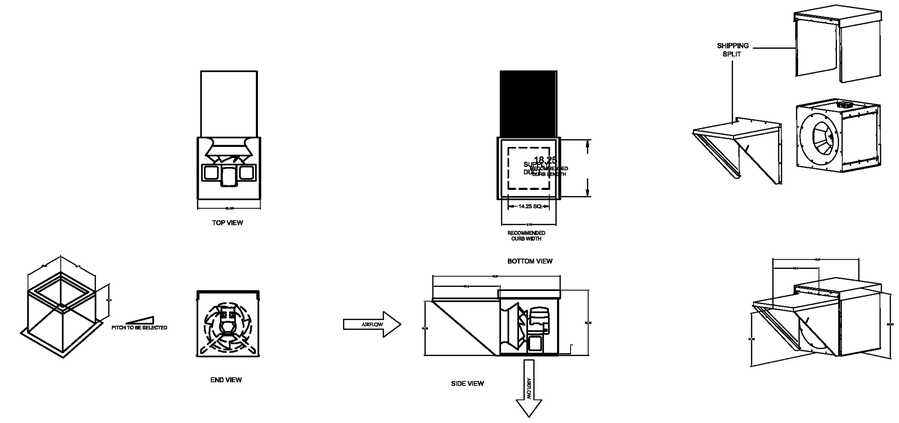
Mechanical Details & Schedules

107 M

Direct Drive Mixed Flow Filtered Roof Supply Fan

MARK INFORMATION		FAN INFORMATION						MOTOR INFORMATION					
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	
1	KSF-1	KSQ-12-M2	1,490	0.613	1,750	0.44	124	0.75	208/60/3	TF	1750	1	

KSF-01 : SELECTED OPTIONS AND ACCESSORIES
Horizontal Weatherhood Intake, Bottom (Curb Mounted) Discharge
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-3R, Toggle, Shipped Separate
Damper Shipped Loose, WD-330-PB-14.25X14.25, Gravity Operated, Not Coated
1" Aluminum Primary Filter

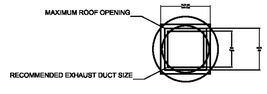


Direct Drive Upblast Centrifugal Roof Exhaust Fan

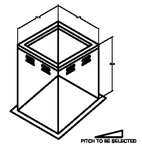
MARK INFORMATION		FAN INFORMATION						MOTOR INFORMATION						
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	KEF-1	CUE-140-VG	1,862	0.994	1,462	0.6	122	1	208/60/3	TF	1725	1	4.6

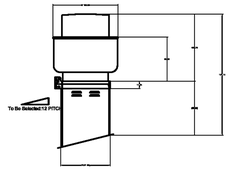
*NEC FLA - Based on table 430.250 or 430.248 of National Electrical Code 2020. Actual motor FLA may vary for sizing thermal overload, consult factory"

KEF-01 : SELECTED OPTIONS AND ACCESSORIES
Standard Curb Cap Size - 22 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Hinge, Factory Installed
Foam Curb Seal (Factory Applied)
Birdscreen: Stainless Steel, nom. 85% Free Area



DUCT TYPE	SIZE
STANDARD	16 SQ
FIRE-WRAPPED	12 SQ





DUCT DIMENSIONS ARE LARGEST POSSIBLE DUCT TO FIT THROUGH CURB.
CONSULT SYSTEM DESIGN ENGINEER FOR RECOMMENDED DUCT SIZE.

OVERALL HEIGHT MAY BE GREATER DEPENDING ON
MOTOR, ADAPTER, AND/OR HINGE BASE.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

Mechanical Details

108 M

HOOD INFORMATION

HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	EXHAUST					SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION
			LENGTH	WIDTH	HEIGHT			TOTAL CFM	COLLAR(S)				MUA CFM	AC CFM		
									WIDTH	LENGTH	DIA.	CFM	S.P.			
1	KH-1	GHEW-88-S	88	48	24	430 SS WHERE EXPOSED	HEAVY	1862	9	18		1862	0.494	1490		215.277	SINGLE

HOOD INFORMATION

HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS				UTILITY CABINET(S)					
		FIXTURE TYPE BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.)		LOCATION	FIRE SYSTEM		CONTROLS		
							L	H		TYPE	SIZE	MODEL	INTERFACE	
1	KH-1	INCANDESCENT (GLOBE) 100W A19 (BULBS NOT INCL.)	4	45.69	BAFFLE STAINLESS STEEL	3	16	20	LEFT	ANSUL R102	6	GKC		
						2	20							

SUPPLY PLENUM INFORMATION

HOOD NO.	MARK	POS.	TYPE	SIZE (IN.)			INSULATED	DAMPER(S)	LED LIGHT(S)		TOTAL CFM	TOTAL S.P.	COLLARS							
				L	W	H			SUPPLIED	QTY			TYPE	MOUNTING	QTY	W	L	DIA.	CFM	VEL.
1	KH-1	FRONT	ASP	100	14	4	NO	YES	NO		1490	0.02	MUA	FACTORY	2	12	30		745	298

HOOD OPTIONS

- UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #MH11726
- BACK INTEGRAL AIR SPACE - 3 IN WIDE
- 18 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED
- FACTORY MOUNTED EXHAUST COLLAR(S)
- BACKSPLASH 80.00 IN HIGH 100.00 IN LONG
- PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
- STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

CONTROL INFORMATION

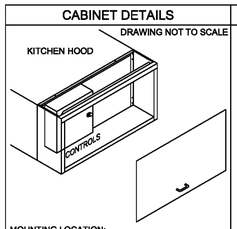
MARK	ELECTRICAL CONTROL PACKAGE		USER INTERFACE		FANS CONTROLLED										
	MODEL	LOCATION	TYPE	LOCATION	FAN #	TYPE	FAN	FAN MARK	ZONE	CFM	MOTOR HP	MOTOR VOLT	CYCLE	MOTOR PHASE	MOTOR STARTER IN PANEL	VFD IN PANEL
KH-1 CONTROLS	GKC-CV-S-11-1-1-0	LEFT CABINET ON KH-01	FULL COLOR TOUCHSCREEN	HOOD – FACE MOUNT LEFT END OF KH-01 SECTION 1	1	EXHAUST	E1	KEF-01	1	1862	1	208	60	3	NO	NO
					2	SUPPLY	S1	KSF-01	1	1650	0.75	208	60	3	YES	NO

CONTROL FEATURES

- HOOD LIGHT CONTROL
- TEMP SENSORS (FACTORY INSTALLED) - QTY. 1
- DRY FIRE CONTACTS - QTY. 2
- LIGHTS OFF DURING FIRE
- EXHAUST MAX DURING FIRE
- SUPPLY OFF DURING FIRE

CABINET DETAILS

DRAWING NOT TO SCALE



MOUNTING LOCATION:
UTILITY CABINET ON HOOD
(INNER CONTROL BOX: 12 X 20 X 6)

NOTES:
1) WHEN CONTROLS ARE MOUNTED IN HOOD-MOUNTED OR WALL-MOUNTED UTILITY CABINET, FOR HOOD OR WALL CABINET DIMENSIONS SEE HOOD SUBMITTAL.

2) MINIMUM OF 36" OF CLEARANCE RECOMMENDED IN FRONT OF CONTROL CABINET

USER INTERFACE DETAILS

MOUNTING TYPE
FACTORY MOUNTED:
FACE MOUNT LEFT SIDE OF HOOD

USER INTERFACE CONTROL
FANS AND LIGHTS

INTERFACE CABLE LENGTH
50FT (FACTORY PROVIDED)

ZONE CONFIGURATION

ZONE #	ZONE	ROOM TEMP
1	Z1	PRESET

HOOD CONFIGURATION

HOOD #	HOOD	HOOD MARK	ZONE	EXHAUST	SUPPLY	MB-TEMP SENSORS	HCS
1	H1	KH01 SECTION 1	Z1	E1	S1	TS1	NO

WIRING DIAGRAM CODE: ####
JOB NAME: RBR - CALHOUN STATION 1-4
MODEL: GKC-CV-S-11-1-1-0
SERIAL NUMBER: WDSN#
MARK: KH-01 CONTROLS
DOC NUMBER: #### REV: ####

DEFAULT SETTINGS / PARAMÈTRES PAR DÉFAUT

FACTORY SETTINGS
TIME ZONE: 0
CONFIGURATION: STANDARD
ZONES: 1
HOODS: 1
SUMPS: 0
EXHAUST FANS: 1
SUPPLY FANS: 1
MB ROOM SENSOR: NO
MB TEMP SENSORS: 1
HIGH TEMP FAULT: NO
FREEZE PROTECTION: YES
GAS RESET: NO
FAN PROVING: NO
BMS: NONE

ZONE SETTINGS
SEE ZONE CONFIGURATION IN TABLE ON LEFT

HOOD SETTINGS
SEE HOOD CONFIGURATION IN TABLE ON LEFT

EXHAUST FAN SETTINGS
SEE FAN CONFIGURATION IN TABLE ON LEFT

SUPPLY FAN SETTINGS
SEE FAN CONFIGURATION IN TABLE ON LEFT

SENSOR SETTINGS
SEE HOOD CONFIGURATION IN TABLE ON LEFT

USER INTERFACE SETTINGS (MB)
FAN & LIGHT BUTTONS: SHOW BOTH (SEPERATE)

USER INTERFACE SETTINGS (HCB)
NA

GENERAL SETTINGS
TIME ZONE: CENTRAL DAYLIGHT (DEFAULT)

FIRE/FAULT SETTINGS
EXHAUST DURING FIRE: MAX
SUPPLY DURING FIRE: OFF
LIGHTS DURING FIRE: OFF

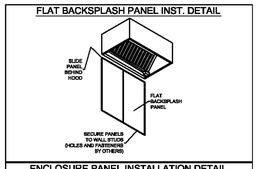
BMS SETTINGS
NA

PRG VERSION: V4

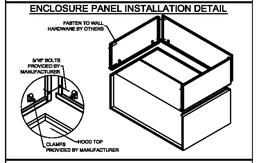
FAN CONFIGURATION

FAN #	TYPE	FAN	FAN MARK	ZONE	MIN CFM	MAX CFM	MODBUS VFD	VFD ADDRESS	MIN FREQ.	MAX FREQ.	MIN VDC	MAX VDC
1	EXHAUST	E1	KEF-01	Z1	-	1862	NO	-	-	-	-	10.0
2	SUPPLY	S1	KSF-01	Z1	-	1650	NO	-	-	-	-	10.0

FLAT BACKSPLASH PANEL INST. DETAIL



ENCLOSURE PANEL INSTALLATION DETAIL



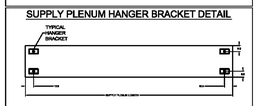
HOOD HANGING HEIGHT FOR FIRE SYSTEMS

VERIFICATION OF HOOD HANGING HEIGHT ABOVE FINISHED FLOOR (A.F.F.) IS REQUIRED FOR CORRECT PLACEMENT OF FIRE SYSTEM NOZZLES.

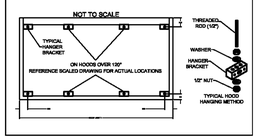
☐ RECOMMENDED HANGING HEIGHT = 80" FROM FINISHED FLOOR TO LOWER FRONT EDGE OF HOOD.

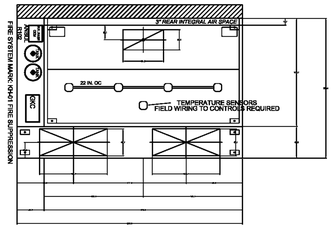
☐ OTHER HANGING HEIGHT = " FROM FINISHED FLOOR TO LOWER EDGE OF HOOD.

