ARCH E1

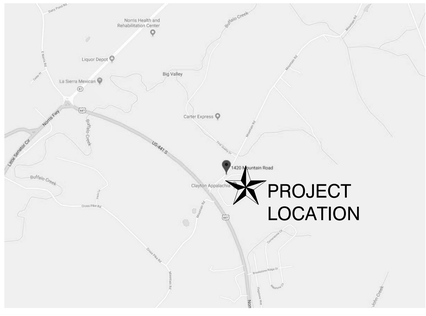
CLAYTON ADDISON MANUFACTURING FACILITY (943)

18025 COUNTY ROAD 41
ADDISON, AL 35540

ABBREVIATIONS:

AFF	- ABOVE FINISH FLOOR	MTL	- METAL
ALT	- ALTERNATE	MG	- MANUFACTURING
ALUM	- ALUMINUM	MFR	- MANUFACTURER
ARCH	- ARCHITECTURAL	MIN	- MINIMUM
ACT	- ACOUSTICAL TILE CEILING	MISC	- MISCELLANEOUS
ASPH	- ASPHALT	NIC	- NOT IN CONTRACT
BF	- BOTTOM FACE	NTS	- NOT TO SCALE
BSMT	- BASEMENT	NO., #	- NUMBER
BM	- BENCH MARK	OC	- ON CENTER
BLDG	- BUILDING	OD	- OUTSIDE DIAMETER
BLK	- BLOCK	P	- PLATE
BRG	- BEARING	PLAS	- PLASTIC
CB	- CATCH BASIN	P-LAM	- PLASTIC LAMINATE
CJ	- CONTROL JOINT	PLYWD	- PLYWOOD
CHB	- CHALK BOARD	PTD	- PAINTED
CLG	- CEILING	RAD;R	- RADIUS
CLOS, CL	- CLOSET	RD	- ROOF DRAIN
CLR	- CLEAR	REINF	- REINFORCING
COL	- COLUMN	REQ'D	- REQUIRED
COMP	- COMPOSITION	RS	- RISER
CONC	- CONCRETE	RM	- ROOM
CONST	- CONSTRUCTION	RO	- ROUGH OPENING
CMU	- CONCRETE MASONRY UNIT	SCHED	- SCHEDULE
CT	- CERAMIC TILE	SCWD	- SOLID CORE WOOD
DTL	- DETAIL	SECT	- SECTION
D, DIA	- DIAMETER	SHT	- SHEET
DN	- DOWN	SIM	- SIMILAR
DWG	- DRAWING	SPECS	- SPECIFICATIONS
DF	- DRINK FOUNTAIN	SQFT ; SF	- SQUARE FEET
DS	- DOWNSPOUT	STD	- STANDARD
EA	- EACH	STL	- STEEL
EF	- EACH FACE	STOR	- STORAGE
ELEC	- ELECTRIC	SD	- STORM DRAIN
EWC	- ELECTRIC WATER COOLER	SUSP	- SUSPENDED
ELEV	- ELEVATION	SQ	- SQUARE
EXIST	- EXISTING	TB	- TACK BOARD
EXT	- EXTERIOR	THOLD	- THRESHOLD
EJ	- EXPANSION JOINT	TLT	- TOILET
FE	- FIRE EXTINGUISHER	TD, TDS	- THREAD (S)
FL	- FLOOR	TF	- TOP FACE
FD	- FLOOR DRAIN	TYP	- TYPICAL
FT	- FOOT	U	- URINAL
FTNG	- FOOTING	VIF	- VERIFY IN FIELD
GALV	- GALVANIZED IRON	VS	- VENT STACK
GA	- GAUGE	VOL	- VOLUME
GYP	- GYPSUM	VT	- VINYL TILE
HB	- HOSE BIB	VERT	- VERTICAL
HCWD	- HOLLOW CORE WOOD	WSCT	- WAINSCOT
HDW	- HARDWARE	WC	- WATER CLOSET
HGT	- HEIGHT	WH	- WATER HEATER
HM	- HOLLOW METAL	WPFG	- WATERPROOFING
ID	- INSIDE DIAMETER	WF	- WIDE FLANGE
IN	- INCH	WDW	- WINDOW
INV	- INVERT	WD	- WOOD
JAN	- JANITOR	W/	- WITH
JST	- JOIST	WWF	- WELDED WIRE FABRIC
LAV	- LAVATORY	WWM	- WELDED WIRE MESH
lb	- POUND	∠	- ANGLE
MH	- MANHOLE	@	- AT
MAX	- MAXIMUM	℄	- CHANNEL
MECH	- MECHANICAL	ø	- DIAMETER

VICINITY MAP:



MATERIALS LEGEND:

CONCRETE BLOCK	CONCRETE IN SECTION	RIGID INSULATION, EIFS AS NOTED
BRICK	SOIL IN SECTION	PLYWOOD
METAL IN SECTION	CRUSHED STONE	FINISH WOOD
GYP. BOARD, PLASTER, OR CONCRETE IN PLAN AS NOTED	BATT INSULATION	WOOD FRAMING

PROJECT INFORMATION:

PROJECT DESCRIPTION
RENOVATIONS AND ADDITIONS TO THE CLAYTON ADDISON MANUFACTURING FACILITY (943)

JURISDICTION
STATE FIRE MARSHAL'S OFFICE
201 MONROE ST. SUITE 1790
MONTGOMERY, AL 36130-3352
SCOTT PILGREEN
PHONE NUMBER: (334) 241-4166

DESIGN CODES
2015 INTERNATIONAL BUILDING CODE
2015 NATIONAL ELECTRICAL CODE
2015 INTERNATIONAL FIRE CODE
2015 INTERNATIONAL MECHANICAL CODE
2015 INTERNATIONAL FUEL CODE
2015 INTERNATIONAL PLUMBING CODE
2015 INTERNATIONAL ENERGY CONSERVATION CODE
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

TYPE OF CONSTRUCTION: TYPE IIB, SPRINKLERED
OCCUPANCY: F-1, MANUFACTURING
NUMBER OF STORIES: 1 STORY
BUILDING AREA ALLOWABLE: UNLIMITED S.F. ACTUAL: S.F. NEW, S.F. EXISTING S.F. TOTAL
OCCUPANT LOAD / FLOOR: 737 OCC.
REQUIRED EXIT WIDTH / FLOOR: 737 OCC. * .2 = 147.4"

FIRE PROTECTION HOURLY RATING FOR ALL STRUCTURAL COMPONENTS AND SEPARATION OF HAZARDS COMPONENTS REQUIRED BY THE APPLICABLE BUILDING CODE

0 COLUMNS	0 BEAMS	0 WALLS
0 FLOOR/CEILING	0 ROOF/CEILING	0 ROOF COVERING
0 CORRIDORS	N/A SHAFT ENCLOSURES	N/A STAIR ENCLOSURE

N/A TENANT SEPARATIONS
N/A OCCUPANCY SEPARATIONS

SPRINKLER SYSTEM TYPE WET
STANDPIPE SYSTEM N/A
FIRE/ SMOKE ALARM SYSTEM YES

PROJECT DIRECTORY:

OWNER:
CLAYTON HOMES
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3916 FOUNTAIN VALLEY ROAD
KNOXVILLE, TN 37916
865-922-9075
BRAD.JARRETT@CLAYTONHOMES.COM

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SURVEYING:
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LIST OF DRAWINGS:

GENERAL
G000 COVER SHEET

CIVIL AND SITE ENGINEERING
C001 CIVIL LEGENDS & NOTES
C100 PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN
C200 SITE DEMOLITION PLAN
C300 OVERALL SITE LAYOUT PLAN
C301 SITE LAYOUT PLAN
C400 SITE GRADING PLAN & DRAINAGE PLAN
C600 SITE UTILITY PLAN
C800 CIVIL DETAILS
C801 CIVIL DETAILS
L100 LANDSCAPE PLAN

ARCHITECTURAL
A000 GENERAL NOTES AND ACCESSIBILITY DETAILS
A001 LIFE SAFETY PLAN
A002 DEMOLITION PLAN
A003 INTERIOR WALL TYPES
A101 FIRST FLOOR PLAN
A201 DOOR SCHEDULE, DOOR/FRAME ELEVATIONS & DETAILS
A202 DOOR & WINDOW DETAILS
A203 WINDOW ELEVATIONS AND DETAILS
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A502 WALL SECTIONS
A503 WALL SECTIONS
A601 ENLARGED PLANS AND DETAILS
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A701 REFLECTED CEILING PLAN AND DETAILS
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INTERIOR DESIGN
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FP101 FLOOR PLAN - FIRE PROTECTION
FP201 FIRE PROTECTION DETAILS

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MECHANICAL ENGINEERING
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M102 ROOF PLAN - HVAC
M201 HVAC SCHEDULES
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M302 RANGE HOOD DETAILS
M303 RANGE HOOD DETAILS
P001 LEGEND, SPECIFICATIONS AND NOTES
P100 DEMOLITION FLOOR PLAN - PLUMBING
P101 FLOOR PLANS - SANITARY
P102 FLOOR PLANS - WATER
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ELECTRICAL ENGINEERING
E001 ELECTRICAL LEGENDS AND NOTES
E101 ELECTRICAL FLOOR PLANS - POWER
E201 ELECTRICAL FLOOR PLANS - LIGHTING
E301 ELECTRICAL FLOOR PLANS - COMMUNICATIONS AND FIRE ALARM
E401 RISER DIAGRAM
E501 ELECTRICAL DETAILS
Grand total: 63

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03/04/19

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SEAL

STATE OF ALABAMA
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09/04/2019
REGISTERED ARCHITECT

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PROJECT INFORMATION

PROJECT:
CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:
18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE
- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION
SHEET ISSUED: 08/16/19
DESIGNED BY: MES
DRAWN BY: ARV
REVIEWED BY: EEH
SHEET TITLE:
COVER SHEET

SHEET NO.:
G000

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GENERAL NOTES

1. COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY A.G.C. OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR, 29 CFR 1926 OSHA.
2. THE APPROPRIATE TRAFFIC CONTROL SIGNS AS DEFINED BY THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, F.H.W.A., 2003", SHALL BE INSTALLED AT THE INCEPTION OF CONSTRUCTION AND SHALL BE PROPERLY MAINTAINED AND/OR OPERATED DURING THE TIME SUCH SPECIAL CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED AND SHALL BE REMOVED IMMEDIATELY AFTER NEED.
3. NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC.
4. VERIFY THE LOCATIONS OF ALL PROPOSED ITEMS PRIOR TO COMMENCING CONSTRUCTION. NOTIFY A/E IMMEDIATELY OF ANY DISCREPANCIES BEFORE STARTING WORK. COMMENCEMENT OF CONSTRUCTION AFTER SUCH DISCOVERY SHALL BE AT THE CONTRACTOR'S RISK.
5. ANY AREA THAT IS DISTURBED OUTSIDE THE LIMITS OF CONSTRUCTION DURING THE LIFE OF THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.