SUPPLY PLENUM HANGER BRACKET DETAIL

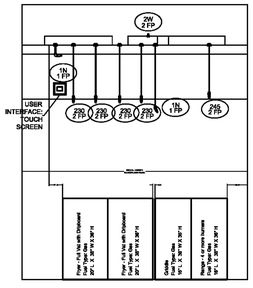


HOOD HANGER BRACKET DETAIL

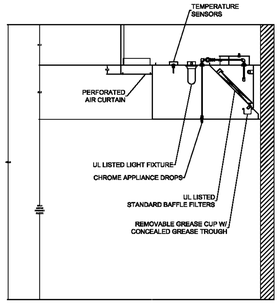




MARK: KH-01 - SECTION 1
PLAN VIEW



MARK: KH-01 - SECTION 1
ELEVATION VIEW



MARK: KH-01
SECTION VIEW

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

Mechanical Details

109 M

SECTION 16000 ELECTRICAL

16001 SCOPE OF WORK
1. THE WORK DESCRIBED UNDER THIS SECTION OF THE SPECIFICATIONS INCLUDES FURNISHING ALL MATERIAL, LABOR, AND EQUIPMENT, EXCEPT AS FURNISHED UNDER OTHER SECTIONS OF THE SPECIFICATION, TO INSTALL ALL ELECTRICAL WORK AS SHOWN IN THE DRAWINGS AND AS SPECIFIED ANF REFERRED TO HEREIN.
2. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT, PAY AL FEES AND COST, SHALL OBTAIN ALL PERMITS, APPROVALS, AND INSPECTIONS TO PROVIDE A COMPLETE ELECTRICAL INSTALLATION.
3. ALL ELECTRICAL EQUIPMENT AND THE RESULTANT INSTALLATION OF SUCH EQUIPMENT, DEVICES, ETC. SHALL BE IN STRICT COMPLIANCE WITH THE NATIONAL ELECTRIC CODE, NFPA 70, ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND THE STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE, NFPA 70E.
3. CONTRACTOR SHALL TAKE RESPONSIBILITY FOR FIELD VERIFICATION OF ALL DIMENSIONS AND LOCATIONS OF EXISTING, RELOCATED, AND NEW EQUIPMENT, AND SHALL BE RESPONSIBLE FOR COORDINATION WITH THE WORK OF OTHER TRADES NECESSARY TO THE PROJECT.
4. THESE DRAWINGS ARE INTENDED TO OUTLINE THE SCOPE OF WORK REQUIRED TO PROVIDE A COMPLETE AND OPERABLE PROJECT CONCLUSION. ALL MISCELLANEOUS COMPONENTS, PARTS, FASTENERS, SPLICES, AND OTHER INCIDENTAL ITEMS NECESSARY TO PROVIDE A COMPLETED PROJECT SHALL BE PROVIDED WHETHER OR NOT SPECIFICALLY NOTED.
5. ALL CONNECTIONS TO EXISTING POWER, AND ALL TESTING SHALL BE DONE WITH THE ASSISTANCE AND GUIDANCE OF THE CONSTRUCTION MANAGER AND THE LOCAL POWER COMPANY.
6. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY CONFLICTS ARISING FROM DISCOVERED CONDITIONS AT ANY PHASE OF THE PROJECT.
7. AT ANY LOCATION WHERE EXCAVATION OR ASSOCIATED WORK CAUSES DAMAGE TO EXISTING UNDERGROUND UTILITIES, CONTRACTOR SHALL RESTORE THE DAMAGED SYSTEM TO LIKE-NEW STATE.
8. CONTRACTOR SHALL VERIFY ALL FINAL LOCATIONS OF ELECTRICAL EQUIPMENT PRIOR TO INSTALLATION WITH CONSTRUCTION MANAGER. .
11. LOCATIONS OF OTHER EQUIPMENT SPECIFIED BY OTHER TRADES OR PROVIDED BY OWNER ARE APPROXIMATE. COORDINATE EXACT LOCATION IN FIELD PRIOR TO ROUGHING IN AND ROUTING CONDUIT.
12. SEE ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LOCATIONS FOR LIGHT FIXTURES IN LAY-IN OR DRYWALL CEILINGS, AND ON INTERIOR OR EXTERIOR WALLS.
13. CONDUITS ARE NOT NECESSARILY SHOWN ON PLAN DRAWINGS FOR SAKE OF CLARITY. PROVIDE CONDUITS BETWEEN DEVICES AND TO PANELS PER REQUIREMENTS LISTED IN DIVISION 16 SPECIFICATIONS. INDICATE EXACT ROUTING OF CONDUIT ON PLAN DRAWINGS AS PART OF AS BUILT DOCUMENTATION TO BE SUBMITTED AFTER FINAL COMPLETION.
16. GENERAL CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES. FAILURE TO DO SO INDICATED THAT THE CONTRACTOR ACCEPTS THE CONDITIONS AS THEY EXIST, AND SHALL PERFORM THE WORK REQUIRED AS SHOWN AND SPECIFIED.
17. ELECTRICAL CONTRACTOR SHALL REVIEW MECHANICAL DRAWINGS AND SPECIFICATION TO OBTAIN LOCATIONS, WIRING REQUIREMENTS, CONTROL WIRING SCHEMES, INTERLOCK WIRING, AND THERMOSTAT LOCATIONS.
18. EQUIPMENT SHALL BE MOUNTED ON MATERIALS SUITABLE FOR THE ENVIRONMENT WHICH IT IS INSTALLED WITH THE APPROPRIATE NEMA ENCLOSURE RATING.
19. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH ARTICLE 110 AND 408.
20. THE DEDICATED ELECTRICAL SPACE EXTENDING FROM THE FLOOR TO THE STRUCTURAL CEILING WITH THE WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD, MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC 110 & 408. COORDINATE INSTALLATION OF ELECTRICAL EQUIPMENT WITH OTHER TRADES PRIOR TO ROUGHING IN EQUIPMENT
30. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE MECHANICAL AND SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.

.01 EXAMINATION OF THE PREMISES
1. THE CONTRACTOR WILL BE HELD TO HAVE EXAMINED THE PREMISES AND SATISFIED HIMSELF AS TO THE EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGATED TO OPERATE IN PERFORMING PART OF THE WORK OR THAT WHICH WILL IN ANY MANNER AFFECT THE WORK UNDER HIS CONTRACT.
2. PRIOR TO ORDERING ANY MATERIAL OR DOING ANY WORK, VERIFY THE DIMENSIONS AT THE SITE; CORRECTNESS OF DIMENSIONS WILL BE THIS CONTRACTORS RESPONSIBILITY. NO EXTRA CHARGES OR COMPENSATION WILL BE ALLOWED FOR DIFFERENCES BETWEEN ACTUAL DRAWINGS AND DIMENSIONS INDICATED ON THE DRAWINGS. IMMEDIATELY REPORT DIFFERENCES TO THE ARCHITECT AND DO NOT PROCEED WITH WORK UNTIL THE ARCHITECT RENDERS HIS DECISION.

.02 REGULATIONS, PERMITS, AND INSPECTIONS
1. REGULATIONS: COMPLY WITH ALL APPLICABLE CODES, RULES, AND REGULATIONS. ALL MATERIALS, EQUIPMENT, AND WORK MUST COMPLY WITH THE LATEST ADOPTED CODE AND THE APPLICABLE MUNICIPAL AND LIFE SAFETY CODES.
2. PERMITS: OBTAIN AND PAY FOR ALL PERMITS, FEES, AND LICENSES REQUIRED TO PERFORM WORK DESCRIBED HEREIN.
3. INSPECTIONS: ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES. PRIOR TO FINAL APPROVAL, FURNISH THE ARCHITECT WITH CERTIFICATES OF INSPECTION AND APPROVALS BY THE LOCAL AUTHORITIES.

.03 WORK LISTED ELSEWHERE
1. FURNISH AND INSTALL MOTOR CONTROLS UNLESS IN MOTOR CONTROL CENTER. FURNISH HOLE CUTTING IN PRE CAST STRUCTURAL CONCRETE.

.04 EXISTING SERVICES AND REMODEL AREA
1. MAINTAIN ALL SERVICES, POWER, SOUND, TELEPHONE, ETC. TO EXISTING BUILDINGS OR AREAS. INTERRUPTIONS OF SERVICES REQUIRED FOR "CUT-OVER" OR CONNECTIONS OF NEW CABLES, ETC. SHALL BE DONE AT THE CONVIENCE OF THE TENANT AND BE APPROVED IN WRITING BY THE TENANT PRIOR TO THE INTERRUPTION.

.05 TEMPORARY POWER
1. PROVIDE TEMPORARY POWER AS REQUIRED BY THE GENERAL CONTRACTOR. THIS SERVICE SHALL BE MAINTAINED THROUGHOUT THE ENTIRE PROJECT AS THE WORK PROGRESSES.
2. PROVIDE OUTLETS AT CONVENIENT POINTS AND IN SUFFICIENT NUMBERS SO THAT NO EXTENSION CORD IS OVER 50 FEET IN LENGTH IS REQUIRED TO REACH ANY WORK POINT. MAINTAIN GENERAL LIGHTING IN CORRIDORS, STAIRS, BASEMENT AND OTHER AREAS NOT RECEIVING DAYLIGHT REQUIRED FOR SAFETY. REMOVE TEMPORARY WORK AS RAPIDLY AS REQUIRED FOR OR ALLOWED BY INSTALLATION OF PERMANENT WORK.

16420 SERVICE ENTRANCE EQUIPMENT
1. SERVICE ENTRANCE EQUIPMENT TO HAVE SHORT CIRCUIT RATING EQUAL TO OR GREATER THAN AVAILABLE FAULT CURRENT, AND MEET ALL REQUIREMENTS OF U.L. STANDARDS NO 891. OUTDOOR GEAR TO BE NEMA 3R. ALL SWITCHGEAR TO BE FREE STANDING, UNLESS OTHERWISE INDICATED, MOUNTED ON 4" CONCRETE PAD EXTENDING A MINIMUM OF 6" IN FRONT OF EQUIPMENT.
2. END SECTION SHALL BE PROVIDED WITH FULL CAPACITY THROUGH BUS FOR FUTURE EXTENTION TO FUTURE SECTIONS.

16436 SWITCHBOARDS
1. SWITCHBOARDS TO BE SQUARE D TYPE QMB OR EQUAL, FREE STANDING, 90" HIGH, MIN 14" DEEP WITH TYPE QMB SWITCHES. END SECTION WITH FULL CAPACITY THROUGH BUS FOR FUTURE SECTIONS. MOUNT ON 4" CONCRETE PAD EXTENDING MINIMUM OF 6" IN FRONT OF SWITCHBOARDS.

16471 SAFETY SWITCHES
1. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE. WHERE OUTSIDE THE BUILDING, THE SWITCHES SHALL BE RAINTIGHT NEMA 3R. ALL SWITCHES SHALL BE LOCKABLE.

16471 PANELS
1. PANEL TYPE AS INDICATED ON THE DRAWING. NEW FLUSH PANELS TO HAVE 3 (3/4") EMPTY CONDUITS STUBBED INTO ACCESSIBLE CEILING SPACE.
2. PROVIDE A GROUND BUS IN ALL PANELS INCLUDING EXTISTING PANELS WHEREIN WORK IS DONE OR LOADS ADDED. CHECK ALL BREAKERS. REPLACE DEFECTIVE BREAKERS IN AFOREMENTIONED PANELS.
3. VERIFY THE INTERRUPTING CAPACITY OF ALL BREAKERS WITH REQUIREMENTS INDICATED ON THE DRAWINGS. REPLACE EXISTING BREAKERS NOT MEETING REQUIRED A.I.C. RATING.
4. HOME RUN CIRCUITRY SHALL BE IN
5. INDIVIDUAL CONDUITS FROM THE LOAD TO THE PANEL. DO NOT USE WIRING GUTTERS TO CONSOLIDATE WIRING. CONDUITS SHALL BE LIMITED TO 3 CURRENT CARRYING CONDUCTORS UNLESS INDICATED OTHERWISE.

16461 DRY TYPE TRANSFORMERS
1. SHALL BE EQUAL TO SQUARE D, 150 DEGREE TEMPERATURE RISE; SERIES 7410/7411. CLEARANCE ALL AROUND PER MANUFACTURERS RECOMMENDATION. PROVIDE ISOLATION PADS.

16510 LIGHTING FITXTURES
1. FLUORESCENT FIXTURES SHALL BE FURNISHED WITH UL LISTED HIGH POWER FACTOR BALLAST. CONTRACTOR SHALL VERIFY CEILING CONSTRUCTION BEFORE ORDING RECESSED UNITS SHALL PROVIDE PLASTER OR DRY WALL FRAMES AS REQUIRED.
2. RECESSED INCANDESCENT FIXTURES AND FLUORESCENT DOWN LIGHTS SHALL BE LISTED FOR USE IN INSULATED CEILING SPACES, AND SHALL HAVE ANY REQUIRED FEED THRU BOXES.
3. LAMPS FOR INCANDESCENT FIXTURES SHALL BE 1000 HOUR INSIDE FROSTED 130 VOLT, NOT EXCEEDING THE WATTAGE FOR WHICH THE FIXTURE IS LABELED AND SHALL BE OF THE TYPE RECOMMENDED BY THE FIXTURE MANUFACTURER. LAMPS SHALL BE OF THE SAME MANUFACTURER AS THE FLUORESCENT.
4. ALL FIXTURES SHALL BE PROPERLY SUPPORTED FROM THE CEILING STRUCTURE, NOT FROM GYPSUM BOARD OR PLASTER. SURFACE OR PENDENT MOUNT FIXTURES SHALL BE BOLTED TOGETHER FOR PROPER ALIGNMENT AND BONDING.
5. ALL FLUORESCENT FIXTURES RECESSED IN THE CEILING OR IN A GRID CEILING SHALL BE PROVIDED WITH EARTHQUAKE CLIPS AS REQUIRED BY CODE.

16195 NAMEPLATES
1. PROVIDE CONTRAST PLASTIC EMBOSSING TAPE, ADHESIVE BAKED NAMEPLATES FOR ALL STARTERS AND DISCONNECT SWITCHES.
2. PROVIDE LAMICOID NAMEPLATES FOR ALL DISTRIBUTION SWITCHES, BREAKERS, LIGHTING, AND POWER PANELS INDICATING ITEMS SERVED. SIZE OF LETTERS SHALL BE A MINIMUM OF 3/16" HIGH

16120 WIRE
1. ALL WIRE AND CABLE SHALL BE NEW, 600VOLT INSULATED, OF TYPES SPECIFIED BELOW. ALL WIRE AND CABLE SHALL BEAR THE UNDERWRITER'S LABEL AND SHALL BE BROUGHT TO THE JOB IN UNBROKEN PACKAGES. WIRE SHALL BE COLOR CODED PER THE NEC.
2. BRANCH CIRCUIT WIRING SHALL BE MINIMUM #12 AWG COPPER.
3. WIRE AND CABLE #4 AWG AND SMALLER SHALL BE THW OR THHN/THWN.
4. WIRE AND CABLE LARGER THAN #4 AWG SHALL BE XHHW.
5. ALL AIR CONDITIONING FEEDERS SHALL BE TYPE XHHW.
6. ALL WIRING IN PANELBOARDS, SWITCHBOARDS, AND GUTTERS SHALL BE NEATLY ARRANGED. WIRE SHALL BE HELD BUNDLED BY TY-WRAPS. WIRES SHALL BE CONNECTED TO CIRCUIT BREAKERS, SWITCHES, AND OTHER DEVICES PERPENDICULAR TO TERMINAL LUGS.
7. ALL WIRING IN MANHOLES, PULL BOXES, OR JUNCTION BOXES OVER 12" IN LENGTH SHALL BE BUNDLED IN A NEAT AND WORKMANLIKE MANNER.
8. AFTER COMPLETION OF UNDERGROUND SPLICES AND SPLICES IN MANHOLES, SEAL SPLICES WITH SCOTCHCOAT #82 COATING OR EQUAL TO MOISTURE PROOF CABLES.
9. LEAVE NO LESS THAN 6" OF WIRE AT EACH OUTLET FOR CONNECTION TO LIGHTING FIXTURES, SWITCHES, RECEPTACLES AND OTHER PIECES OF EQUIPMENT. WHERE WIRES FEED THROUGH AN OUTLET OR JUNCTION BOX, NEATLY TUCK 6" LOOP IN BOTTOM OF BOX.
10. LIGHTING AND POWER CIRCUITS SHALL BE IDENTIFIED BY PANEL LETTER AND CIRCUIT NUMBER WITH BRADY WRAP AROUND CLOTH WIRE MARKERS AT AL TERMINATIONS AND JUNCTIONS.
11. ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:
11.1. FOR ALL 120V TO GROUND CKTS:
11.1.1. PHASE CONDUCTIONS: BLACK, RED, BLUE
11.1.2. NEUTRAL - WHITE
11.2. FOR ALL 277V TO GROUND CKTS:
11.2.1. PHASE CONDUCTORS: BROWN, ORANGE, YELLOW
11.2.2. NEUTRAL CONDUCTORS: GRAY
11.3. LARGE FEEDER CONDUCTORS SHALL BE COLOR CODED BY COLORED TAPE WRAPPED AROUND THE CONDUCTOR AT EACH PULL BOX, TERMINATION POINT AND SPLICE.
12. ALL CONNECTIONS TO CIRCUIT BREAKERS AND SWITCHES AND ALL JOINTS IN WIRES SHALL BE MAKE AS NOTED:
12.1. CONNECTIONS TO CIRCUIT BREAKERS AND SWITCHES: #12 WIRE SHALL BE FORMED AROUND BINDING POST OR SCREW. #10 AND #8 WIRE - BUCHANAN, "TERMEND" OR APPROVED EQUAL, LOCKING TONGUE LUG. #6 WIRE OR LARGER - BURNDY "QUICK-LUG" TYPE QDA, OR APPROVED EQUAL, ROUND FLANGE SOLDERLESS LUG.
12.2. FIXTUE CONNECTION: CIRCUIT CONNECTIONS TO FIXTURE WIRE SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS CONNECTORS - BUCHANAN, SCOTCHLOC OR WING NUT OR APPROVED EQUAL, COMPLETE WITH INSULATOR AND SECURITY RING.
12.3. JOINTS IN WIRES: #6 WIRE AND LARGER - BURNDY OR APPROVED EQUAL, #8 OR SMALL - BUCHANAN, SCOTCHLOC, WING NUT, OR EQUAL PRESSURE TYPE SOLDERLESS CONNECTORS COMPLETE WITH INSULATOR AND SECURITY RING.
13. CONTROL WIRING AND ALL OTHER STANDARD WIRING TO SCREW CONNECTIONS SHALL BE PROVIDED WITH T&B STA-KON TERMINALS.
14. SOLID CONDUCTORS SHALL LOOP TIGHTLY AND COMPLETELY AROUND TERMINAL SCREWS ON ALL WIRING DEVICES.
15. UNINSULATED SOLDERLESS CONNECTORS TO BE INSULATED AS FOLLOWS: TAPE WITH A COVERING OF RUBBER TAPE, EQUAL IN THICKNESS TO THE INSULATION. THIS SHALL BE FOLLOWED WITH AN OTHER COVERING OF FRICTION TAPE IN TWO LAYERS. ONE COAT OF WATERPROOF PAINT SWHALL BE APPLIED WHEN SUBJECT TO MOISTURE.
16. WIRE AND CABLE TO BE PULLED INTO CONDUITS WITHOUT STRAIN. USE POWDERED SOAPSTONE, MINERALAC, OR OTHER APPROVED LUBRICANT.
17. WIRE SHALL NOT BE RE PULLED IF SAME HAS BEEN PULLED OUT OF A CONDUIT RUN. NO CONDUCTOR SHALL BE PULLED INTO CONDUIT UNTIL CONDUIT SYSTEM IS COMPLETE, INCLUDING JUNCTION BOXES, PULL BOXES, ETC. WITHOUT PERMISSION OF ARCHITECT.

16110 CONDUIT
1. IN GENERAL, ELECTRICAL METALLIC TUBING SHALL BE USED FOR ALL WIRING EXCEPT IN OR UNDER CONCRETE, EARTH, OR FILL. ELECTRICAL METALLIC TUBING MAY BE USED IN FURRED SPACES, WOO FRAME WALL WHERE CONDUITS DO NOT EXCEED 2 1/2" IN SIZE. BRICK, BLOCK, TILE, AND CONCRETE WALLS ARE NOT CONSIDERED HOLLOW AND RIGID CONDUIT SHALL BE PROVIDED FOR THESE AREA.
2. RIGID STEEL CONDUITS OR INTERMEDIATE METAL CONDUITS SHALL BE USED IN CONCRETE SLABS, IN SOLID GROUTED CELLS OR CONCRETE MASONRY WALLS, BRICK, OR TILE WALLS, FOR ALL EXPOSED CONDUIT OUTSIDE OF THE BUILDING, AND FOR CONDUITS EXCEEDING 2 1/2" IN SIZE. IN ADDITION ALL WIRING IN OR UNDER CONCRETE, EARTH, OR FILL SHALL BE RIGID GALVANIZED OR SHERARDIZED STEEL. RIGID CONDUIT UNDER CONCRETE, IN EARTH, OR FILL SHALL BE COATED WITH POLYETHYLENE TAPE, SCOTCH NO 50 OR APPROVED EQUAL, SPIRAL WRAPPED 1/2" LAPPED OT AN OVERALL THICKNESS OF NOT LESS THAN 15 MILS.
3. USE FLEXIBLE METAL CONDUITS FOR RECESSED FIXTURES, MOTOR, TRANSFORMER, AND OTHER EQUIPMENT SUBJECT TO MOVEMENT. USE LIQUID TIGHT TYPE WHERE EXTERIOR OR SUBJECT TO LIQUID SPRAY OR DRIPPING.
4. UL LISTED SCHEDULE 80 PVC CONDUIT MAY BE USED FOR UNDERGROUND RUNS. EXPANSION JOINTS AT 75 FEET ON CENTER OR AS REQUIRED BY MFG. ALL BENDS SHALL BE MANUFACTURED.
5. NON-METALLIC CONDUIT INSTALLED BELOW CONCRETE FLOORS MAY BE INSTALLED IN THE FILL, HOWEVER, A PORTION OF THE CONCRETE FILL MATERIAL MUST BE PLACED AROUND THE CONDUIT FOR RIGID SUPPORT. NON-METALLIC CONDUIT OUTSIDE THE FILL SHALL BE BURIED A MINIMUM OF 18" BELOW GRADE. NON-METALLIC CONDUIT SHALL BE PROVIDED WITH CODE SIZE COPPER BOND WIRE INSIDE THE CONDUIT FOR ELECTRICAL CONTINUNITY, AND SHALL BE INSTALLED IN ACCORDANCE TO NEC ARTICLE 250. WRAPPED RIGID STELL ELEBOWS SHALL BE USED FOR RISERS ON PVC CONCUIT RUNS AND SHALL BE GROUNDED.
6. CONDUIT PLACED IN A CONCRETE SLAB SHALL BE LARGER THAN 3/4"TRADE SIZE DIAMETER AND CONDUIT SMALLER THAN 3/4" SHALL BE USED FOR UNDERGROUND CIRCUITS. CONDUIT SHALL HAVE MINIMUM 1" CONCRETE COVER. NOT CONDUIT SHALL BE IMBEDDED INA SLAB THAT IS TLESS THAN 3-1/2" THICK, EXCEPT FOR LOCAL OFFSETS. NO CONDUIT SHALL BE PLACED BETWEEN THE REINFORCING STEEL AND THE BOTTOM OF THE SLAB.
7. ALL CONDUIT UNDER CONCRETE DRIVES OR ANY LOCATION WHERE SUBJECT TO DAMAGE BY HEAVY EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE OR 18" BELOW GRADE ENCASED IN A 3" THICK CONCRETE ENVELOPMENT.
8. TRENCHING, BACFILLING, AND CONCRETE WORK FOR ELECTRICAL WORK SHALL BE DONE UNDER THIS SECTION AND AS REQUIRED BY LOCAL AND/OR RULING AUTHORITIES AND REGULATING AGENCIES.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SLEEVES AND CHASES REQUIRED WHERE CONDUITS PASS THROUGH FLOORS AR WALLS, AND SHALL SEAL ALL AOPENING AND FINISH TO MATCH ADJACENT SURFACES. WHERE EXPOSED CONDUITS PASS THOUG WALL, FLOORS, OR CEILINGS, ESCUTCHEON PLATES SHALL BE PROVIDED.
10. ALL NECESSARY SERVICES AND BLOCKOUTS SHALL BE PROVIDED.
11. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
12. RIGID CONDUIT FITTINGS
12.1. PROVIDE DOUBLE LOCKNUTS AND BUSHINGS EXCEPT AT THREADED HUBS.
13. EMT OR FLEX FITTINGS
13.1. FOR EMT OR MALLEABLE IRON, COMPRESSION, AND SET SCREW (DOUBLE SET SCREW), FOR FLEXIBLE CONDUIT, COMPRESSION OR CLAMP TYPE CONNECTOR SHALL HAVE INSULATED THREADS.
14. MC CABLE
14.1. METAL CLAD CABLE MAY BE USED IN LIEU OF EMT CONDUIT AND WIRE FOR BRANCH CIRCUIT WIRING IF ACCEPTABLE TO AUTHORITIES.

16140 WIRING DEVICES
1. WHEN SURFACE WEATHERPROOF MOUNTING IS REQUIRED, RECEPTACLES SHALL BE MOUNTED IN AN FS CONDUIT BOX.
2. ELEVATION OF EACH RECEPTACLE SHALL BE FLOOR PLUS 18" TO CENTER UNLESS OTHERWISE NOTED.
3. ALL SWITCHES SHALL BE OF THE SAME MANUFACTURER AS THE THE RECEPTACLES FURNISHED.
4. COVERPLATES FOR TPRECPTACLES, SWITCHS, AND OUTLETS SHALL GENERALLY BE PLASTIC, WITH COLOR AS SELECTED BY THE ARCHITECT.

16130 BOXES
1. BOXES IN EXPOSED OR WET LOCATIONS SHALL BE CAST STEEL CONDUIT BODIES. IN CONCEALED LOCATIONS, THEY SHALL BE SHEET STEEL BOXES WITH GALVANIZED OR SHERARDIZED FINSIH, NEOPRENE GASKETED, SCREWED COVERS.
2. SHEET STEEL BOXES SHALL BE STANDARD ONE-PIECE KNOCKOUT BOXES. WHERE OUTLETS ARE INSTALLED INCONCRETE SLABS, BOXES SHALL BE CONCRETE CAST TYPE BOXES. BOXES SHALL NOT BE LESS THAN 4" IN DIAMETER AND 1-1/2" DEEP. OUTLET BOXES SET IN CONCRETE SHALL BE SET TO HAVE FINAL OPENING FLUSH WITH FINISH SURFACE.
3. CAST-METAL CONDUIT BODIES SHALL BE CROUSE-HINDS CONDUITS, APPLETON UNILETS, OR APPROVED EQUIVALENT. BOXES SHALL BE ARRANGED WITH THREADED CONNECTORS FOR RIGID CONDUIT. ALL CONDUIT BODIES SHALL HAVE SUITABLE COVERS, WHICH SHALL BE PROVIDED WITH GASKET FOR EXTERIOR AND MOIST LOCATIONS.
4. POWER / PHONE FLOOR OUTLETS SHALL BE STEEL CITY #664 WITH #664CST COVER (VERIFY COLOR), #664-BP PHONE PLATE, #664RP RECEPTACLE PLATE AND 20A DUPLEX RECEPTACLE. PHONE COMPARTMENT TO HAVE 3/4" E.C. TO CEILING SPACE VIA FLOOR WALL.
5. OUTLETS SET IN FURRED CEILING AND STUD WALLS SHALL BE ANCHORED TO THE CEILING OR WALL STRUCTURE WITH SUITABLE STEEL STRAPS.
6. OUTLET BOXES SHALL BE USED ALL PULL AND JUNCTION BOXES WHEREVER POSSIBLE AND WHERE REQUIRED. BOXES IN PLASTERED WALLS OR CONCRETE BLOCK WALLS IN FINISHED AREAS AND CEILINGS SHALL HAVE TWO GANG RAISED PLASTER RINGS AND BLANK WALL PLATE. OTHER BOXES SHALL HAVE BLANK COVERS.
7. WHERE OTHER THAN OUTLET BOXES ARE REQUIRED, PULL AND JUNCTION BOXES SHALL BE CONSTRUCTED OF GALVANIZED STEEL CONFORMING TO CODE REQUIREMENTS. EXTERIOR BOXES SHALL BE OF WEATHERPROOF CONSTRUCTION AND SHALL BE PROVIDED WITH NEOPREME COVER GASKETS. BOXES SHALL BE RIGIDLY ATTACHED TO THE STRUCTURE, INDEPENDENT OF ANY CONDUIT SUPPORT.

HANGERS / INSERTS
1. FURNISH AND INSTALL ALL UNISTRUT, HANGERS, SUPPORTS, ETC. REQUIRED FOR WORK UNDER THIS DIVISION. SUPPORT CONDUIT FROM BUILDING STRUCTURE, NOT FROM CEILING SUPPORTS. BRANCH CIRCUIT CONDUITS 3/4" AND SMALLER MAY BE RUN FROM CEILING SUPPORTS USING SPRING STEEL CLIPS.