DEMOLITION NOTES

1. DO ALL DEMOLITION WORK REQUIRED TO REMOVE EXISTING MASONRY WALLS, PAVING, FOUNDATIONS, CONCRETE SLABS, EXISTING UNDERGROUND PIPING, CONDUIT, BUILDING FINISHES, DOORS, WINDOWS AS SHOWN ON THE DRAWINGS AND ANY OTHER NECESSARY ITEMS TO INSTALL THE PROPOSED WORK.
2. CONTRACTORS SUBMITTING PROPOSALS SHALL DETERMINE THE QUANTITIES OF DEMOLITION WORK REQUIRED BY FIELD INVESTIGATION OF THE BUILDING AND SITE.
3. SUBMIT A DEMOLITION SCHEDULE TO THE PROJECT MANAGER PRIOR TO EXECUTION OF THE WORK. INDICATE PROPOSED METHODS AND SEQUENCE OF OPERATIONS. INCLUDE PROPOSAL FOR CONTROL OF DUST AND NOISE, AND COORDINATION FOR SHUT-OFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES.
4. MAINTAIN TEMPORARY BARRICADES FOR PROTECTION OF JOB PERSONNEL AND THE PUBLIC. REMOVE BARRICADES WHEN NO LONGER REQUIRED.
5. CONDUCT OPERATIONS IN SUCH A MANNER AS TO MINIMIZE INTERFERENCE WITH USE OF PUBLIC WAYS AND ADJACENT USED FACILITIES. DO NOT CLOSE, BLOCK OR OTHERWISE OBSTRUCT USE OF PUBLIC WAYS OR FACILITIES WITHOUT WRITTEN CONSENT OF AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATIVE ROUTES TO CLOSED OR OBSTRUCTED FACILITIES AS REQUIRED BY LOCAL REGULATIONS.
6. EXISTING UTILITIES INDICATED TO REMAIN SHALL BE KEPT IN SERVICE AND PROTECTED FROM DAMAGE DURING DEMOLITION OPERATIONS.
7. DO NOT INTERRUPT EXISTING UTILITIES USED OR OCCUPIED FACILITIES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION IF INTERRUPTION IS ALLOWED, PROVIDE ALTERNATIVE TEMPORARY SERVICES ACCEPTABLE TO GOVERNING AUTHORITIES.
8. LOCATE, IDENTIFY, SHUT OFF, CAP AND DISCONNECT UTILITIES AT PROPERTY LINE OR VALVE AS REQUIRED. PROVIDE BY-PASS CONNECTIONS AS REQUIRED TO MAINTAIN SERVICES TO ADJACENT PROPERTIES AND FACILITIES. PROVIDE A MINIMUM OF 72 HOURS ADVANCE NOTICE TO PROPERTY OWNERS IF SHUT-DOWN OF SERVICES IS REQUIRED DURING THE CHANGE-OVER.
9. COORDINATE WITH ALL UTILITY COMPANIES 48 HOURS PRIOR TO ANY DEMOLITION WORK.
10. REMOVE DEBRIS, RUBBISH, AND OTHER SUBSTANCES FROM SITE. LEGALLY TRANSPORT AND DISPOSE OF SUCH MATERIALS OFF-SITE.
11. BURYING OR BURNING OF MATERIALS ON THE PROJECT SITE IS FORBIDDEN.
12. AVAILABILITY FOR DEMOLITION MUST BE CONFIRMED BY OWNER JUST PRIOR TO DEMOLITION.
13. THE USE OF EXPLOSIVES IS STRICTLY PROHIBITED.
14. HISTORIC ARTIFACTS, INCLUDING CORNERSTONES, THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, ANTIQUES, AND OTHER ITEMS OF SIGNIFICANCE SHALL REMAIN THE PROPERTY OF THE OWNER. NOTIFY OWNERS REPRESENTATIVE IF SUCH ARTICLES ARE ENCOUNTERED. OBTAIN APPROVAL REGARDING METHOD OF REMOVAL. SALVAGE SUCH ARTICLES AND TURN OVER TO OWNER.
15. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, COMPLY WITH APPLICABLE REGULATIONS IN HANDLING, REMOVING, AND PROTECTING AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION.
16. REGRADE ALL AREAS WHERE DEMOLITION HAS OCCURRED. PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND NEW GRADING, THERE SHALL NOT BE ANY VOIDS, PITS, OR MOUNDING OF EARTHWORK.

SITE NOTES

1. WHERE PROPOSED PAVEMENT ABUTS EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE CUT IN A NEAT STRAIGHT LINE THROUGH PAVEMENT AND BASE. PROVIDE A SMOOTH TRANSITION.
2. INSTALL EXPANSION JOINT MATERIAL BETWEEN NEW AND EXISTING CONCRETE AND/OR ASPHALT.
3. MAINTAIN AND PROTECT EXISTING PAVEMENT OR GRAVEL SURFACES WHICH ARE TO REMAIN. CONTRACTOR SHALL REPLACE DAMAGED AREAS, MATCHING DEPTH, MATERIAL AND GRADE OF EXISTING SURFACES.
4. DIMENSIONS SHOWN ARE TO FACE OF CURB, CENTER OF COLUMN, EDGE OF BUILDING EXTERIOR OR CENTER OF PAINTED STRIPES.
5. SIDEWALK AND PAVING JOINTS ARE SHOWN FOR REFERENCE ONLY. REVIEW JOINT LAYOUT WITH ALL SPECIFICATIONS AND DETAILS BEFORE POURING CONCRETE.

SURVEY NOTES

1. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS PREPARED BY **SMW ENGINEERING GROUP, 158 BUSINESS CENTER DRIVE, BIRMINGHAM AL 35244. SURVEY PERFORMED xx/xx/2018**.
2. COORDINATES ARE IN FEET AND REFERENCE TO **ALABAMA STATE PLANE SYSTEM OF 1983**.
3. BEARINGS SHOWN ARE BASED ON MAGNETIC NORTH.
4. THE VERTICAL DATUM IS BASED ON **THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)**.
5. FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ON DRAWINGS ARE APPROXIMATE IN DEPTH AND LOCATION. REPAIR EXISTING UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GRADING NOTES

1. FIELD VERIFY CRITICAL GRADES AT CONNECTION POINTS SUCH AS ENTRANCES PRIOR TO CONSTRUCTION AND NOTIFY PROJECT MANAGER OR ENGINEER OF ANY DISCREPANCIES.
2. THE MINIMUM SLOPE FOR PARKING, SIDEWALKS, AND LANDSCAPED AREAS IS 1%. FIELD VERIFY MINIMUM SLOPE IS ACHIEVED.
3. MAXIMUM SLOPE IN HANDICAP PARKING AREAS IS 2%. MAXIMUM LONGITUDINAL SIDEWALK SLOPE IS 5%. SLOPE SIDEWALKS AWAY FROM BUILDING AT 1½% CROSS SLOPE UNLESS OTHERWISE NOTED. SIDEWALK CROSS SLOPE CANNOT EXCEED 2% IN ANY CASE.
4. UNLESS OTHERWISE NOTED, ELEVATIONS SHOWN REPRESENT FINISHED GRADES. ADJUST FOR PAVEMENT THICKNESS, TOPSOIL, ETC.
5. ADJUST DRAINAGE STRUCTURE TOPS AS NECESSARY TO MATCH FINAL GRADES.
6. NO SLOPE SHALL BE STEEPER THAN 2(H):1(V)
7. ALL EARTHWORK SHALL MEET THE FOLLOWING REQUIREMENTS AT A MINIMUM:
   - A. FOLLOW RECOMMENDATIONS OF THE PROJECT SUBSURFACE INVESTIGATION REPORT. REPORT ANY CONTRADICTIONS TO THE PROJECT MANAGER. SOIL EXCAVATION SHALL BE CONSIDERED AS UNCLASSIFIED.
   - B. OBTAIN CERTIFICATION FROM A TESTING LAB, SIGNED AND SEALED BY AN ENGINEER, STATING THAT ALL EARTHWORK IS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SUBSURFACE INVESTIGATION REPORT AND SOILS ARE CAPABLE OF SUPPORTING THE STRUCTURE AND IMPROVEMENTS.
   - C. SUBMIT SOIL SAMPLES FOR TESTING AS REQUIRED BY THE PROJECT GEOTECHNICAL ENGINEER.
   - D. SOIL FOR COMPACTED BACKFILL AND ENGINEERED FILL SHALL CONSIST OF CLEAN GRANULAR SOILS, CLAY SOILS, OR SHALE SOILS HAVING A PLASTICITY INDEX OF LESS THAN 35 AND A MINIMUM DENSITY OF 90 POUNDS PER CUBIC FOOT WHEN COMPACTED TO ONE HUNDRED PERCENT (100%) OF ITS MAXIMUM DRY DENSITY PER STANDARD PROCTOR TEST. (ASTM D698) MATERIAL SHALL BE FREE OF VEGETATION, ROOTS, ROCKS LARGER THAN 2" IN ANY DIMENSION, DEBRIS AND OTHER DELETERIOUS MATERIALS. RESIDUAL SOIL EXCAVATED AT THE SITE MAY BE USED FOR BACKFILL IF IT MEETS THE SPECIFICATION REQUIREMENTS. THE MOISTURE CONTENT OF THE FILL SOILS SHOULD BE MAINTAINED WITHIN +3 AND -3 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT DETERMINED FROM THE STANDARD PROCTOR COMPACTION TEST.
   - E. ALL FILL IN AREAS TO BE OCCUPIED BY THE BUILDING(S) AND PAVING, INCLUDING AN AREA 10 FEET OUTSIDE THE PERIMETERS THEREOF, SHALL BE CONTROLLED (ENGINEERED) FILL AND THE COMPACTION SHALL BE TESTED BY A LICENSED AND QUALIFIED GEOTECHNICAL ENGINEER. CONTROLLED FILL IN AREAS OF BUILDINGS SHALL BE COMPACTED IN MAXIMUM 4" LIFTS TO AT LEAST 98% OF MAXIMUM DRY DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM SPECIFICATION D-698 (STANDARD PROCTOR). FILL IN AREAS OF ASPHALT PAVING SHALL BE COMPACTED IN MAXIMUM 6" LIFTS TO AT LEAST 98% OF MAXIMUM DRY DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM SPECIFICATION D-698. THE UPPER 12 INCHES OF FILL BENEATH PAVEMENTS AND UPPER 24 INCHES BENEATH FOOTINGS AND GRADE SLABS SHALL BE COMPACTED TO 100%. PROVIDE 95% COMPACTION IN ALL OTHER AREAS.
   - F. AFTER STRIPPING TOPSOIL, ALL FILL AREAS SHALL BE PROOFROLLED AND MONITORED BY THE PROJECT GEOTECHNICAL ENGINEER.
   - G. FILL OUTSIDE OF BUILDING AND PAVEMENT SHALL BE PLACED IN 8" LIFTS IN THE PRESENCE OF A REPRESENTATIVE OF THE SOIL TESTING LAB, COMPACTED TO SPECIFIED REQUIREMENTS, AND TESTED EVERY 900 SF FOR EACH LAYER OF FILL. REMEDY ANY INADEQUATELY PLACED FILL TO MEET PROJECT SPECIFICATIONS.
   - H. ALL LANDSCAPED AND GRASS AREAS SHALL HAVE A MINIMUM OF 5" OF CLEAN TOPSOIL.
   - I. ALL OFFSITE BORROW AND SPOIL SITES, IF REQUIRED, SHALL BE PROPERLY PERMITTED.