CONCRETE, EXCAVATION, FILL, BACKFILL
1. FURNISH ALL CONCRETE, EXCAVATION, FILL, BACKFILL, AND STEEL REQUIRED FOR THIS WORK UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL CONCRETE, FILL, BACKFILL, STEEL, ETC., WHERE REQUIRED SHALL BE IN STRICT ACCORDANCE WITH SPECIFICATIONS SETUP IN OTHER DIVISIONS OF THE SPECIFICATION.

FINAL LOCATION OF SURFACE FEATURES
1. SHALL BE ACCOMPLISHED IN THE FIELD, SUBJECT TO THE APPROVALS OF THE ARCHITECT. THE LOCATION OF ALL SWITCHES, FIXTURES, PANELS, ETC. AND THEIR PROXIMITY AND RELATIONSHIP TO ALL VISIBLE FEATURES OF EQUIPMENT FURNISHED BY OTHER TRADES, SHALL BE MADE KNOWN TO THE ARCHITECT. IN CASE OF CONFLICT BETWEEN TRADES, OR BETWEEN A TRADE AND THE ARCHITECT, THE DECISION OF THE ARCHITECT SHALL BE FINAL AND HIS INSTRUCTIONS IN THESE MATTERS SHALL BE FOLLOWED BY ALL CONCERNED.

PAINTING
1. ALL EXPOSED ELECTRICAL EQUIPMENT, CONDUIT, FLUSH PANEL FRONTS, TRANSFORMER, SWITCHES, SWITCHBOARDS, PANELS, AND SIMILAR ITEMS SHALL BE PAINTED AS SPECIFIED UNDER THE PAINTING SECTION OF THESE SPECIFICATIONS.

2. CLEANING UP PREMISES
3. AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTER MATERIAL OR RUBBISH CAUSED BY EMPLOYEES. METAL FLOOR PANS SHALL BE PROVED PIPE THREADING MACHINES AND BENCHES AND SHALL BE USED AT ALL TIMES TO PREVENT CONCRETE FLOORS BECOMING OIL SOAKED. UPON COMPLETION OF THE JOB, REMOVE ALL DEBRIS, CLEAN ALL SWITCH PLATES, FIXTURES, PANEL TRIMS AND IN GENERAL, LEAVE THE PREMISES IN A CLEAN AND TIDY CONDITION.

4. ACCEPTABLE MANUFACTURERS
5. THE FOLLOWING IN A LIST OF MANUFACTURERS WHOSE SPECIFICATION GRADE EQUIPMENT IS ACCEPTABLE AS TO MANUFACTURER. SUBSTITUTIONS SHALL NOT CAUSE OR CONTRIBUTE TO CHANGES UNLESS THESE CHANGES ARE APPROVED BY THE ARCHITECT PRIOR TO SUBSTITUTION.
6. ITEMS: CAREFUL CHECKING MUST BE MADE TO VERIFY THAT THE EQUIPMENT WILL MEET ALL CAPACITIES, REQUIREMENTS, SPACE ALLOCATIONS, AND THAT THE WEIGHTS ARE NOT EXCESSIVE.
7. POWER DISTRIBUTION EQUIPMENT: SQUARE D.
8. WIRE AND CABLE: GENERAL CABLE, ANACONDA, CAPITOL, CIRCLE AW, GENERAL ELEC, OKONITE, ROME, SIMPLEX, KAISER.
9. LOCAL WALL SWITCHES, RECEPTACLES, PILOT LIGHTS: PASS AND SEYMOUR, SIERRA, BRYANT, CIRCLE F, GENERAL ELEC, HUBBELL, RUSSELL & STOLL, ARROW-HART.
10. DEVICE PLATES: HUBBELL, SLATER, PASS AND SEYMOUR, SIERRA, BRYANT, ARROW-HART, LEVITON.
11. LAMPS: GENERAL ELECTRIC, PHILLIPS, SYLVANIA.
12. CONDUIT: TRIANGLE, NATIONAL ELECTRIC CO., JONES-MCLAUGHLIN, REPUBLIC.
13. FITTINGS: THOMAS AND BETTS, APPLETON, CROUSE-HINDS.
14. CAST OUTLET BOXES: CROUSE-HINDS, APPLETON.
15. BALLAST: ADVANCE, GENERAL ELEC, JEFFERSON, WESTINGHOUSE, SYLVANIA, UNIVERSAL.
16. FLOOR BOXES: HUBBELL, LEW STEEL CITY.
17. OUTLET BOXES: RACO, STEEL CITY, SLATER.
18. SHOP DRAWINGS:
19. ALL DATA SHALL BE SUBMITTED AT ONE TIME, BOUND, AND INDEXED IN AN ORDERLY MANNER. PRIOR TO STARTING THE WORK, SUBMIT TO THE ARCHTIECT FOR APPROVAL, SIX (6) SETS OF SHOP DRAWINGS OF SERVICE ENTRANCE SECTION, SWITCHBOARDS, PANELBOARDS, LIGHTING FIXTURES, TRANSFORMERS, GENERATORS AND ALL EQUIPMENT FABRICATED
20. FINAL INSPECTION AND TEST:
21. FURNISH ALL METERS, CABLES, CONNECTIONS AND APPARATUS NECESSARY FOR MAKING TEST.
22. TEST SYSTEM FOR SHORTS AND GROUNDS. FAULTY WIRING SHALL BE REMOVED AND REPLACED. ANY DEVICE, APPARATUS OR FIXTURE INSTALLED SHOWING SUBSTANDARD PERFORMANCE SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ARCHITECT.
23. MEGGER ALL SYSTEM NEUTRALS IN THE PRESENCE OF THE ENGINEER TO INSURE THE NEUTRAL IS NOT GROUNDED WITHIN THE SYSTEM. TEST SHALL BE MADE AFTER ALL BRANCH WIRING IS INSTALLED AND CONNECTED.
24. TEST ALL GROUND FAULT RELAYS IN THE PRESENCE FO THE ENGINEER. SET RELAY FOR TIME AND CURRENT RATING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
25. ALL EQUIPMENT RATED 1,000 AMPS OR MORE OR 480VOLTS SHALL BE TESTED FOR INSULATION BREAKDOWN. THE APPLICATION OF A 60HZ ALTERNATING POTENTIAL OF 1,000V PLUS TWICE THE RATED VOLTAGE OF THE DEVICE TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
26. HIGH POTENTIAL TESTING:
27. THE HIGH POTENTIAL TEST SHALL BE MADE BY AN INDEPENDENT COMPANY HIRED BY THE ELECTRICAL CONTRACTOR. COPIES OF THE REPORT CERTIFIED BY A REGISTERED ENGINEER, SHALL BE FORWARDED TO THE ARCHITECT WITHIN TWO (2) WEEKS AFTER THE TEST ARE PERFORMED.
28. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. "HI-POT" TEST VOLTAGES AND TIMES SHALL BE COORDINATED WITH AND DETERMINED BY THE OWNER'S REPRESENTATIVE WHENANY OTHER CABLE OR DEVICES, OTHER THAN THAT INSTALLED BY THE ELECTRICAL CONTRACTOR UNDER HIS CONTRACT, IS TO BE INCLUDED IN THE TEST PROCEDURE. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, HIS INTENTIONS TO PERFORM THE HI-POT TEST, INCLUDING TIME AND DATE AND TESTING AGENCY.
29. IN GENERAL TEST SHALL BE CONDUCTED AS FOLLOWS:
30. MAXIMUM DC VOLTAGES 52.8KV.
31. BUILD-UP TIME TO TEST VOLTAGE - ONE (1) MINUTE IN 10KV DC STEPS WITH RECORDED MILLI-AMP READINGS AT 156, 30 AND 45 SECONDS.
32. HOLDING TIME AT TEST VOLTAGE - FIVE (5) MINUTES, WITH RECORDED MILLI-AMPS READING AT THE END OF EACH MINUTE.
33. "DECAY TIME" SHALL BE RECORDED WITH SHUT-OFF AT APPROXIMATELY 1-3KV.
34. THE "HI-POT" TEST SHALL NOT BE MADE UNTO ANY PORTION OF AN ENERGIZED DEVICE. SUFFICIENT TIME LAG SHALL BE ALLOWED IN THE ORIGINAL REQUEST FOR THE OWNER TO SET UP A DEFINITE PERIOD OF TESTING IN ANY PORTION OF THE OWNER'S DISTRIBUTION SYSTEM IS INVOLVED.
35. GROUNDING:
36. THE NEUTRAL CONDUCTORS AND ALL OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS AS REQUIRED BY CODE SHALL BE GROUNDED. GROUNDING BUSHING SHALL BE USED AS REQUIRED AND SHALL BE O.Z. INSULATED TYPE BL OR APPROVED EQUAL. NO GROUNDING SHALL BE MADE TO GAS PIPING. WHERE EQUIPMENT OR DEVICES ARE SERVED BY NON-METALLIC DUCTS, ENCLOSURES SHALL BE GROUNDED BY MEANS OF A CODE SIZE BARE OR GREEN INSULATED EQUIPMENT GROUND WIRE INSTALLED IN THE DUCT WITH THE CURRENT CARRYING CONDUCTORS AND BE BONDED SECURELY IN EACH CABINET TERMINATING THE GROUND WIRE. COPPER JUMPERS SHALL BRIDGE FLEXIBLE CONDUIT AND BE INSTALLED IN THE CONDUIT. ALL SERVICE GROUNDS SHALL BE IN ACCORDANCE WITH THE UFER GROUND.
37. ALL EMT, FLEXIBLE CONDUIT, MC CABLE, OR PVC CONDUIT SHALL BE PROVIDED WITH AND INSULATED GREEN GROUND WIRE.

COMMUNICATIONS:

TELEPHONE:
1. PROVIDE EMPTY CONDUIT OR DUCT WITH "JET-LINE" OR EQUAL POLYPROPYLENE PULL LINE AND TERMINAL MOUNTING BOARD AS SHOWN ON DRAWINGS.
2. US LARGE RADIUS RIGID GALVANIZED STEEL CONDUIT FOR BENDS AND OFFSETS IN DUCT RUNS.
3. ALL CONDUIT RUNS TO TELEPHONE OUTLET BOXES SHALL BE A MINIMUM OF 3/4" AND HAVE A MAXIMUM OF TWO 90 DEGREE BENDS BETWEEN PULL BOXES.
4. TELEPHONE TERMINAL BOARDS SHALL BE 3/4" FIR PLYWOOD, GRADE CC PLUS SIZE AS INDICATED ON DRAWINGS. TELEPHONE TERMINAL CABINETS SHALL HAVE THE DOOR FASTENED TO THE TRIM WITH CONCEALED HINGES AND BE PROVIDED WITH FLUSH TYPE COMBINATION LATCH AND LOCK, KEYED TO MATCH LIGHTING PANELS, CABINETS AND TRIM SHALL BE FACTORY PAINTED WITH TWO FINISH COATS.
5. PROVIDE ALL NECESSARY MATERIAL AND LABOR REQUIRED BY THE TELEPHONE COMPANY FOR DELIVERING SERVICE TO THE TELEPHONE TERMINAL BOARD. ALL CONDUIT, TRENCHING AND BACKFILL SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WIT THE TELEPHONE COMPANY STANDARDS.

DATA:
1. ALL CONDUIT RUNS TO THE DATA OUTLET BOX SHALL BE A MINIMUM OF 3/4" AND HAVE A MAXIMUM OF TWO 90 DEGREE BENDS BETWEEN PULL BOXES.
2. ALL DATA OUTLETS ARE TO HAVE WALL PLATES TO MATCH THE DEVICE PLATE.

GUARANTEE:
1. GUARANTEE ALL MATERIAL, EQUIPMENT, AND WORKMANSHIP FOR ALL SECTIONS UNDER THIS DIVISION IN WRITING TO BE FREE FROM DEFECT OF MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. REPLACE WITHOUT CHARGE, ANY MATERIAL OR EQUIPMENT PROVIDING DEFECTIVE DURING THIS PERIOD. THE GUARANTEE SHALL INCLUDE PERFORMANCE OF THE EQUIPMENT UNDER ALL CONDITIONS OF LOAD, INSTALLING ANY ADDITIONAL ITEMS OF CONTROL AND/OR PROTECTIVE DEVICES AS REQUIRED.

GENERAL ELECTRICAL NOTES (NOTES APPLY WHETHER KEYED TO PLAN OR NOT)

2. LIGHTING:
2.1. SEE ARCHITECTURAL PLANS AND REFLECTED CEILING PLAN FOR LOCATION OF ALL LIGHT FIXTURES, INCLUDING COVE AND MLL-WORK LIGHTING. WHERE FIXTURE LOCATIONS NEED TO BE CHANGED, COORDINATE WITH THE ARCHITECT. AVOID ROLL-UP DOORS.
2.2. BEFORE ORDERING FIXTURES, FIELD VERIFY THAT FIXTURES WILL FIT IN AVAILABLE SPACE.
2.3. VERIFY LAMP TYPE / COLOR NUMBER OF LAMPS PER FIXTURE, LENS TYPE, AND VOLTAGE BEFORE ORDERING NEW FIXTURES TO MATCH EXISITNG.