DRAINAGE NOTES

1. FIELD VERIFY CRITICAL GRADES AT CONNECTION POINTS PRIOR TO CONSTRUCTION OR FABRICATION OF PRECAST STRUCTURES.
2. UNLESS OTHERWISE NOTED, HDPE SHALL BE HANCOR, LANE HDPE, OR ADS N-12 SMOOTH INTERIOR WALL HDPE PIPE. PROVIDE #57 STONE BEDDING AND BACKFILL TO PAVEMENT SUBGRADE OR 12" ABOVE PIPE IN GRASS AREAS. ALL PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M252, TYPE S (4"-10") OR AASHTO M294, TYPE S (12"-48"). GASKET SHALL MEET THE REQUIREMENTS OF ASTM F477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321. JOINTS SHALL BE SILT TIGHT AND NON-RATED WATERTIGHT GASKETS SHALL BE COVERED WITH A REMOVABLE WRAP BY THE MANUFACTURER TO ENSURE THAT THE GASKET IS FREE FROM DEBRIS.
3. UNLESS OTHERWISE NOTED, RCP SHALL BE CLASS III CONFORMING TO ASTM C-76 (LATEST REVISION): "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE".
4. ROOF LEADERS SHALL BE ASTM D3034 SDR 35 PVC WITH GASKET JOINTS. UNLESS OTHERWISE NOTED ON THE PLANS, 4" SHALL BE LAID AT A 2% MINIMUM SLOPE AND 6" SHALL BE LAID AT 1% MINIMUM SLOPE.
5. COORDINATE WITH GOVERNING AGENCY FOR ALL REQUIRED MATERIAL APPROVALS, INSPECTIONS AND TESTING.

EROSION CONTROL NOTES

1. UNLESS SHOWN OTHERWISE, ALL DISTURBED AREAS NOT ULTIMATELY RECEIVING A HARD SURFACE SHALL HAVE A MINIMUM DEPTH OF 5" OF TOPSOIL AND BE STABILIZED WITH GRASS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS AND COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS RELATED TO SITE GRADING, EROSION AND SEDIMENTATION CONTROL, AND STORMWATER RUNOFF.
3. FURNISH, ERECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES IN CONFORMITY WITH THE ALABAMA EROSION AND SEDIMENT CONTROL HANDBOOK, FOURTH EDITION, AS PREPARED BY TDEC. SEE PLAN AND DETAILS FOR SPECIFIC EROSION AND SEDIMENTATION CONTROL MEASURES.
4. EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON THIS PLAN ARE A MINIMUM REQUIREMENT. MAINTAIN, MODIFY AND ADD EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE.
5. ENVIRONMENTAL PERMIT REQUIREMENTS: SHOW COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES CURRENTLY ADOPTED BY ADEM (CGP) AND THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP). PROVIDE ENGINEER AND ADEM WITH COPIES OF ALL REQUIRED PAPERWORK. PERFORM AND PROVIDE ALL MAINTENANCE, INSPECTIONS, RECORD KEEPING, AND REPORTING.
6. INSPECTIONS WILL BE PERFORMED BY PERSONNEL CERTIFIED IN THE ADEM LEVEL 1 EROSION CONTROL COURSE. PROOF OF INSPECTOR'S CERTIFICATION SHALL BE KEPT ON FILE AT THE JOBSITE ALONG WITH ALL INSPECTION REPORTS AND OTHER REQUIRED PAPERWORK IDENTIFIED IN THE PROJECT SWPPP AND THE CGP. MAINTENANCE REPAIR NEEDS IDENTIFIED BY INSPECTIONS SHALL BE ADDRESSED WITHIN 7 DAYS OR BEFORE THE NEXT RAIN EVENT. DOCUMENT WHEN MAINTENANCE ITEMS ARE COMPLETED ON THE INSPECTION REPORT.
7. MAINTAIN A RAIN GAUGE AND RAINFALL RECORDS ON SITE AS REQUIRED BY ADEM.
8. EROSION AND SEDIMENTATION CONTROL IMPLEMENTATION:
   - A. STAKE THE DISTURBED AREA LIMITS AND UNDISTURBED AREAS IN THE FIELD BEFORE BEGINNING WORK
   - B. INSTALL CONSTRUCTION EXIT
   - C. TEMPORARY EROSION AND SEDIMENTATION CONTROL: PROVIDE MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF AND AIRBORNE DUST TO UNDISTURBED AREAS AND TO ADJACENT PROPERTIES AND WALKWAYS, ACCORDING TO THE SITE EROSION AND SEDIMENTATION CONTROL DRAWINGS AS WELL AS THE CGP AND THE SWPPP.
   - D. BEGIN SITE GRADING
   - E. VERIFY THAT FLOWS OF WATER REDIRECTED FROM CONSTRUCTION AREAS OR GENERATED BY CONSTRUCTION ACTIVITY DO NOT ENTER OR CROSS TREE- OR PLANT- PROTECTION ZONES.
   - F. INSPECT, REPAIR, AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
   - G. CLEAN, REPAIR, AND RESTORE ADJOINING PROPERTIES AND ROADS AFFECTED BY EROSION AND SEDIMENTATION FROM THE PROJECT SITE DURING THE COURSE OF THE PROJECT. OBTAIN PERMISSION AND APPROPRIATE PERMITS TO ACCESS AREAS OUTSIDE THIS SITE.
   - H. AFTER FINAL STABILIZATION OF THE SITE, REMOVE EROSION AND SEDIMENTATION CONTROLS AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.
   - I. STORMWATER CONTROL: COMPLY WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. PROVIDE BARRIERS IN AND AROUND EXCAVATIONS AND SUBGRADE CONSTRUCTION TO PREVENT FLOODING BY RUNOFF OF STORMWATER FROM HEAVY RAINS.
   - J. PROJECT MANAGER OR ENGINEER MAY DIRECT CONTRACTOR TO LIMIT SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY CLEARING AND GRUBBING, EXCAVATION, BORROW AND EMBANKMENT OPERATIONS AND MAY DIRECT CONTRACTOR TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES.
   - K. PROVIDE PERMANENT EROSION CONTROL MEASURES AT EARLIEST PRACTICAL TIME TO MINIMIZE REQUIREMENT FOR TEMPORARY EROSION CONTROLS. PERMANENTLY SEED AND MULCH CUT SLOPES AS EXCAVATION PROCEEDS.
   - L. MAINTAIN TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY CONTRACTOR AS DIRECTED BY PROJECT MANAGER OR ENGINEER TO CONTROL SILTATION AT ALL TIMES THROUGHOUT WORK. PROVIDE MAINTENANCE OR ADDITIONAL WORK DIRECTED BY ENGINEER WITHIN 48 HOURS OF NOTIFICATION BY ENGINEER.

12. EROSION CONTROL SHALL BE MAINTAINED UNTIL PAVING IS COMPLETED AND LAWNS HAVE BEEN ESTABLISHED. PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM EROSION AND SEDIMENT DAMAGE THROUGHOUT THE LIFE OF THE PROJECT.
13. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT SOIL STABILIZATION AT THE CONSTRUCTION SITE (OR PHASE OF THE PROJECT) MUST BE COMPLETED NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE, NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES OR CRUSHER RUNS WILL NOT BE CONSIDERED A NON-ERODING SURFACE.
14. ALL WATER DISCHARGED FROM EXCAVATIONS AND TEMPORARY SEDIMENT PONDS SHALL BE FILTERED USING SEDIMENT CONTROLS ACCEPTABLE TO ADEM AS WELL AS THE LOCAL AUTHORITY HAVING JURISDICTION.
15. UNLESS OTHERWISE NOTED, RIP-RAP SHALL BE A.L.D.O.T. MACHINED CLASS A-1 WITH A MEDIAN RIP-RAP SIZE D50 OF 6", 9" THICK AND SHALL BE UNDERLAIN WITH A NON-WOVEN GEOTEXTILE FABRIC.
16. CONCRETE WASHOUT AREA SHALL BE IN CONFORMANCE WITH STANDARDS OF ADEM, AS WELL AS THE LOCAL PERMITTING AUTHORITY HAVING JURISDICTION.
17. CONTRACTOR COORDINATE WITH ENGINEER AT BEGINNING OF LAND DISTURBANCE TO DETERMINE WHETHER OR NOT AN INITIAL SITE ASSESSMENT INSPECTION BY THE ENGINEER IS REQUIRED. IF REQUIRED, THE SITE ASSESSMENT INSPECTION BY THE ENGINEER MUST BE PERFORMED WITHIN 1 MONTH OF STARTING CONSTRUCTION. ALLOW ENGINEER A MINIMUM OF 1 WEEK NOTICE IN SCHEDULING SITE ASSESSMENT INSPECTIONS.

UTILITY NOTES

1. COORDINATE WITH EXISTING UTILITIES AND STORM SEWER INSTALLATION TO AVOID CONFLICTS . UTILITY INSTALLATION AND MATERIAL SHALL MEET THE REQUIREMENTS OF **ADDISON WATER WORKS** AND ALL APPLICABLE CODES. COORDINATE WITH **ADDISON WATER WORKS** PRIOR TO CONSTRUCTION TO DETERMINE MATERIAL, INSTALLATION TESTING AND INSPECTION REQUIREMENTS. VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. PAVEMENT REPAIR AND TRAFFIC CONTROL SHALL MEET THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY AND ALL PERMITS AND LICENSES REQUIRED TO WORK IN THE PUBLIC R.O.W. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TAP FEES AND COORDINATION WITH **ADDISON WATER WORKS** TO ESTABLISH WATER AND SEWER SERVICE.
4. PROVIDE 10' MIN. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES. WHERE CROSSINGS OCCUR, PROVIDE 18" MIN SEPARATION BETWEEN WATER AND SEWER LINES. PROVIDE 6" MIN. CLEARANCE BETWEEN STORM SEWERS AND OTHER UTILITIES. UNLESS OTHERWISE NOTED PROVIDE 3' MINIMUM COVER FOR ALL UTILITIES. PROVIDE #57 STONE BEDDING AND BACKFILL TO SUBGRADE FOR ALL UTILITIES LOCATED IN PAVED AREAS.
5. ADJUST ALL EXISTING UTILITY STRUCTURES, WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT, TO MATCH FINAL GRADES. ADJUSTMENTS SHALL MEET THE REQUIREMENTS OF **ADDISON WATER WORKS**.
6. COORDINATE WITH **ADDISON WATER WORKS** TO REMOVE OR ABANDON EXISTING UTILITIES, WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT, THAT ARE LOCATED WITHIN THE PROJECT LIMITS AND NO LONGER IN USE.
7. UNLESS OTHERWISE NOTED, ALL SANITARY SEWER PIPE AND FITTINGS SHALL BE PVC MEETING THE REQUIREMENTS OF ASTM D 3034. USE SDR 35 UNLESS OTHERWISE SPECIFIED. FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM D 3311 AND ASTM D 2665. PIPE SHALL HAVE AN INTEGRAL BELL END WITH GASKET SEAL WHICH HAS BEEN REINFORCED WITH A STEEL RING, BAND, OR OTHER RIGID MATERIAL THAT PERMANENTLY LOCKS THE GASKET IN PLACE. THE JOINT SHALL MEET THE REQUIREMENTS OF ASTM D 3212. GASKETS SHALL BE OF A LOCK-IN TYPE GASKET, REIBER TYPE OR APPROVED SUBSTITUTE, MEETING THE REQUIREMENTS OF ASTM F-477. UNLESS OTHERWISE NOTED, MINIMUM SLOPE SHALL BE 2.0% FOR 4" LINE AND 1.0% FOR 6" LINES.
8. UNLESS OTHERWISE NOTED, ALL WATER LINES SHALL BE AWWA C900 PVC (CLASS 200) WITH BELL END FOR PUSH-ON TYPE JOINTS. JOINTS SHALL CONSIST OF COMPACT PATTERN DUCTILE IRON FITTINGS MEETING THE REQUIREMENTS OF AWWA C 153 WITH RUBBER GASKETS MEETING THE REQUIREMENTS OF AWWA C 111. INSTALLATION SHALL COMPLY WITH UL 1285.
9. ALL FIRE WATER LINES SHALL BE CLASS 350 DUCTILE IRON WITH PUSH-ON TYPE JOINTS. PIPE SHALL COMPLY WITH AWWA C151 AND CEMENT - MORTAR LINING SHALL COMPLY WITH AWWA C104. INSTALLATION SHALL COMPLY WITH AWWA C600.
10. FIRE LINE SIZE SHALL BE VERIFIED BY SPRINKLER CONTRACTOR. CERTIFIED CALCULATIONS SHALL BE SUBMITTED TO THE OWNER. SEE THE FIRE PROTECTION PLAN FOR FURTHER REQUIREMENTS. ALL FIRE PROTECTION PIPING STARTING FROM THE POINT OF SERVICE MUST BE INSTALLED BY AN ALABAMA REGISTERED SPRINKLER CONTRACTOR.
11. ALL WATER LINE MATERIALS SHALL BE LEAD FREE.