3. EMERGENCY LIGHTING:
3.1. UNLESS INDICATED OTHERWISE, FLUORESCENT FIXTURES INDICATED AS EMERGENCY LIGHTS SHALL HAVE A 1 LAMP EMERGENCY LIGHTING FLUORESCENT BALLAST PACK (6 VOLT) FURNISHED WITH A FIXTURE. EMERGENCY LIGHTS/EXIT LIGHTS SHALL BE CIRCUITED TO AN UNSWITCHED LIGHTING CIRCUIT WHEN A NIGHT LIGHT CIRCUIT IS NOT PROVIDED.
3.2. EXIT SIGNS SHALL HAVE AN INTEGRAL EMERGENCY BATTERY. THEY SHALL BE SURE-LITES PLX 600 RP SERIES, UNIVERSAL EXIT, UNLESS OTHERWISE SPECIFIED. VERIFY THAT NO EXIT SIGN OBSTRUCTS A DOOR SWING OR HEADROOM PRIOR TO INSTALLING. VERIFY CEILING OR WALL MOUNTING.

4. POWER
4.1. WITHIN THE AREA OF THIS PROJECT AND SCOPE OF WORK, ANY DUPLEX RECEPTACLE WITHIN (6) SIX FEET OF A SINK SHALL BE A GROUND FAULT INTERRUPTING RECEPTACLE.
4.2. ALL DUPLEX RECEPTACLES WITH ISOLATED GROUND SHALL HAVE A MINIMUM #12 GREEN GROUND WIRE RUN TO PANEL GROUND BUS.
4.3. IN ANY PATIENT CARE AREAS, A #10 GREEN BOND WIRE SHALL BE RUN WITH ALL RECEPTACLE CIRCUITS. PEDIATRIC CARE AREAS SHALL HAVE TAMPERPROOF RECEPTACLES.
4.4. ANY 15A OR 20A, 120 VOLT LIGHTING OR OUTLET BRANCH CIRCUIT WITH AN OVERALL LENGTH OF 100 FEET OR LONGER SHALL BE #10 WIRE FOR FULL LENGTH OF CIRCUIT EXCEPT AS NOTED OTHER-WISE.
4.5. PROVIDE W.P. DUPLEX OUTLET WITHIN 25 FEET OF ANY EXTERIOR HVAC UNIT.
4.6. ANY 15A OR 20A 125V RECEPTACLES IN COMMERCIAL GARAGES SHALL BE MOUNTED A MINIMUM OF 18" ABOVE FINISH FLOOR.
4.7. OUTLETS ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24".

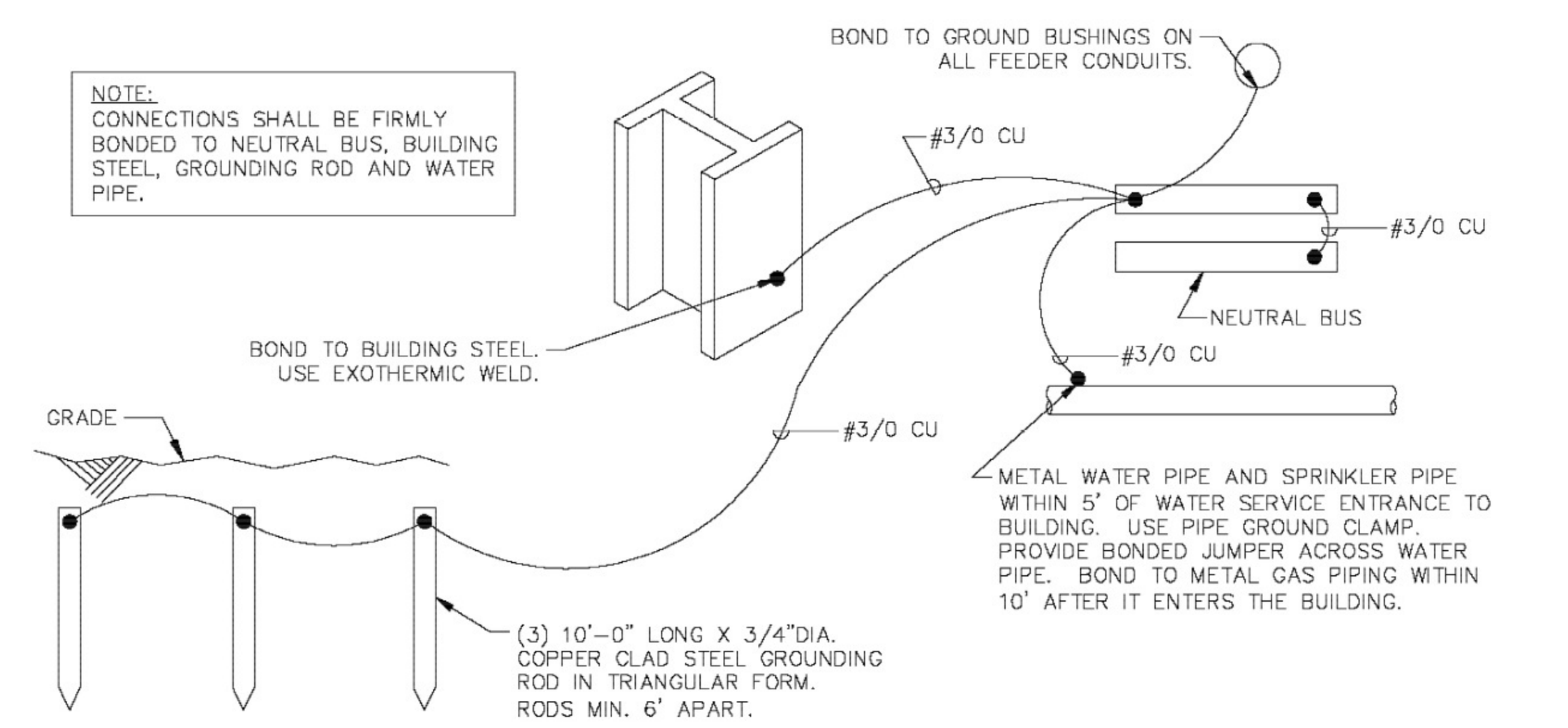
5. EQUIPMENT (RELATED ELECTRICAL WORK)
5.1. EQUIPMENT AS REFERRED TO IN THESE NOTES SHALL MEAN ANY HEATING, VENTILATING OR AIR CONDITIONING EQUIPMENT, PLUMBING EQUIPMENT, FOOD SERVICE EQUIPMENT, SHOP EQUIPMENT, MEDICAL EQUIPMENT, LAUNDRY EQUIPMENT, OFFICE EQUIPMENT, MODULAR FURNITURE SYSTEMS, SPECIALTY EQUIPMENT, TENANT OR OWNER FURNISHED EQUIPMENT, OR ANY OTHER EQUIPMENT, SPECIAL OR OTHERWISE THAT IS REFERENCED ON ANY CONTRACT DOCUMENTS FOR THIS PROJECT.
5.2. A COMPLETE SET OF CONTRACT DOCUMENTS SHALL BE OBTAINED AND REVIEWED BY THE ELECTRICAL CONTRACTOR FOR THE PURPOSE OF STUDYING THE ARCHITECTURAL, HVAC, PLUMBING, FOOD SERVICE, SPECIALTY SYSTEMS DRAWINGS, ETC. THIS SHALL INCLUDE ANY DRAWINGS PREPARED BY VENDORS, SUCH AS KITCHEN EQUIPMENT DRAWINGS, RADIOLOGY EQUIPMENT DRAW- INGS, OR MODULAR FURNITURE DRAWINGS, ETC. THE INTENT IS TO DISCOVER ANY WORK THAT IS TO BE DONE BY THE ELECTRICAL CONTRACTOR WHICH MAY NOT BE SHOWN ON THE ELECTRICAL DRAWINGS.
5.3. IF ANY EQUIPMENT REQUIRES ELECTRICAL POWER IT SHALL BE PROVIDED, INCLUDING ALL CIRCUITRY, OVER CURRENT DEVICES, GROUNDING, RECEPTACLES, HARD WIRING, ROUGH-IN, ETC. ALL SUCH WORK SHALL BE DONE BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFIED OTHERWISE IN THESE CONTRACT DOCUMENTS, AND WHETHER OR NOT IT IS INDICATED IN THE ELECTRICAL DOCUMENTS.
5.4. PRIOR TO BID, ANY CONFLICT BETWEEN THE ELECTRICAL DOCUMENTS AND ANY OTHER CONTRACT-RELATED DOCUMENTS SHALL BE REPORTED TO THE ELECTRICAL ENGINEER. CONFLICT SHALL BE RESOLVED PRIOR TO BID.
5.5. FOR EACH ITEM OF EQUIPMENT, VERIFY THE ELECTRICAL CHARACTERISTICS, INCLUDING LOAD, VOLTAGE, AND PHASE: LOAD BALANCING ON PHASES, AND GROUNDING REQUIREMENTS, ETC.
5.6. VERIFY ROUGH-IN LOCATION, AND FINAL CONNECTION REQUIREMENTS. PROVIDE THE PROPER RECEPTACLES TO MATCH THE CORD CAP FURNISHED WITH THE EQUIPMENT, OR PROVIDE THE APPROPRIATE HARD WIRING.
5.7. PROVIDE ANY INDICATED OR REQUIRED OVERCURRENT PROTECTION AND/OR DISCONNECT SWITCHES, FUSED FOR THE LOAD OR PER MANUFACTURERS RECOMMENDATIONS.
5.8. PROVIDE FOR CONNECTION TO ANY CONTROLLER FURNISHED WITH EQUIPMENT.
5.9. PROVIDE ANY CONTROLLERS, STARTERS, AND CONTROL WIRING NOT INDICATED TO BE PROVIDED BY OTHERS.
5.10. ANY DROP CORDS SERVING EQUIPMENT SHALL BE PROVIDED WITH KELLEMS STRESS RELIEF GRIPS AT THE JUNCTION BOX CONNECTOR(S).
5.11. KITCHEN EQUIPMENT SHUT DOWN: WHEN KITCHEN EQUIPMENT IS REQUIRED BY CODE TO BE SHUT DOWN BY A FIRE PROTECTION SYSTEM, SAID EQUIPMENT INCLUDING GAS SOLENOIDS FOR THIS EQUIPMENT, IGNITION CIRCUITS, POWER CIRCUITS, AND HOOD EXHAUST FANS AND RELATED MAKE-UP AIR UNIT(S) SHALL BE CONNECTED TO THE KITCHEN FIRE PROTECTION SYSTEM SHUTDOWN MECHANISM VIA SHUNT TRIP BREAKER(S).

6. HVAC AND PLUMBING SYSTEMS (RELATED ELECTRICAL WORK)
6.1. ANY CONTROL WIRING AND CONNECTIONS NOT PROVIDED BY THE HVAC CONTRACTOR SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFIED OTHERWISE.
6.2. WHERE ONE OR MORE DISCONNECT SWITCH IS REQUIRED FOR AN HVAC UNIT, THEY SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
6.3. SEE MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL DUCTWORK AND DIFFUSERS TO AVOID ANY CONFLICTS WITH LIGHTING FIXTURE LAYOUT. OVERLAY THE LIGHTING AND HVAC PLANS AND REVIEW FOR CONFLICT.
6.4. PROVIDE FOR CONNECTION AND CIRCUITRY OF ANY DUCT DETECTOR FURNISHED UNDER ANOTHER SECTION. REVIEW MECHANICAL PLANS.
6.5. PROVIDE ALL INTERLOCK WIRING FOR ANY HVAC EQUIPMENT REQUIRING INTERLOCKING.
6.6. WHERE A SIMPLEX OR DUPLEX RECEPTACLE IS SUPPLYING POWER TO A FURNACE, FURNISH AND INSTALL ONE (1) DUPLEX RECEPTACLE, 20A, ADJACENT TO FURNACE. CONNECT FURNACE VIA A 12/3 SJ CORD AND A 20A MALE CORD CAP.

7. TELEPHONE / DATA OR SPECIAL SYSTEMS / CONDUIT SYSTEMS
7.1. WHERE CEILING SPACE IS USED AS AN AIR RETURN PLENUM PROVIDE CONDUIT FROM EACH TELEPHONE, OR DATA OUTLET TO THE SUITE TERMINAL POINT DESIGNATED BY TENANT. ANY PLENUM WIRING NOT IN CONDUIT SHALL BE RATED FOR USE IN PLENUM.
7.2. SERVICE CONDUIT FOR ELECTRICAL OR OTHER SYSTEMS SHALL BE MARKED AT EACH END AS TO SOURCE AND DESTINATION. (I.E.: SERVICE STATION, FACP, SUITE #, PANEL DESIGNATION, ETC.)

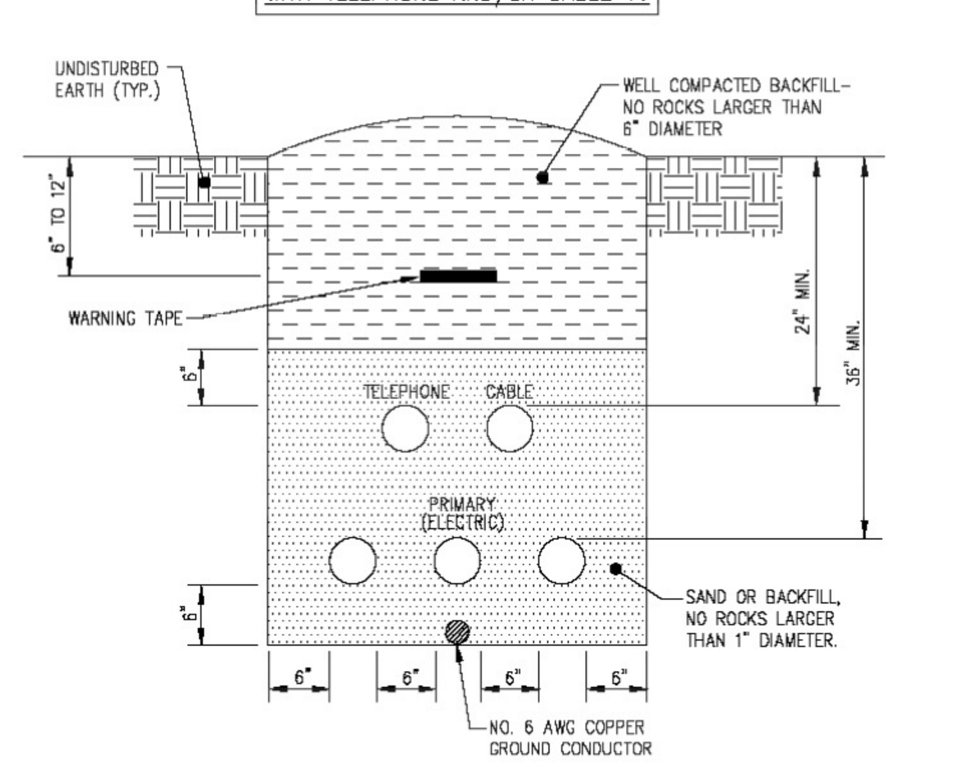
8. SITE NOTES:
8.1. REQUIREMENT FOR TRENCHING AND BACKFILL FOR SITE UTILITIES INCLUDING EXACT ROUTING AND POINT OF TERMINATION SHALL BE VERIFIED WITH THE POWER AND TELEPHONE COMPANIES. THEIR REQUIREMENTS SHALL BE DEEMED PART OF THIS CONTRACT. AVOID CONFLICT WITH EXISTING SITE UTILITIES.
8.2. ELECTRICAL CONTRACTOR SHALL INCLUDE IN THIS BID AN ESTIMATED SUM AS AN UNDERGROUND SERVICE ALLOWANCE TO BE PAID TO POWER COMPANY FOR EACH SERVICE.
8.3. THE EXACT LOCATION, ORIENTATION AND ACCESSIBILITY OF THE ELECTRICAL SERVICE ENTRANCE SHALL BE APPROVED BY THE POWER COMPANY. SERVICE ENTRANCE EQUIPMENT SHOP DRAWINGS SHALL BE APPROVED BY THE POWER COMPANY.
8.4. THE REQUIREMENTS FOR THE TELEPHONE BOARDS OR CABINETS, AND THEIR LOCATIONS, SERVICE RACEWAYS TO THESE SERVICE POINTS AND ALL CONDUIT REQUIREMENTS BETWEEN TELEPHONE OUTLETS, AND HOME RUN CONDUITS FROM THE OUTLETS TO TERMINAL POINTS SHALL BE VERIFIED WITH THE TELEPHONE COMPANY REPRESENTATIVE PRIOR TO ROUGH-IN. PROVIDE #6 COPPER BOND FROM THE TELEPHONE TERMINAL BOARD TO THE GROUND BUS IN THE SERVICE ENTRANCE SECTION.
8.5. MINIMUM POINT OF PRESENCE - CABLING IS PROVIDED BY THE TELEPHONE SERVICE COMPANY TO ONE POINT ONLY. THE MAIN TELEPHONE TERMINAL CABINET OR BOARD AT ONE BUILDING ONLY ON THE SITE. ADDITIONAL CABLING WILL BE NECESSARY FROM THE MAIN TELEPHONE CABINET OR BOARD TO THE OTHER TELEPHONE CABINETS OR BOARDS ON THE SITE. THIS CABLING IS NOT PART OF THIS CONTRACT AND SHALL BE PROVIDED BY THE OWNER TO FACILITATE TELEPHONE SERVICE TO ALL TENANTS ON THE SITE.
8.6. EXACT ORIENTATION OF ALL SITE LUMINARIES, FLOODLIGHTS, AND LANDSCAPE LIGHTING SHALL BE AS DIRECTED BY THE OWNERS. ALL SITE LIGHTING SHALL BE #10 COPPER UNLESS OTHERWISE NOTED, AND SHALL BE RUN IN PVC CONDUIT WITH A #10 COPPER GREEN BOND WIRE.

ACCEPTABLE FUSE EQUIVALENTS						
UL CLASS	VOLT	DESCRIPTION	BUSSMAN	RELIANCE	SHAWMUT	LITTLEFUSE
RK1	250	TIME DELAY	LPN-RK	LENRK	A2D-R	LLNRK
RK1 (A)	600	TIME DELAY	LPS-RK	LESRK	A6D-R	LLSRK
RK5	250	TIME DELAY	FRN-RK	ECNR	TR-R	FLNR
RKS (A)	600	TIME DELAY	FRS-R	SCSR	TRS-R	FLSR
L	600	TIME DELAY	KRP-C	LKU	A4BY	---
L (A)	600	FAST ACTING	KLU	LCL	---	KLLU
L (B)	600	FAST ACTING	KTU	LCU	---	---
K1	250	FAST ACTING	KWN-R	---	---	---
K1 **(A)**	600	FAST ACTING	KWS-R	---	---	
RK1 (B)	250	FAST ACTING	KTN-R	NCSR	A2K	---
RK1 (C)	600	FAST ACTING	KTS-R	SCLR	A6K	---
J	600	FAST ACTING	JKS	JLC	A4J	JLS
T	250	QUICK	JJN	---	A3T	JLLN
T **(A)**	600	QUICK	JJS	---	---	JLLS
NOTE: FUSES NOT LISTED ABOVE MUST BE APPROVED BY DESIGNER/ENGINEER.						



GROUNDING SYSTEM DETAIL
NOT TO SCALE

ONE OR MORE PRIMARY CIRCUITS WITH TELEPHONE AND/OR CABLE TV



TRENCH FOR JOINT ELECTRIC AND COMMUNICATION FACILITES
NOT TO SCALE

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

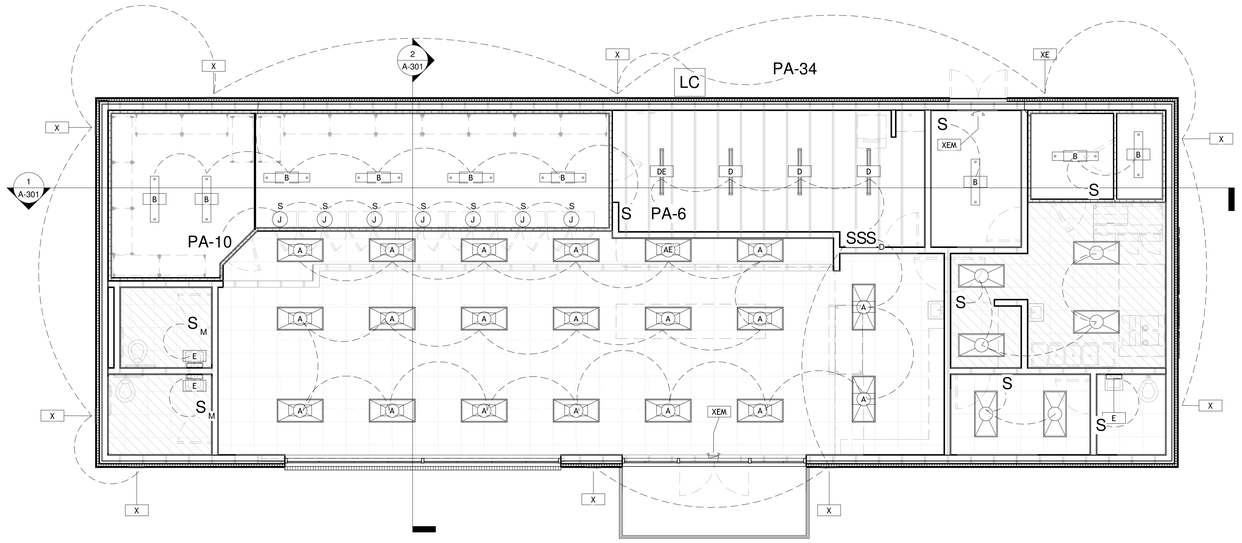
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

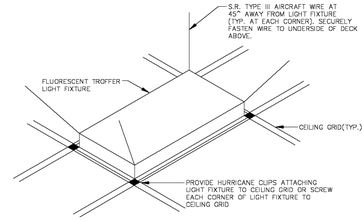
Revision	Rev Date

Specifications

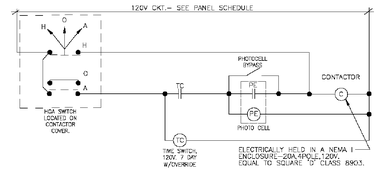
101 E



1 Electrical Lighting Plan
3/16" = 1'-0"



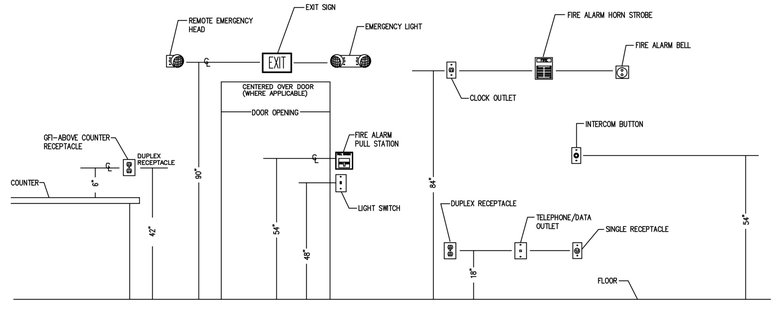
SEISMIC RESTRAINT FOR FLUORESCENT TROFFER LIGHT FIXTURE
NOT TO SCALE



LIGHTING CONTACTOR WIRING DIAGRAM
NOT TO SCALE

Lighting Fixture Schedule

Type Mark	Type	Description	Lumen Range	Lighting Color	Count	Mount	Size	Mounted Height	Model	Wattage	Volts	#
A	2x4 Troffer Lay in Light	Architectural LED Troffer, 90 CRI, Adjustable CCT	3140	3k	33	Lay In	24x48	<varies>	CREE CR 24 B 31L 9ACK UNV 10V1	80 W	120V 1P 2W	A
AE	2x4 Troffer Lay in Light with Emergency	Architectural LED Troffer, 90 CRI, Adjustable CCT	3140	3k	1	Lay In	24x48	@ Ceiling	CREE CR 24 B 31L 9ACK UNV 10V1 EB	80 W	120V 1P 2W	AE
B	Airtight Linear Light for Cold Storage	Internal Prismatic Lens, 15% DR High Impact Additive, Universal Voltage, 1 Dimming Driver	1k-2k	5k	9	Ceiling	48"	<varies>	COOPER 4VT2 LD4 6 DR UNV L840 CD1	64 W	120V 1P 2W	B
D	Linear Hanging Light for Storage	LED, CRI 80	3k	5k	4	Hanging	48"	9'	LITHONIA LL4 5000LM 80CRI 50K EPD MIN10 ZT MVOLT F1/240A MB	41 W	120V 1P 2W	D
DE	Linear Hanging Light for Storage with Emergency	LED, CRI 80	3k	5k	1	Hanging	48"	9'	LITHONIA LL4 5000LM 80CRI 50K EPD MIN10 ZT MVOLT IE10WCP F1/240A MB	41 W	120V 1P 2W	DE
E	Vanity Light	Wall Mount LED, Integral PR Sensor, DIMS to 10%, Nlight without Lumen Management	1k	3k	3	Wall	24"	<varies>	LIHTONIA WL2 18L LP830 NES7 N100 DIM10	18 W	120V 1P 2W	E
X	Decorative Wall Sconce	Decorative Wall Mounted Forward Throw Led. Nighttime Friendly.	Manf	3k	9	Wall	Manf. Standard	<varies>	Lithonia MRW LED P4 40K SR2 MVOL T	60 W	120V 1P 2W	X
XE	Decorative Wall Sconce E	Decorative Wall Mounted Forward Throw Led. Nighttime Friendly. With Emergency Backup	Manf	3k	1	Wall	Manf. Standard	7'	Lithonia MRW LED P4 40K SR2 MVOL T E20WC	60 W	120V 1P 2W	XE
XEM	Emergency Directional Lighting	Combination Exit Emergency Light with Automatic Battery Backup, Ceiling Or Wall Mount - Red Letters - Black	Manf	Red	2	Wall Over Door	Manf. Standard	<varies>	Astralite EEU MR R B		120V 1P 2W	XEM



MOUNTING HEIGHT DETAIL
NOT TO SCALE

SWITCH SCHEDULE

CALLOUT	SYMBOL	NOTE 1	NOTE 2	NOTE 3	QUANTITY
DIMMER	$D	LED DIMMER COMPATIBLE WITH LIGHTING	MOUNT CENTERLINE OF BOX AT 45" AFF UNLESS NOTED OTHERWISE.		6
Generic Switch	$	SINGLE-POLE, SINGLE THROW SWITCH.	MOUNT CENTERLINE OF BOX AT 45" AFF UNLESS NOTED OTHERWISE.		7
LC	$LC	MULTI POLE LIGHTING CONTACTOR	SUBSCRIPT INDICATES POLE NUMBER ON CONTACTOR		3
MOTION	$M	MOTION DETECTOR SWITCH, PASS & SEYMOUR #MSP200 OR EQUIVALENT.	MOUNT CENTERLINE OF BOX AT 45" AFF UNLESS NOTED OTHERWISE.		8