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT APPLY TO THIS PROJECT

ADEM	ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
@	AT
&	AND
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ADA	AMERICANS WITH DISABILITIES ACT
APP'D	APPROVED
APPROX. OR ~	APPROXIMATE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASPH.	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
B/C	BACK OF CURB
BLDG.	BUILDING
BLVD.	BOULEVARD
BM	BENCHMARK
B/W	BOTTOM OF WALL
Δ	CURVE DELTA ANGLE
CB	CATCH BASIN
CFS	CUBIC FEET PER SECOND
CGP	CONSTRUCTION GENERAL PERMIT
CI	CURB INLET
C	CENTERLINE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
C.O.	CLEANOUT
CONC.	CONCRETE
CONT.	CONTINUOUS
°	DEGREES
DCB	DOUBLE CATCH BASIN
DIA. OR Ø	DIAMETER
DIP	DUCTILE IRON PIPE
DWG.	DRAWING
E	EAST
EA.	EACH
E.F.	EACH FACE
EIP	EXISTING IRON PIPE
EL. OR ELEV.	ELEVATION
EOP	EDGE OF PAVEMENT
EPA	ENVIRONMENTAL PROTECTION AGENCY
ETC.	ET CETERA
E.W.	EACH WAY
EX. OR EXIST.	EXISTING
F/C	FACE OF CURB
FFE	FINISHED FLOOR ELEVATION
FIN.	FINISHED
FP	FIRE PROTECTION
FT.	FEET
GC	GENERAL CONTRACTOR
GI	GRATE INLET
GPM	GALLONS PER MINUTE
GV	GAS VALVE
H	HORIZONTAL
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
HP HDPE	HIGH PERFORMANCE HIGH DENSITY POLYETHYLENE
HWY.	HIGHWAY
ID	INSIDE DIAMETER OR INLINE DRAIN
IN.	INCH(ES)
INV.	INVERT
IPF	IRON PIN FOUND
JB	JUNCTION BOX
L	LENGTH
LBS.	POUNDS
LF	LINEAR FEET
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
N/A	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION AGENCY
NIC	NOT IN CONTRACT
NIP	NEW IRON PIN
NO. OR #	NUMBER
NOI	NOTICE OF INTENT
NPDES	NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
N.T.E.	NOT TO SCALE
O.C.	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PIV	POST INDICATOR VALVE
POB	POINT OF BEGINNING (ALIGNMENT)
POE	POINT OF ENDING (ALIGNMENT)
PP	POWER/UTILITY POLE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
Q1	1 YEAR STORM PEAK FLOW
Q10	10 YEAR STORM PEAK FLOW
QLP	QUALIFYING LOCAL PROGRAM
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REF.	REFERENCE
REQ'D	REQUIRED
REV.	REVISION
R.O.W.	RIGHT-OF-WAY
S	SOUTH
SAN.	SANITARY
SCH.	SCHEDULE
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FEET
SPAP	SPECIAL POLLUTION ABATEMENT PERMIT
SQ.	SQUARE
ST.	STREET
STA.	STATION
SS	SANITARY SEWER
SSFM	SANITARY SEWER FORCE MAIN
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
TBM	TEMPORARY BENCH MARK
STB.	THICK
TC	TOP OF CASTING
T/C	TOP OF CURB ELEVATION
TP	TOP OF PAVEMENT ELEVATION
T/W	TOP OF WALL
TYP.	TYPICAL
V	VERTICAL
W	WEST
W/	WITH
WS	WATER SURFACE
WV	WATER VALVE
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WELDED WIRE MESH
YD	YARD DRAIN

LEGEND

EXISTING	LEGEND	PROPOSED
P/E	EASEMENT	C/E
R/W	RIGHT-OF-WAY	R/W
PL	PROPERTY LINE	PL
2010	MAJOR CONTOUR	2010
2011	MINOR CONTOUR	2011
SS x	SANITARY SEWER	SS
G x	GAS PIPING	G
W x	WATER LINE	W
OU x	OVERHEAD UTILITIES	OU
UE x	ELECTRIC (UNDERGROUND)	UE
UT x	TELEPHONE/COMM.	T
SD x	STORM SEWER	SD
	ROOF DRAINS	RD
	FIRE SUPPRESSION LINE	F
	FORCE MAIN	SSFM
	SILT FENCE	SF
	REINFORCED SILT FENCE	SSF
	CONSTRUCTION LIMITS	
	SETBACK	
	EXISTING TO BE REMOVED	
	DRAINAGE SWALE	
	CHECK DAM	
	DIVERSION DITCH	TD
	TUBES AND WATTLES	
	CURBLINE	
	CURBLINE	
	BUILDING	
X	FENCE	X
	VEGETATION	
S	SEWER MANHOLE	S
GT	GREASE TRAP	GT
ST	STORM MANHOLE	ST
JB	JUNCTION BOX	JB
CB	CATCH BASIN	
CB	CURB INLET	
	THROATED INLET	
©	CLEAN OUT	©
	HEADWALL	
XXX.XX ×	SPOT GRADE	XXX.XX
	OUTFALL	OUT
	RIPRAP OUTLET PROTECTION	
	TEMP. CONSTRUCTION EXIT	
	INLET PROTECTION	
	THRUST BLOCK	
W	WATER VALVE	
W	WATER METER	W
PIV	POST INDICATOR VALVE	
	FIRE HYDRANT	
	FIRE DEPARTMENT CONNECTION	
IV	IRRIGATION VALVE	
G	GAS VALVE	
GM	GAS METER	G
	UTILITY POLE	
EV	ELECTRICAL VAULT	
EM	ELECTRIC METER	
E	ELECTRICAL BOX	
GW	GUY WIRE	
	LIGHT STANDARD	
T	TELEPHONE PEDESTAL	
	BOLLARD	
	SLOPE DRAIN	
	SLOPE MATTING	
	TEMPORARY STABILIZATION	TS
	PERMANENT STABILIZATION	PS
	CONCRETE WASHOUT	CW
	FILTER RING	
	BENCHMARK	
	CONTROL POINT	
	MAILBOX	

AREAS & CALCULATIONS

DISTURBED AREA

TOTAL SITE AREA		DISTURBED AREA	
0.643	Acres	0.237	Acres
28030.07	sqft	10314.88	sqft

PROPERTY INFORMATION

OWNER

NAME: CLAYTON HOMES
CONTACT: BRAD JARRETT

ADDRESS: 3916 FOUNTAIN VALLEY ROAD
KNOXVILLE, TN 37918
PHONE: (844) 275-5213

PROPERTY DATA

ADDRESS: 16661 COUNTY ROAD 41
ADDISON, AL 35179

811
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MBI

ENGINEER:

MBI COMPANIES INC.
299 N. WEISGARBER ROAD
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SEAL

STATE OF ALABAMA REGISTERED PROFESSIONAL ENGINEER NO. 20809 DAVID J. MATLOCK
08/16/19

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

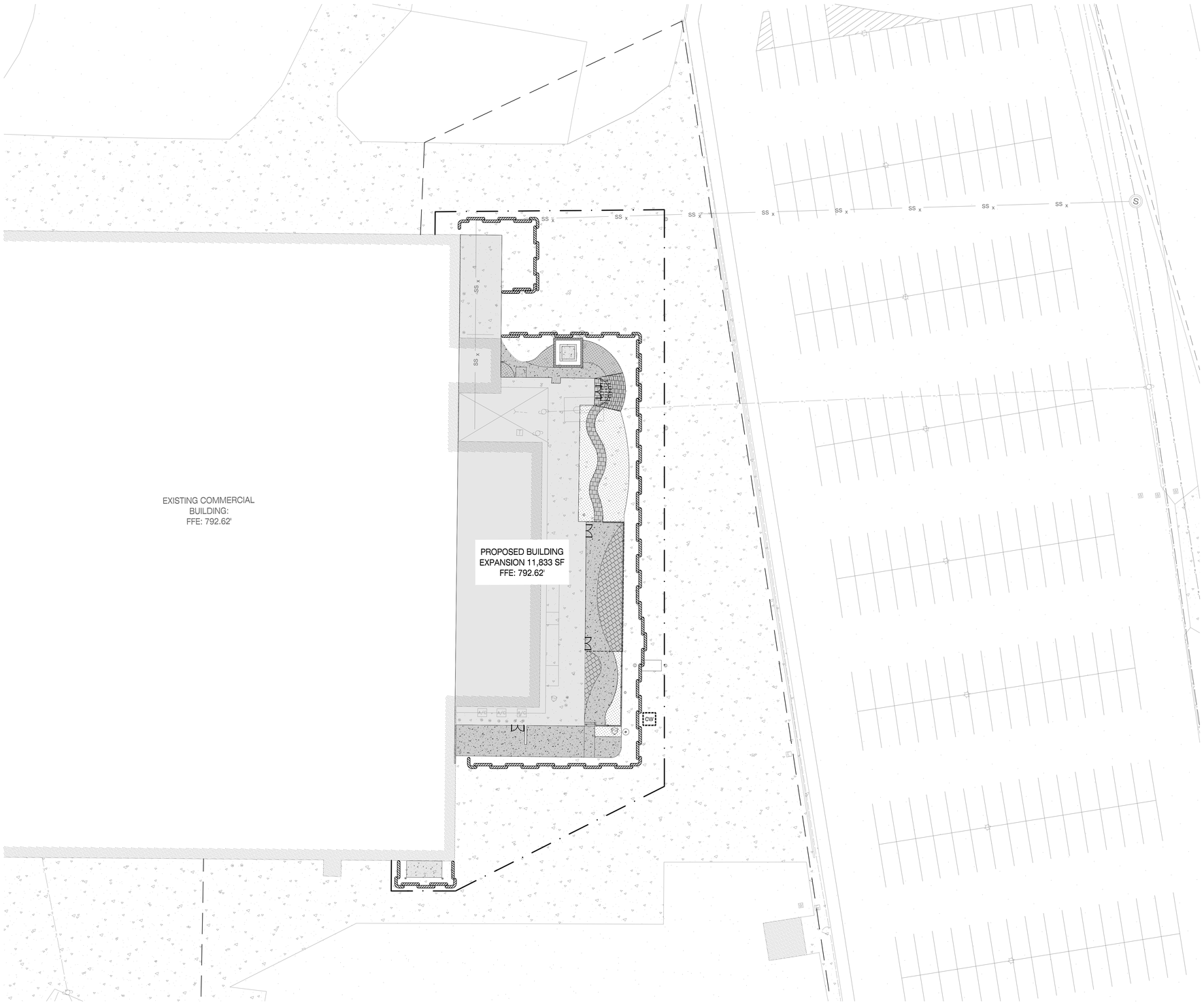
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