Dhunna Gas Station - HWY 80
Project No 20251202001 . Date 2/27/2026

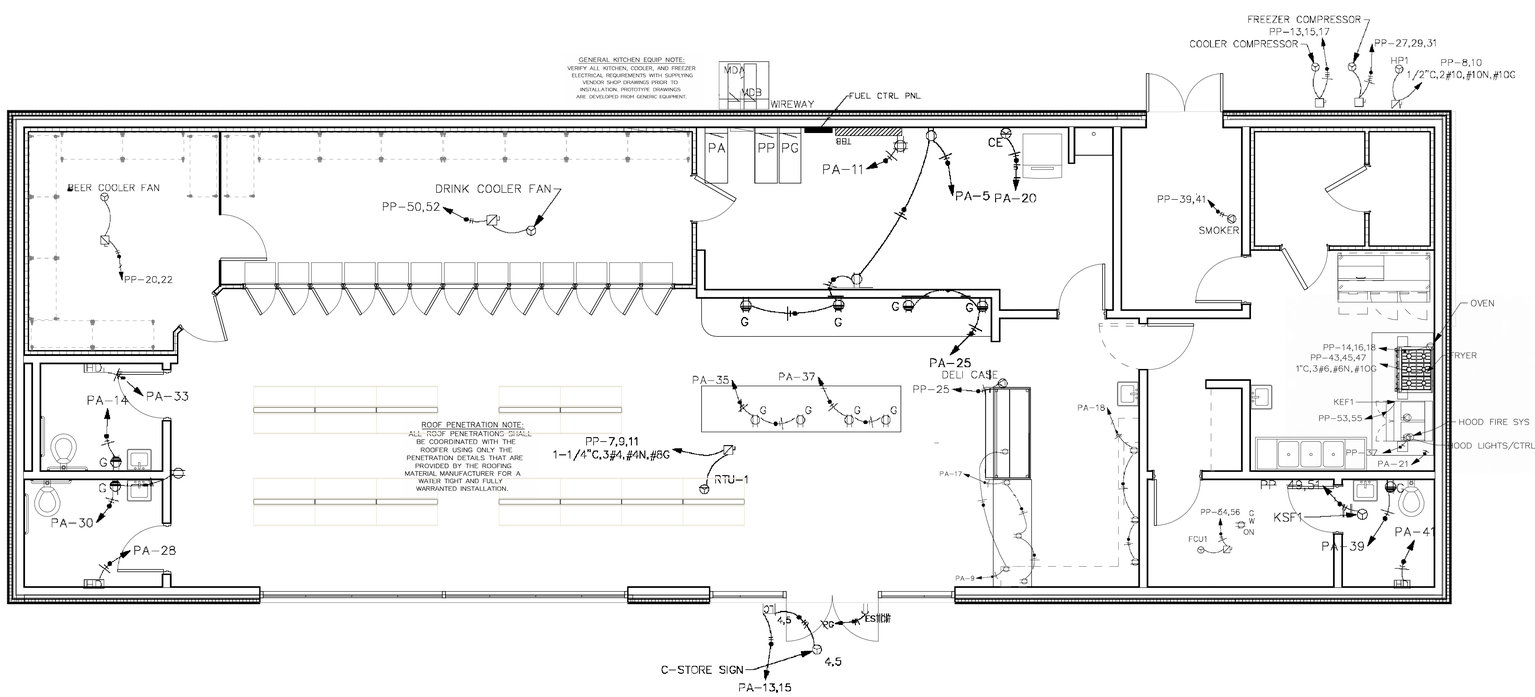
4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

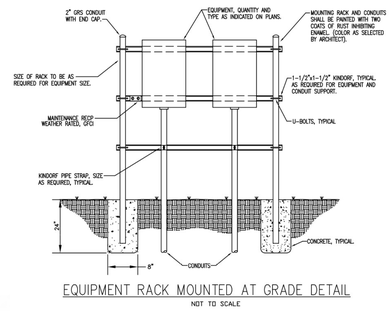
Revision	Rev Date

Lighting Plan

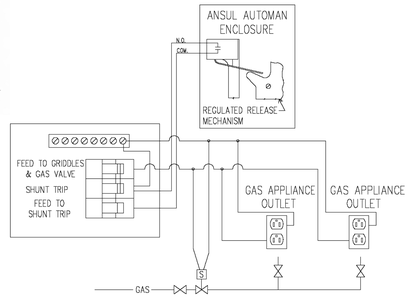
102 E



2 Floor Plan Power & Aux.
1/4" = 1'-0"



EQUIPMENT RACK MOUNTED AT GRADE DETAIL
NOT TO SCALE



FIRE SUPPRESSION FOR GAS APPLIANCES – KITCHEN HOOD WIRING DETAIL
NOT TO SCALE

Receptacle Schedule

Callout	Symbol	Nema	Volts	Details	Notes		
Counter Gfci		5-20r	120v 1p 2w	G, Gnd	Mounted 2" Above Counter with Backsplash, 6' Above Counter Without Backsplash, Mounted 45" Aff Where Not Counter Is Present Unless Noted Otherwise on Architect Details.	Hubbell Gftr15 (15a) Or Gftr20 (20a) W/Plate Or Equivalent	Gfci Duplex Receptacle, Commercial, Self-Testing, Tamper Resistant, Weather Resistant, Led, Heavy Duty, Ul and Csa Approved.
Gfci		5-15r	120v 1p 2w	G, Gnd	Mount At 18 11 Aff, Hubbell Gftr15 (15a) Or Gftr20 (20a) W/Plate or Equivalent	Gfci Duplex Receptacle, Commercial, Self-Testing	Tamper Resistant, Weather Resistant, Led, Heavy Duty, Ul and Csa Approved.
Hand			120v 1p 2w	Gnd	Excel Dryer Xl-Sb Xlerator Hand Dryer or As Specified by Architect	Mount At 45"Aff in Men's Room. Mount At 43" Aff in Women's Room.	Stainless Steel Heated Unit
Quad		5-15r	120v 1p 2w	Gnd	Two Recps Mount At 18" Aff, Hubbell Drs15xxwrtr (15a) Or Drs20xxwrtr (20a) W/Plate or Equivalent	Commercial Grade, Weather Resistant, Tamper Resistant, Back and Side Wired.	Heavy Duty, Ul and Csa Approved.
Standard		5-15r	120v 1p 2w	Gnd	Mount At 18" Aff, Hubbell Drs15xxwrtr (15a) Or Drs20xxwrtr (20a) W/Plate or Equivalent	Commercial Grade, Weather Resistant, Tamper Resistant, Back and Side Wired.	Heavy Duty, Ul and Csa Approved.
WP		5-15r	120v 1p 2w	W, G, Gnd	Mount 24" Aff in A Ul Approved Weatherproof Enclosure That Maintains Weatherproof Rating While a Plug Is Inserted.	Hubbell Gftr15 (15a) Or Gftr20 (20a) W/Plate or Equivalent	Gfci Duplex Receptacle, Commercial, Self-Testing, Tamper Resistant, Weather Resistant, Led, Heavy Duty, Ul and Csa Approved.

1. If A 5-15r Is the Only Receptacle on The Circuit Then Upgrade Receptacle to 5-20r
2. Receptacle Color to Be Specified by Architect.
3. Receptacle Color and Light Switch Colors Are to Match.

Telephone and Data Schedule

CALLOUT	SYMBOL	NOTE 1	NOTE 2	NOTE 3
TBB	TBB	4' x 4' x 3/4" PLYWOOD PAINTED TWO COATS BLUE ENAMEL.	PROVIDE ONE #6(G) - 1/2" CONDUIT CONNECTED TO THE BUILDING SERVICE GROUND.	ROUTE ONE 3" CONDUIT FROM BACKBOARD TO PROPERTY LINE AS DIRECTED BY LOCAL TELEPHONE VENDOR FOR TELEPHONE SERVICE ENTRANCE. INSTALL PULL STRING/WIRE IN CONDUIT.

Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209
New Construction

Construction Documents

Revision	Rev Date

Electrical Power & Aux.

E
103

WIREWAY

ROOM
MOUNTING SURFACE
FED FROM UTIL TRANS
NOTE

VOLTS 208Y/120V 3P 4W
AIC 35,000
LUGS STANDARD

OCT #	BREAKER TRIP/POLES	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	FEEDER RACEWAY AND CONDUCTORS
1	225/3	BREAKER MDA	1.94	2.23	3.5	2-1/2"C.,3#4/0,#4/0N.,#4G
2	600/3	BREAKER MDB	45.1	59.3	38.9	(2)3"C.,3#300kcmil,#300kcmil N.,#1G
3	20/3	SPARE	0	0	0	
4	20/3	SPARE	0	0	0	
5	20/3	SPARE	0	0	0	
		TOTAL CONNECTED KVA BY PHASE	47	61.5	42.4	

	CONN KVA	CALC KVA	
LIGHTING	13.4	16.8	(125%)
LARGEST MOTOR	21.6	5.4	(25%)
MOTORS	66.6	66.6	(100%)
RECEPTACLES	17.3	13.7	(50%x10)

	CONN KVA	CALC KVA	
KITCHEN EQUIPMENT	24.9	16.2	(65%)
CONTINUOUS	1	1.25	(125%)
NONCONTINUOUS	5.9	5.9	(100%)
HEATING	21.8	21.8	(100%)
COOLING	21.8	0	(0%)
TOTAL LOAD		148	
BALANCED 3-PHASE LOAD		410 A	

PG

ROOM
MOUNTING SURFACE
FED FROM PP
NOTE

VOLTS 208/120V 2P 3W
BUS AMPS 150
NEUTRAL 100%
AIC 30,000
MAIN BKR 150
LUGS STANDARD

OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B
1	20/1	DISP 1	0.8		2	20/1	DISP 2	0.8	
3	20/1	SWITCHED NEUTRAL		0	4	20/1	SWITCHED NEUTRAL		0
5	20/1	DISP 3	0.8		6	20/1	DISP 4	0.8	
7	20/1	SWITCHED NEUTRAL		0	8	20/1	SWITCHED NEUTRAL		0
9	20/1	DISP 7	0.8		10	20/1	DISP 8	0.8	
11	20/1	SWITCHED NEUTRAL		0	12	20/1	SWITCHED NEUTRAL		0
13	20/1	DISP 9	0.8		14	20/1	DISP 8	0.8	
15	20/1	SWITCHED NEUTRAL		0	16	20/1	SWITCHED NEUTRAL		0
17	20/1	DISP 5	0.8		18	20/1	DISP 10	0.8	
19	20/1	SWITCHED NEUTRAL		0	20	20/1	SPARE		0
21	20/1	SUBMERGED PUMP 1	1		22	20/1	TANK MONIT. CONSOLE	1	
23	20/1	SWITCHED NEUTRAL		0	24	20/1	SWITCHED NEUTRAL		0
25	20/1	SUBMERGED PUMP 2	1		26	20/1	TANK MONIT. CONSOLE	1	
27	20/1	SWITCHED NEUTRAL		0	28	20/1	SWITCHED NEUTRAL		0
29	20/1	SUBMERGED PUMP 3	1		30	20/1	TANK MONIT. CONSOLE	1	
31	20/1	SWITCHED NEUTRAL		0	32	20/1	SWITCHED NEUTRAL		0
33	20/1	DISP 1,3,5,7,9 LIGHTS	0.5		34	20/1	SPARE	0	
35	20/1	SWITCHED NEUTRAL		0	36	20/1	SPARE		0
37	20/1	DISP 2,4,6,8,10 LIGHTS	0.5		38	20/1	SPARE	0	
39	20/1	SWITCHED NEUTRAL		0	40	20/1	SPARE		0
41	20/1	SPARE	0		42	20/1	SPARE	0	
		TOTAL CONNECTED KVA BY PHASE	15	0					
		TOTAL CONNECTED AMPS BY PHASE	125	0					

	CONN KVA	CALC KVA	
LIGHTING	1	1.25	(125%)
LARGEST MOTOR	1	0.25	(25%)

	CONN KVA	CALC KVA	
MOTORS	11	11	(100%)
NONCONTINUOUS	3	3	(100%)
TOTAL LOAD		15.5	
BALANCED LOAD		74.5 A	

PP

ROOM
MOUNTING SURFACE
FED FROM MDB
NOTE

VOLTS 208Y/120V 3P 4W
BUS AMPS 600
NEUTRAL 100%
AIC 42,000
MAIN BKR MLO
LUGS STANDARD

OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	PNL PG E-STOP CKT	0.2			2	225/3	PANEL PA	9.02	10.9	
3	150/2	PANEL PG		15		4	|				8.74
5	|				0	6	|				
7	80/3	RTU-1	7.21			8	40/2	HP1	2.29	2.29	
9	|			7.21		10	|				0
11	|				7.21	12	20/1	SPARE			
13	20/3	COOLER COMPRESSOR	1.33			14	20/3	OVEN	1.33	1.33	
15	|			1.33		16	|				1.33
17	|				1.33	18	|				
19	20/1	RECEPTACLE	0.72			20	20/2	BEER COOLER FAN	1.1	1.1	
21	20/2	DRINK COOLER FAN		1.1		22	|				1.1
23	|				1.1	24	30/3	BEER COOLER COOLING UNIT	2.63	2.63	
25	20/1	DELI CASE	1.8			26	|				2.63
27	20/3	FREEZER COMPRESSOR		1.33		28	|		2.63	2.63	
29	|				1.33	30	30/3	COKE COOLER CU			2.63
31	|		1.33			32	|		2.63	2.63	
33	20/1	COOLER		0.5		34	20/1	RECEPTACLE			
35	20/1	FREEZE			0.5	36	30/3	COKE COOLER COOLING UNIT			2.63
37	20/1	HOOD FIRE SYS	1			38	|		2.63	2.63	
39	20/2	SMOKER		0.5		40	|				1.1
41	|				0.5	42	20/2	DRINK COOLER FAN	1.1	1.1	
43	50/3	FRYER	5.77			44	|				1.1
45	|			5.77		46	20/2	DRINK COOLER FAN	1.1	1.1	
47	|				5.77	48	|				1.1
49	20/2	KSF1	0.828			50	20/2	DRINK COOLER FAN	1.1	1.1	
51	|			0.828		52	|				1.1
53	20/2	KEF1			0.96	54	20/2	FCU1	0.08	0.08	
55	|		0.96			56	|				0.08
		TOTAL CONNECTED KVA BY PHASE	45.1	39.3	38.9						
		TOTAL CONNECTED AMPS BY PHASE	376	484	324						