CIVIL NOTES & LEGEND

SHEET NO.:

C001



GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS
2. VERIFY LOCATION OF CONSTRUCTION ENTRANCE WITH OWNER

EROSION CONTROL LEGEND

- CONSTRUCTION LIMITS
- CW — CONCRETE WASHOUT; SEE DETAIL 2/C800
- PS — PERMANENT STABILIZATION; SEE SEED MIXTURE TABLES BELOW
- FIBER ROLL; SEE DETAIL 1/C800

PERMANENT SEED MIXTURES

GROUPS	SEEDING DATES	GRASS SEEDS	PERCENT
A	FEBRUARY 1 TO JULY 1	KENTUCKY 31 FESCUE	80%
		KOREAN LESPEDEZA	15%
		ENGLISH RYE	5%
B	JUNE 1 TO AUGUST 15	KENTUCKY 31 FESCUE	55%
		ENGLISH RYE	20%
		KOREAN LESPEDEZA	15%
		GERMAN MILLET	10%
B1	APRIL 15 TO AUGUST 15	BERMUDAGRASS (HULLED)	70%
		ANNUAL LESPEDEZA	30%
C	AUGUST 1 TO DECEMBER 1	KENTUCKY 31 FESCUE	70%
		ENGLISH RYE	20%
		WHITE CLOVER	10%
C1	FEBRUARY 1 TO DECEMBER 1	KENTUCKY 31 FESCUE	70%
		CROWN VETCH	25%
		ENGLISH RYE	5%

PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN

SCALE: 1" = 20'-0"

1

BUILDING NORTH

NORTH

Know what's **below.**
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GRAPHIC SCALE

20 0 10 20 40 60

1 INCH = 20'

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ALABAMA LICENSED NO. 20809 PROFESSIONAL ENGINEER DAVID J. MATLOCK

08/16/19

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ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

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DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN

SHEET NO.:

C100

GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS
2. COORDINATE W/OWNER PEDESTRIAN AND MANUFACTURING TRAFFIC AND ACCESS AS REQUIRED

DEMOLITION LEGEND

TO BE REMOVED

TO BE DEMOLISHED

X DEMOLITION KEYED NOTES

1. REMOVE EXISTING BUILDINGS, CONCRETE, ASPHALT, PADS, ETC. WITHIN AREA OF CONSTRUCTION. VERIFY EXTENTS OF DEMOLITION IN FIELD.
2. RELOCATE EXISTING HYDRANT, SEE C600 FOR NEW LOCATION
3. ELECTRICAL EQUIPMENT TO REMAIN

SITE DEMOLITION PLAN

SCALE: 1" = 20'-0"

Know what's below.
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GRAPHIC SCALE

20 0 10 20 40 60

1 INCH = 20'

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SEAL

STATE OF ALABAMA
REGISTERED
NO. 20809
PROFESSIONAL
ENGINEER
DAVID J. MATLOCK

08/16/19

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KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

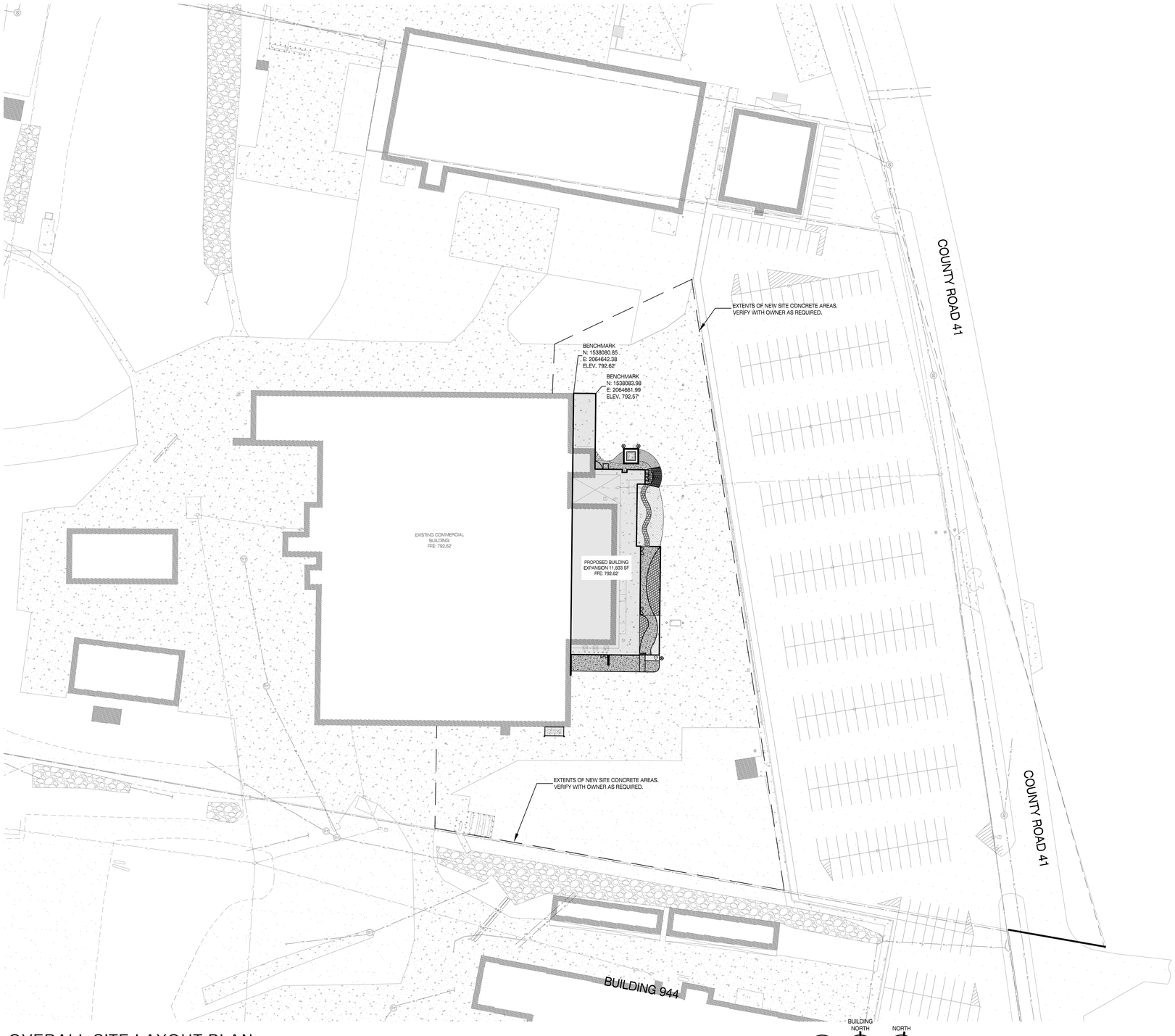
SITE DEMOLITION PLAN

SHEET NO.:

C200

GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS
2. ALL RADII NOT LABELED ARE TO BE R3.00
3. VERIFY EXTENTS OF NEW SITE CONCRETE AREAS WITH OWNER AS REQUIRED.



OVERALL SITE LAYOUT PLAN

1

SCALE: 1" = 40'-0"

Know what's below.
Call before you dig.
In Tennessee call 811 or 1-800-351-1111

GRAPHIC SCALE

40 0 20 40 80 120

1 INCH = 40'

MBI

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SEAL

STATE OF ALABAMA
NO. 20809
PROFESSIONAL ENGINEER
DAVID J. MATLOCK
08/16/19

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

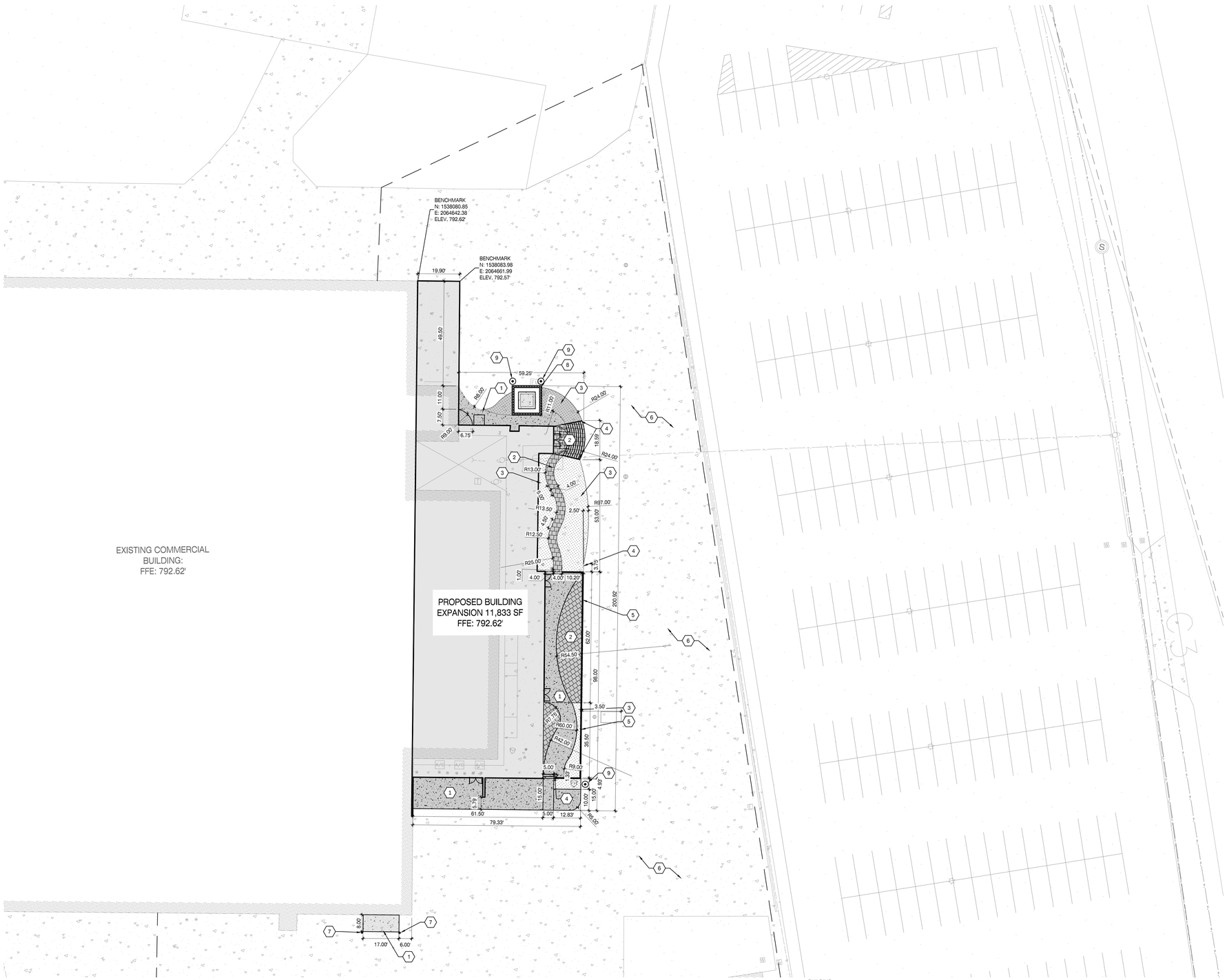
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

OVERALL SITE LAYOUT PLAN

SHEET NO.:

C300



SITE LAYOUT PLAN

SCALE: 1" = 20'-0"

1

GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS
2. ALL RADII NOT LABELED ARE TO BE R3.00'

X SITE KEYED NOTES

1. CONCRETE SIDEWALK; SEE DETAIL 4/C800
2. STAMPED & COLORED CONCRETE, STYLE TO BE DETERMINED BY OWNER/ARCHITECT; SEE DETAIL 4/C800
3. GRASS / LANDSCAPED AREA
4. STAIRS WITH HANDRAIL; SEE DETAIL 3/C800
5. DECORATIVE HANDRAIL; SEE ARCHITECTUAL DETAIL
6. COORDINATE ANY WORK WITHIN THIS AREA WITH OWNER TO MAINTAIN CONTINUOUS TRAFFIC FLOW AS REQUIRED
7. 6' BOLLARD; SEE DETAIL 8/C800
8. PROPOSED ENCLOSURE FOR EXISTING TRANSFORMER; SEE ELECTRICAL PLANS
9. 6" DIA BOLLARD W/36" CONCRETE SPHERE; SEE DETAIL 6/A402

Know what's below.
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GRAPHIC SCALE
20 0 10 20 40 60
1 INCH = 20'

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STATE OF ALABAMA
NO. 20809
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08/16/19
ENGINEER
DAVID J. MATLOCK

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

19025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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- ☐ DESIGN DEVELOPMENT
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- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.S.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

SITE LAYOUT PLAN

SHEET NO.:

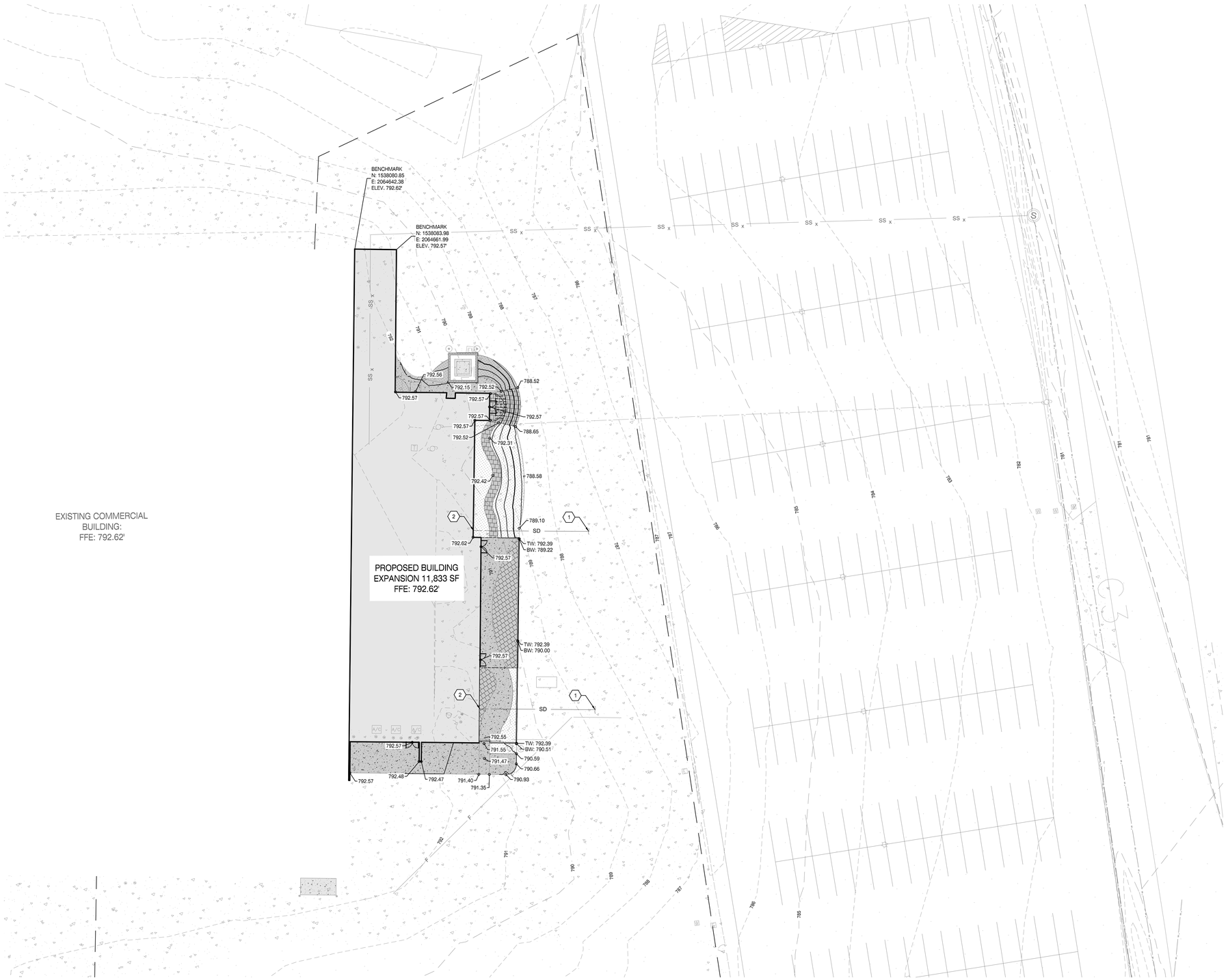
C301

GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS

X DRAINAGE KEYED NOTES

1. 8" ASTM D3034 SDR P/C STORM DRAIN LINE @ 1.0% MIN. SLOPE. FIELD LOCATE AND CONNECT TO EXISTING SYSTEM; SEE DETAIL 5/C800.
2. CONNECT TO 4" ROOF DRAIN; SEE PLUMBING PLANS



SITE GRADING & DRAINAGE PLAN

SCALE: 1" = 20'-0"

BUILDING NORTH

NORTH

Know what's below. Call before you dig.
In Tennessee call 811 or 1-800-351-1111

GRAPHIC SCALE
20 0 10 20 40 60
1 INCH = 20'

MBI

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SEAL

STATE OF ALABAMA
NO. 20809
PROFESSIONAL
CIVIL ENGINEER
DAVID J. MATLOCK
08/16/19

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

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NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

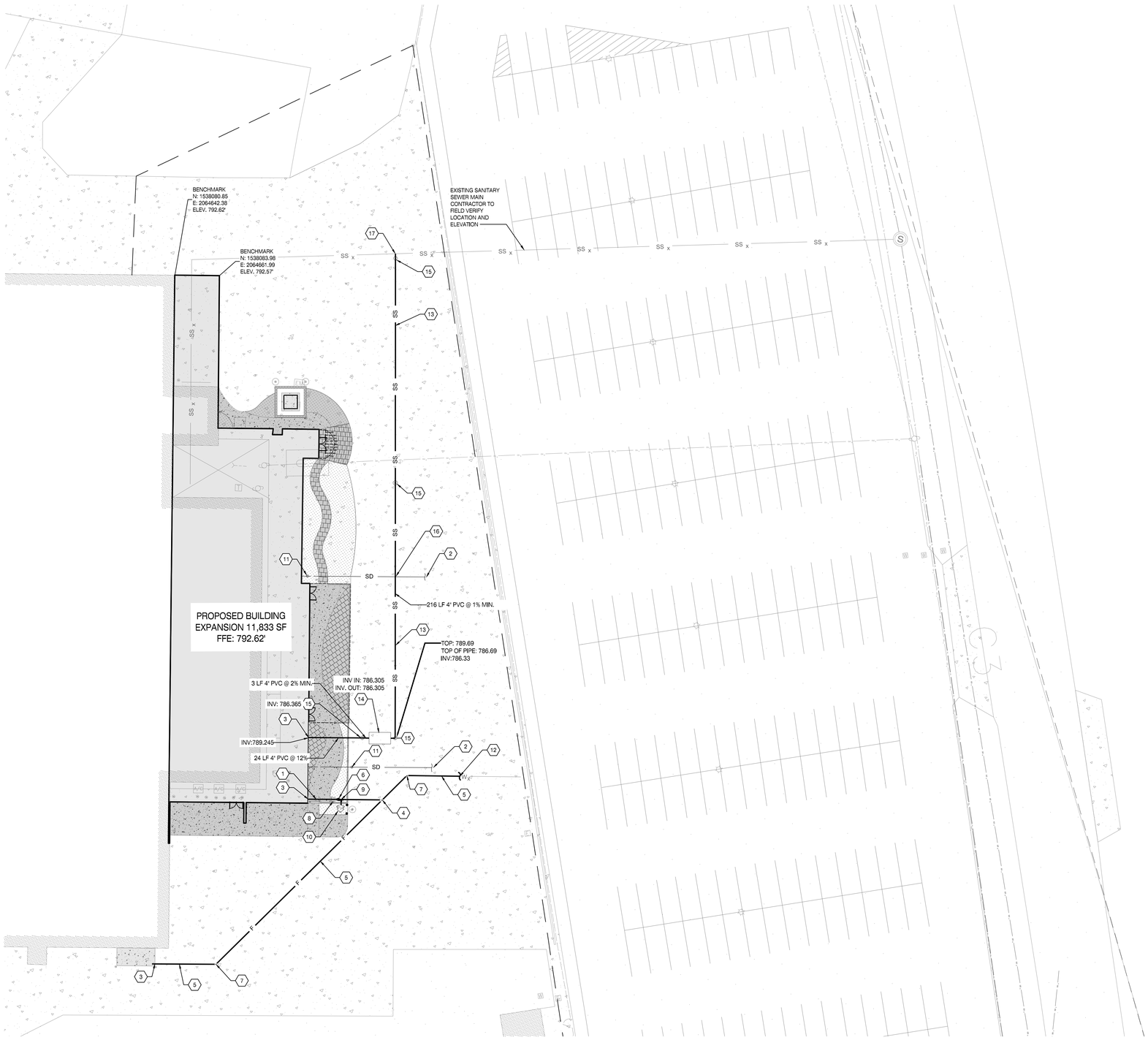
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.S.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

SITE GRADING PLAN & DRAINAGE PLAN

SHEET NO.:

C400



SITE UTILITY PLAN

SCALE: 1" = 20'-0"

1

GENERAL NOTES

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS
2. COORDINATE ALL UTILITY CROSSINGS
3. PROVIDE KOR & SEAL CONNECTORS
4. FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. DETERMINE LOCATED, SIZE, MATERIAL & INVERTS. REPORT ANY DISCREPANCIES TO OWNER & ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION & INSTALLATION.