	CONN. KVA	CALC. KVA	
LIGHTING	11.9	14.9	(125%)
LARGEST MOTOR	21.6	5.4	(125%)
OTHER MOTORS	66.6	66.6	(100%)
RECEPTACLES	14.1	12	(50%x10)

	CONN. KVA	CALC. KVA	
CONTINUOUS	1	1.25	(125%)
HEATING	21.8	21.8	(100%)
NONCONTINUOUS	3	3	(100%)
KITCHEN EQUIP	24.9	16.2	(65%)
NONCON/DIVERSE	0	0	(N/A)
TOTAL KVA	143	141	

BALANCED THREE PHASE AMPS 392

PA

ROOM
MOUNTING SURFACE
FED FROM PP
NOTE

VOLTS 208Y/120V 3P 4W
BUS AMPS 225
NEUTRAL 100%
AIC 35,000
MAIN BKR MLO
LUGS STANDARD

OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	LIGHTING	0.526			2	20/1	ELIGHT, LIGHTING	0.837		
3	20/1	SPARE		0		4	20/1	ELIGHT, LIGHTING		1.32	
5	20/1	RECEPTACLE			0.72	6	20/1	LIGHTING			1.55
7	20/1	SPARE	0			8	20/1	SPARE	0		
9	20/1	RECEPTACLE		0.36		10	20/1	RECEPTACLE		0.5	
11	20/1	TELEPHONE			0.8	12	20/1	LIGHTING			0.75
13	20/2	C-STORE SIGN	0.6			14	20/1	RECEPTACLE	0.18		
15	|			0.6		16	20/1	RECEPTACLE		1.26	
17	20/1	RECEPTACLE			0.72	18	20/1	RECEPTACLE			0.72
19	20/1	RECEPTACLE	1.08			20	20/1	ICE	1.8		
21	20/1	HOOD LIGHTS/CTRL		1.2		22	20/1	RECEPTACLE		0.72	
23	20/1	SPARE			0	24	20/1	RECEPTACLE			0.18
25	20/1	RECEPTACLE	0.36			26	20/1	AIR PUMP	1.6		
27	20/1	RECEPTACLE		0.18		28	20/1	RECEPTACLE		1.45	
29	20/1	RECEPTACLE			0.18	30	20/1	RECEPTACLE			0.36
31	20/1	RECEPTACLE	1.08			32	20/1	SPARE	0		
33	20/1	RECEPTACLE		1.45		34	20/1	LIGHTING		1.1	
35	20/1	RECEPTACLE			0.36	36	20/1	C-STORE SIGN	0.6		0.4
37	20/1	RECEPTACLE	0.36			38	20/1	LIGHTING		0.6	
39	20/1	RECEPTACLE		0.18		40	20/1	LIGHTING	0.6		
41	20/1	RECEPTACLE			1.45	42	20/1	LIGHTING			0.554
		TOTAL CONNECTED KVA BY PHASE	9.02	10.9	8.74						
		TOTAL CONNECTED AMPS BY PHASE	75.2	91	72.8						

	CONN. KVA	CALC. KVA	
LIGHTING	9.93	12.4	(125%)
LARGEST MOTOR	1.8	2.25	(125%)
OTHER MOTORS	1.8	1.8	(100%)
RECEPTACLES	13.4	11.7	(50%x10)

	CONN. KVA	CALC. KVA	
CONTINUOUS	0.8	1	(125%)
HEATING	0	0	(100%)
NONCONTINUOUS	0	0	(100%)
KITCHEN EQUIP	1.2	1.2	(100%)
NONCON/DIVERSE	0	0	(N/A)
TOTAL KVA	28.7	30.1	

BALANCED THREE PHASE AMPS 83.6

LA

ROOM
MOUNTING SURFACE
FED FROM MDA
NOTE

VOLTS 208Y/120V 3P 4W
BUS AMPS 225
NEUTRAL 100%
AIC 35,000
MAIN BKR MLO
LUGS STANDARD

OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	OCT #	OCT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	LIGHTING	0.313			2	20/1	SPARE	0		
3	20/1	EWH		1.45		4	20/1	SPARE		0	
5	20/1	RECEPTACLE			1.45	6	20/1	SPARE			0
7	20/1	RECEPTACLE	1.45			8	20/1	SPARE	0		
9	20/1	RECEPTACLE		0.18		10	20/1	SPARE		0	
11	20/1	EWH			1.45	12	20/1	SPARE			0
13	20/1	RECEPTACLE	0.18			14	20/1	SPARE	0		
15	20/2	OH SIGN		0.6		16	20/1	SPARE		0	
17	|				0.6	18	20/1	SPARE			0
19	20/1	SPARE	0			20	20/1	SPARE	0		
21	20/1	SPARE		0		22	20/1	SPARE		0	
23	20/1	SPARE			0	24	20/1	SPARE			0
25	20/1	SPARE	0			26	20/1	SPARE	0		
27	20/1	SPARE		0		28	20/1	SPARE		0	
29	20/1	SPARE			0	30	20/1	SPARE			0
31	20/1	SPARE	0			32	20/1	SPARE	0		
33	20/1	SPARE		0		34	20/1	SPARE		0	
35	20/1	SPARE			0	36	20/1	SPARE			0
37	20/1	SPARE	0			38	20/1	SPARE	0		
39	20/1	SPARE		0		40	20/1	SPARE		0	
41	20/1	SPARE			0	42	20/1	SPARE			0
		TOTAL CONNECTED KVA BY PHASE	1.94	2.23	3.5						
		TOTAL CONNECTED AMPS BY PHASE	16.2	18.6	29.3						

	CONN. KVA	CALC. KVA	
LIGHTING	1.51	1.89	(125%)
LARGEST MOTOR	0	0	(125%)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	3.26	3.26	(50%x10)

	CONN. KVA	CALC. KVA	
CONTINUOUS	0	0	(125%)
HEATING	0	0	(100%)
NONCONTINUOUS	2.9	2.9	(100%)
KITCHEN EQUIP	0	0	(N/A)
NONCON/DIVERSE	0	0	(N/A)
TOTAL KVA	7.27	8.05	

BALANCED THREE PHASE AMPS 22.3

FAULT CURRENT SCHEDULE

DEVICE	FAULT	AIC RATING	L-N VOLTS	UTILITY FAULT	UTILITY X	UTILITY R	FED FROM DEVICE	FED FROM FAULT	FED FROM X	FED FROM R	FEEDER SIZE	FEEDER X / 1000'	FEEDER R / 1000'	FEEDER LENGTH	TRANSFORMER X	TRANSFORMER R	TRANSFORMER KVA	TRANSFORMER Z%	TRANSFORMER X/R RATIO	TRANSFORMER FAULT @ PRIMARY	TOTAL MOTOR FAULT	DIRECTLY CONNECTED MOTOR LOAD KVA	DIRECTLY CONNECTED MOTOR LOAD FAULT	DIRECTLY CONNECTED MOTOR LOAD X	DIRECTLY CONNECTED MOTOR LOAD R
UTIL TRANS	42,721	65,000	120V	41,667	0.002824	0.0005648											300	2	5	UTILITY	0.002824	0.0005648	1,054				
WIREWAY	30,417	35,000	120V	29,352	0.003878	0.001294	UTIL TRANS	41,667	0.002824	0.0005648	(2)#500kcmil	0.0195	0.0135	54'	0.0011	0.0007							1,065				
MDA	26,087	42,000	120V	25,300	0.004319	0.001961	WIREWAY	29,352	0.003878	0.001294	#4/0	0.041	0.062	11'	0.0004	0.0007							787				
LA	14,215	35,000	120V	13,988	0.006628	0.005449	MDA	25,300	0.004319	0.001961	#4/0	0.041	0.062	56'	0.0023	0.0035							227				
MDB	28,281	42,000	120V	27,213	0.004125	0.001559	WIREWAY	29,352	0.003878	0.001294	(2)#300kcmil	0.0205	0.022	12'	0.0002	0.0003							1,068				
PP	26,359	42,000	120V	25,288	0.004378	0.001831	MDB	27,213	0.004125	0.001559	(2)#300kcmil	0.0205	0.022	12'	0.0003	0.0003							1,071	74	822	0.1416	0.03541
PA	22,315	35,000	120V	21,533	0.00491	0.002636	PP	25,288	0.004378	0.001831	#4/0	0.041	0.062	13'	0.0005	0.0008							762	3.4	38	3.084	0.731
PG	22,402	30,000	120V	21,568	0.004858	0.002712	PP	25,288	0.004378	0.001831	#3/0	0.042	0.077	11'	0.0005	0.0009							834	11	212	0.5503	0.1376

1. Utility transformer shall be mounted a minimum of 20' away from any main disconnect for A/C ratings to be valid.
2. Utility transformer primary shall be 13.8kV or less primary for A/C ratings to be valid.
3. Please contact engineer for A/C revisions if above changes.

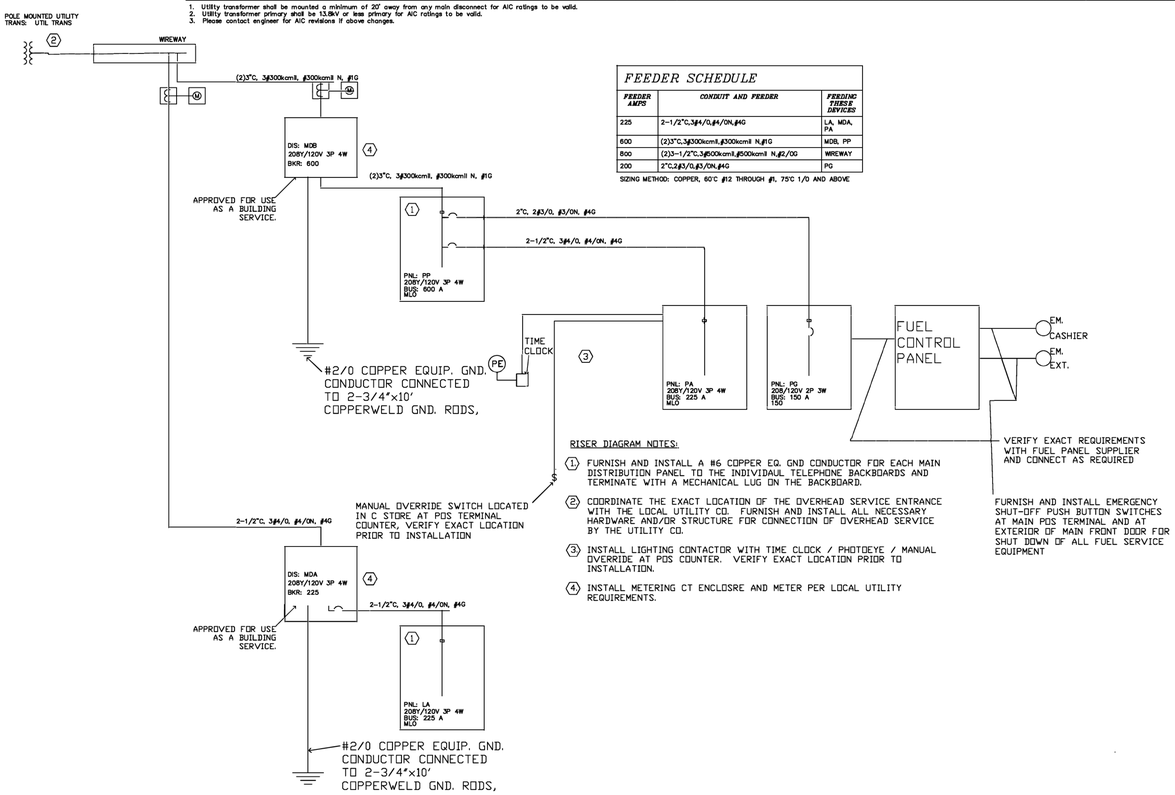
VOLTAGE DROP SCHEDULE

DEVICE	FEEDER VOLTAGE DROP	FEEDER WIRE SIZE	FEEDER LENGTH	BRANCH CIRCUIT MAX VOLTAGE DROP	BRANCH CIRCUIT WIRE SIZE	TOTAL VOLTAGE DROP
UTIL TRANS	0%	#12	–	–	–	0%
WIREWAY	0.4%	(2)#500kcmil	54'	–	–	0.4%
MDA	0.42%	#4/0	11'	–	–	0.42%
LA	0.49%	#4/0	56'	1.13% (CKT 3)	#12	1.62%
MDB	0.52%	(2)#300kcmil	12'	–	–	0.52%
PP	0.54%	(2)#300kcmil	12'	1.99% (CKT 25)	#12	2.52%
PA	0.7%	#4/0	13'	6.02% (CKT 28) PA-28: 6.02%	#10 #10	6.72%
PG	0.71%	#3/0	11'	3.12% (CKT 28)	#10	3.84%

FEEDER SCHEDULE

FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
225	2-1/2"C.,3#4/0,#4/0N.,#4G	LA, MDA, PA
600	(2)3"C.,3#300kcmil,#300kcmil N.,#1G	MDB, PP
800	(2)3-1/2"C.,3#500kcmil,#500kcmil N.,#2/0G	WIREWAY
200	2"C.,2#3/0,#3/0N.,#4G	PG

SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C 1/0 AND ABOVE



Dhunna Gas Station - HWY 80

Project No 20251202001 . Date 2/27/2026

4020 US-80, Jackson, MS 39209

New Construction

Construction Documents

Revision	Rev Date

Electrical Schedules

104

E