X UTILITY KEYED NOTES

1. PROPOSED 2-1/2" WATER SERVICE PVC LINE; SEE DETAIL 7/C800
2. PROPOSED STORM SERVICE LINE - FIELD LOCATE CONNECT TO EXISTING SYSTEM
3. FOR CONTINUATION SEE PLUMBING PLANS
4. 6"x6" TEE AND A 45° BEND; SEE DETAIL 2/C801
5. 6" DUCTILE IRON CL350 FIRE PROTECTION SERVICE LINE; SEE DETAIL 7/C800
6. 6" TO 2" PIPE REDUCER
7. 45° BEND; SEE DETAIL 2/C801
8. 2" WATER METER; SEE DETAIL 1/C801
9. 6"x6"x6" TEE, SEE DETAIL 2/C801
10. FIRE HYDRANT ASSEMBLY; SEE DETAIL 3/C801
11. STORM SEWER CLEANOUT; SEE DETAIL 6/C800
12. FIELD LOCATE AND CONNECT TO EXISTING PER LOCAL UTILITY REQUIREMENTS.
13. 4" SCH40 PVC BUILDING SANITARY SEWER SERVICE LINE @ 1.0% MIN. SLOPE; SEE DETAIL 7/C800
14. GREASE INTERCEPTOR WITH TRAFFIC-RATED LIDS; SEE PLUMBING PLANS FOR DETAILS
15. 2 WAY SANITARY SEWER CLEANOUT; SEE DETAIL 4/C801
16. CONTRACTOR TO FIELD LOCATE STORM DRAIN LINE AND ADJUST SS LINE AS REQUIRED TO MAINTAIN MIN 1% SLOPE W/O CONFLICTING W/ STORM DRAIN LINE
17. FIELD LOCATE AND CONNECT TO EXISTING W/SADDLE PER LOCAL UTILITY REQUIREMENTS.

Know what's below.
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GRAPHIC SCALE
20 0 10 20 40 60
1 INCH = 20'

MBI

ENGINEER:

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STATE OF ALABAMA
NO. 20809
PROFESSIONAL
08/16/19
M.I.N.E.S.
DAVID J. MATLOCK

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN:

SHEET INFORMATION

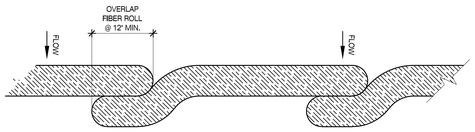
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.S.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

SITE UTILITY PLAN

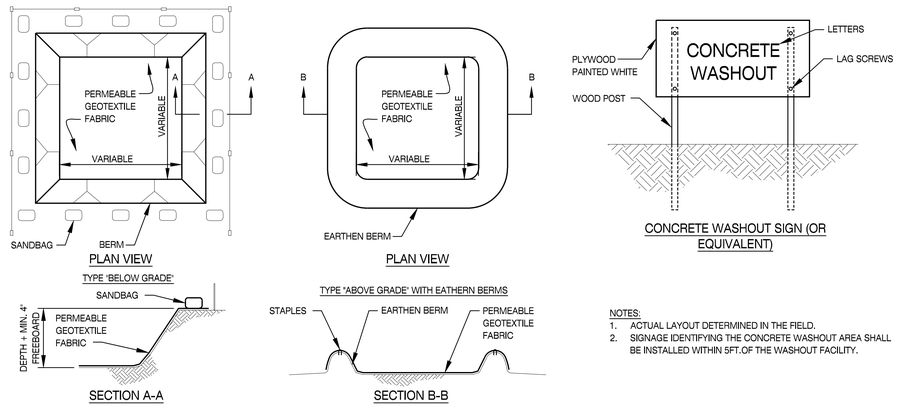
SHEET NO.:

C600



FIBER ROLL 1

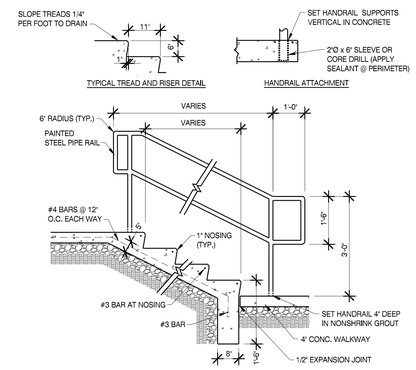
SCALE: N.T.S.



NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.

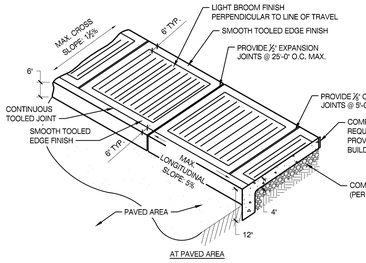
CONCRETE WASHOUT 2

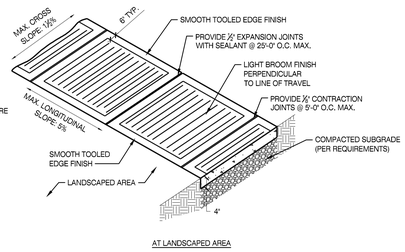
SCALE: N.T.S.



EXTERIOR STAIRS 3

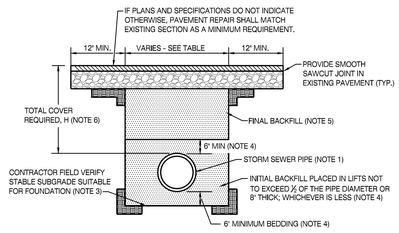
SCALE: N.T.S.





CONCRETE SIDEWALK 4

SCALE: N.T.S.



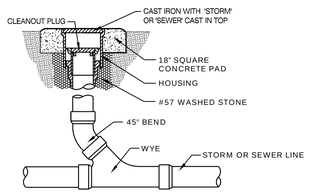
1. ALL HDPE PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST ED., AND ALL CMP SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM A 798, LATEST ED.
2. THIS DETAIL ADDRESSES A TRENCH TYPE INSTALLATION. FOR EMBANKMENT OR OTHER INSTALLATIONS, FOR CMP SEE AASHTO SECTION 27, FOR HDPE SEE AASHTO SECTION 30. THIS DETAIL DOES NOT ADDRESS OSHA TRENCH SAFETY REQUIREMENTS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MEET ALL HEALTH AND SAFETY ISSUES REGARDING TRENCH SAFETY.
3. WHERE THE TRENCH BOTTOM IS UNSUITABLE FOR FOUNDATION IN THE OPINION OF THE PROJECT GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL STABILIZE THE TRENCH BOTTOM ACCORDING TO THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.
4. BEDDING AND INITIAL BACKFILL TO 6' ABOVE THE CROWN OF THE PIPE SHALL BE #57 CRUSHED STONE. ELIMINATE VOIDS BY KNIFING UNDER AND AROUND PIPE WITH SHOVEL OR OTHER MEANS AT THE DISCRETION OF THE CONTRACTOR.
5. FINAL BACKFILL FOR ALL PIPES LOCATED IN PAVED AREAS SHALL BE COMPACTED #57 CRUSHED STONE MEETING THE REQUIREMENTS OF THE TENNESSEE STATE DEPARTMENT OF TRANSPORTATION. FOR GRASS OR LANDSCAPED AREAS, PROVIDE #57 CRUSHED STONE INITIAL BACKFILL TO 6' ABOVE CROWN OF PIPE AND COVER GRAVEL WITH A NONWOVEN GEOTEXTILE TO PREVENT MIGRATION OF FINES. FINAL BACKFILL TO SURFACE SHALL BE SOIL FREE OF FOREIGN DEBRIS. SOIL BACKFILL SHALL BE PLACED IN 8' LOOSE LIFTS AND BE COMPACTED TO 90% STANDARD DENSITY PER AASHTO T-99 OR PER PROJECT SPECIFICATIONS, WHICHEVER IS MORE STRINGENT. TOP 6' SHALL BE TOPSOIL FROM SITE STRIPPING OPERATIONS LOOSELY PLACED.
6. MINIMUM COVER, H, IS 24" UP TO 48" DIAMETER PIPE. H IS 36" FOR 54" TO 60" DIAMETER PIPE. H IS MEASURED FROM TOP OF PIPE TO TOP OF FLEXIBLE PAVEMENT OR GROUND SURFACE IN GRASS OR LANDSCAPE AREAS WHERE APPLICABLE. FOR RCP AND CONCRETE PIPE, H IS 12" MINIMUM.

RCP AND CONCRETE	
PIPE DIA (IN)	MINIMUM WIDTH (IN)
12	22
15	26
18	31
24	40
30	50
36	59
42	68
48	78
54	87
60	98

CMP, HDPE AND PVC	
PIPE DIA (IN)	MINIMUM WIDTH (IN)
4	21
6	23
8	26
10	28
12	30
15	34
18	39
24	48
30	56
36	64
42	72
48	80
54	88
60	96

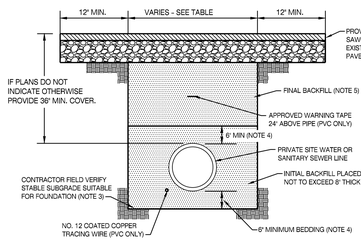
STORM SEWER TRENCH 5

SCALE: N.T.S.



STORM/SEWER CLEANOUT 6

SCALE: N.T.S.

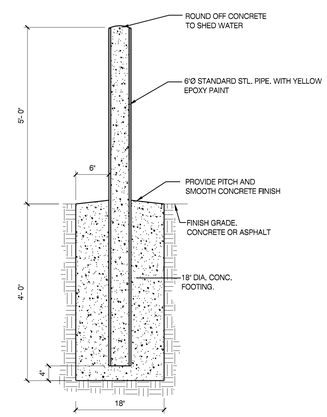


NOTES:
1. ALL PRIVATE SITE UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODE, LOCAL UTILITY REQUIREMENTS, AND THE LOCAL AGENCY HAVING JURISDICTION OVER BUILDING CONSTRUCTION.
2. THIS DETAIL ADDRESSES A TRENCH TYPE INSTALLATION. THIS DETAIL DOES NOT ADDRESS OSHA TRENCH SAFETY REQUIREMENTS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MEET ALL HEALTH AND SAFETY ISSUES REGARDING TRENCH SAFETY.
3. WHERE THE TRENCH BOTTOM IS UNSUITABLE FOR FOUNDATION IN THE OPINION OF THE PROJECT GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL STABILIZE THE TRENCH BOTTOM ACCORDING TO THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.
4. BEDDING AND INITIAL BACKFILL TO 6" ABOVE THE CROWN OF THE PIPE SHALL BE #57 CRUSHED STONE. ELIMINATE VOIDS BY KNIFING UNDER AND AROUND PIPE WITH SHOVEL OR OTHER MEANS AT THE DISCRETION OF THE CONTRACTOR.
5. FINAL BACKFILL FOR ALL PIPES LOCATED IN PAVED AREAS SHALL BE COMPACTED #57 CRUSHED STONE MEETING THE REQUIREMENTS OF THE STATE'S DEPARTMENT OF TRANSPORTATION.
6. FOR GRASS OR LANDSCAPED AREAS, PROVIDE #57 CRUSHED STONE INITIAL BACKFILL TO 6" ABOVE CROWN OF PIPE AND COVER GRAVEL WITH A NONWOVEN GEOTEXTILE TO PREVENT MIGRATION OF FINES. FINAL BACKFILL TO SURFACE SHALL BE SOIL FREE OF FOREIGN DEBRIS. SOIL BACKFILL SHALL BE PLACED IN 8" LOOSE LIFTS AND BE COMPACTED TO 90% STANDARD DENSITY PER AASHTO T-99 OR PER PROJECT SPECIFICATIONS, WHICHEVER IS MORE STRINGENT. TOP 6" SHALL BE TOPSOIL FROM SITE STRIPPING OPERATIONS LOOSELY PLACED.
7. IF PLANS AND SPECIFICATIONS DO NOT INDICATE OTHERWISE, PAVEMENT REPAIR SHALL MATCH EXISTING SECTION AS A MINIMUM REQUIREMENT.

MINIMUM TRENCH WIDTHS	
PIPE DIA. (IN.)	MIN. WIDTH (IN.)
< 4	18
4	21
6	23
8	26

WATER AND SEWER TRENCH 7

SCALE: N.T.S.



6" BOLLARD 8

SCALE: N.T.S.

MBI

ENGINEER:

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SEAL

STATE OF TENNESSEE
NO. 20809
PROFESSIONAL ENGINEER
DAVID J. MATLOCK
08/16/19

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PROJECT INFORMATION

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CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

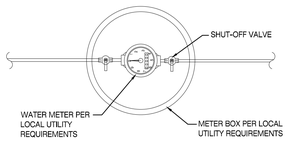
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

CIVIL DETAILS

SHEET NO.:

C800



NOTE:
1. VALVE AND METER BOXES SHALL BE CAST IRON WHEN LOCATED IN TRAFFIC AREA.

WATER METER (1)

SCALE: N.T.S.

NOTES:
1. KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES.
2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
3. REQUIRED VOLUMES OR BEARING AREAS AT FITTINGS SHALL BE AS INDICATED BELOW, ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIFICATIONS.
4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE = 4050 LBS/CU YD. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESS./150) x (TABLE VALUE).
5. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS/SQ FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, MULTIPLY TABLE VALUES BY THE FACTOR (13.33/P/S), WHERE:

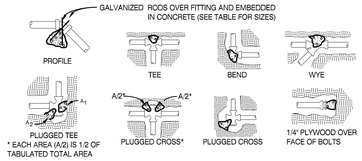
   Pb = ACTUAL TEST PRESSURE, PSIG
   Sb = ACTUAL SOIL BEARING PRESSURE, PSF.

6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUSTS SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD
8. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SQ FT.
9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS FOR VOLUMES SHOWN TO LEFT OF SOLID LINE IN TABLE.
10. TEST PRESSURES ARE SHOWN IN THE PIPING SCHEDULE.
11. ALLOWABLE SOIL BEARING STRESS IS 2000 LBS/SQ FT.

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)							
FITTING SIZE	TEE, WYE, PLUG, OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED RUN		BEND ANGLE		
			A_1	A_2	45°	22 1/2°	11 1/4°
4	1.0	1.4	1.9	1.4	1.0	-	-
6	2.1	3.0	4.3	3.0	1.6	1.0	-
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

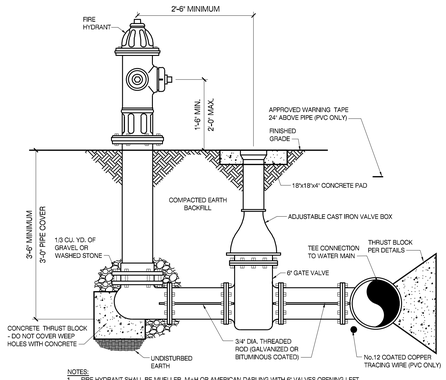
VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS)			
FITTING SIZE	BEND ANGLE		
	45°	22 1/2°	11 1/4°
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.6
10	6.0	2.3	0.9
12	8.5	3.2	1.3
14	11.5	4.3	1.8
16	14.8	5.6	2.3

FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"
14"-16"	#8	36"



THRUST BLOCK (2)

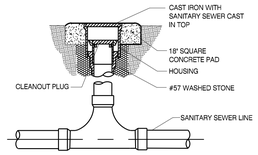
SCALE: N.T.S.



NOTES:
1. FIRE HYDRANT SHALL BE MUELLER, M+H OR AMERICAN DARLING WITH 6" VALVES OPENING LEFT.
2. ALL VALVES SHALL BE RATED FOR 200 psi WORKING PRESSURE AND SHALL OPEN LEFT. PROVIDE VALVES BY MUELLER, M+H, OR AMERICAN DARLING.

FIRE HYDRANT ASSEMBLY (3)

SCALE: N.T.S.



2 WAY SANITARY SEWER CLEANOUT (4)

SCALE: N.T.S.

MBI

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SEAL

STATE OF TENNESSEE
NO. 20809
PROFESSIONAL ENGINEER
LANCE L. NEELY
DAVID J. MATLOCK
08/16/19

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

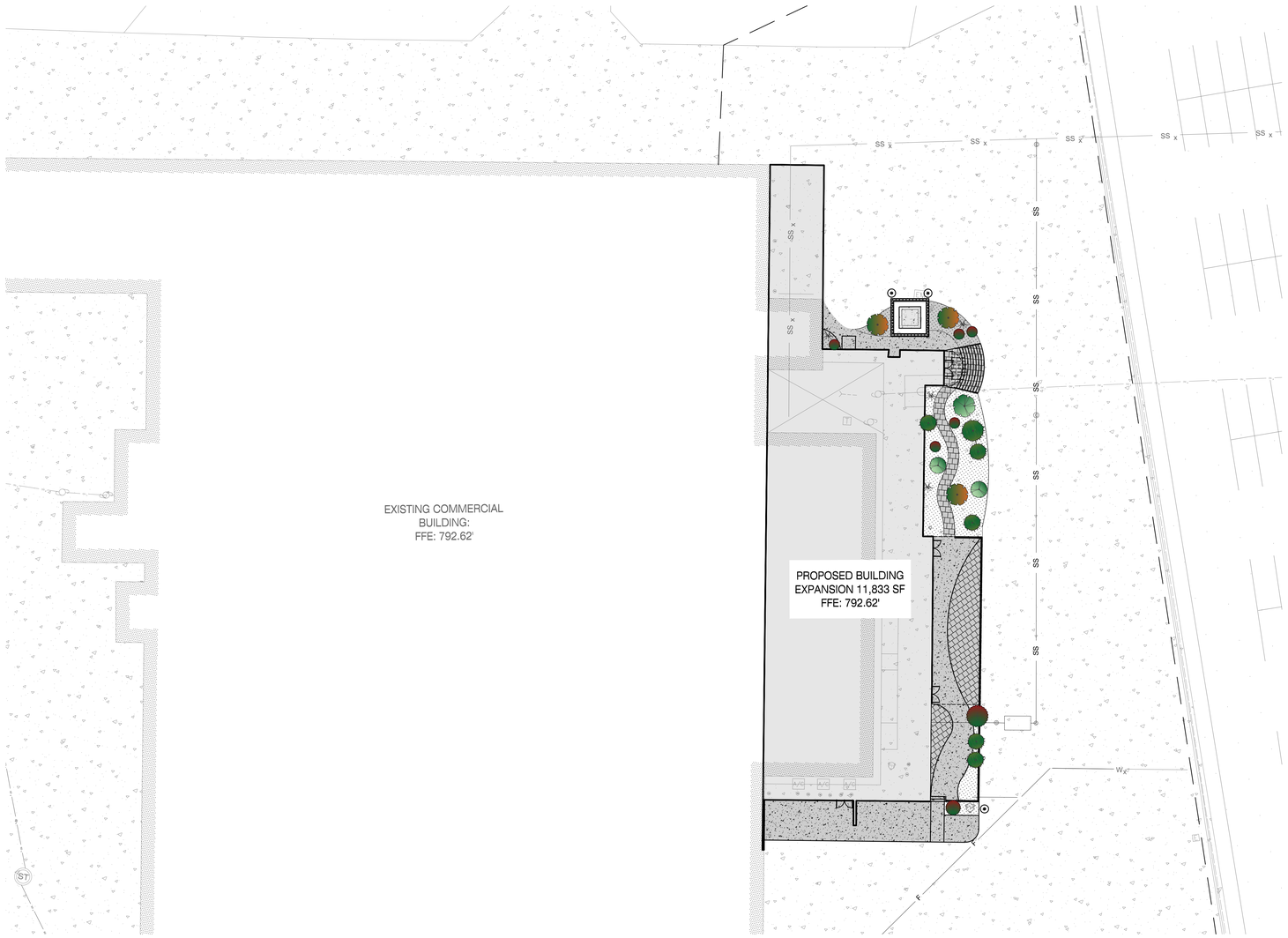
SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

SHEET TITLE:

CIVIL DETAILS

SHEET NO.:

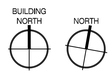
C801



LANDSCAPE PLANTING PLAN

SCALE: 1" = 20'-0"

1

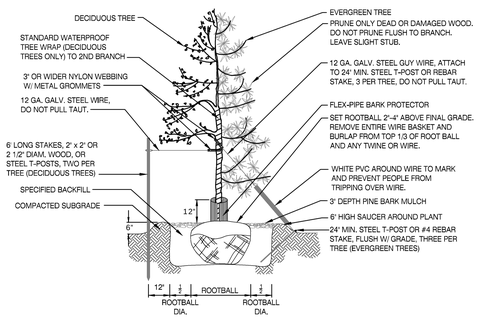


GENERAL LANDSCAPE NOTES

1. CARE IS TO BE TAKEN TO PROTECT ALL UNDERGROUND UTILITIES. THE GENERAL CONTRACTOR IS TO VERIFY AND MARK THE EXACT LOCATION OF ALL EXISTING UTILITIES (WATER, SEWER, GAS, ELECTRIC, SEPTIC TANKS, ETC.)
2. SOIL USED IN THE BACKFILL OF PLANTING PITS AND LANDSCAPE BEDS SHALL BE CLEAN AND WEED FREE, AND SHALL BE MIXED WITH 25% PEAT MOSS:PINE BARK BY VOLUME.
3. 12:6:6 PENNINGTON NURSERY FERTILIZER OR EQUAL SHALL BE USED IN ALL PLANTING PITS.
4. HERBICIDE, TREFLAN OR EQUAL TO BE APPLIED TO PLANTING BEDS FOR NOXIOUS WEED CONTROL.
5. ALL PLANTING BEDS TO HAVE A MINIMUM 3" OF PINE BARK MULCH.
6. PRESSURE TREATED WOODEN STAKES SHALL BE USED FOR TREES OVER 2" CALIPER OR IN AREAS WHERE HEAVY WIND IS A FACTOR.
7. ALL LANDSCAPING MATERIAL SHALL BE INSTALLED IN A PROFESSIONAL MANNER, AND ACCORDING TO ACCEPTED PLANTING PROCEDURES.
8. TOPSOIL FURNISHED BY THE OWNER OR LANDSCAPE CONTRACTOR SHALL BE NATURAL, FERTILE,FRIABLE SOIL POSSESSING CHARACTERISTICS REPRESENTATIVE OF PRODUCTIVE SOILS IN THE AREA. SOIL SHALL NOT BE EXCESSIVELY ACIDIC, ALKALINE OR TOXIC THAT IT MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHOULD BE FREE OF CLAY LUMPS, STONES, STUMPS, ROOTS, OR SUBSTANCE 2" OR MORE IN DIAMETER.
9. ALL TREES RETAINED OR NEW SHALL BE PROPERLY MAINTAINED TO ENSURE THEIR SURVIVAL FOR 12 MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION. ANY TREE WHICH FAILS TO SURVIVE AFTER 12 MONTHS SHALL BE REPLACED WITHIN 9 MONTHS OF LOSS.
10. LAWN QUALITY SHALL BE PROVIDED WITH FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSIS OF SEED VENDER'S CERTIFIED STATEMENT FOR EACH GRASS SEED MIXTURE.
    PROJECT CONDITIONS PROCEED WITH AND COMPLETE LAWNS AND GRASSES AS RAPIDLY AS PORTIONS OF SITE BECOME AVAILABLE. FERTILIZER WITH COMMERCIAL PERCENTAGE TO BE DETERMINED WITH ANALYSIS AND SEASON OF INSTALLATION. LIME TO BE NATURAL DOLOMITIC LIMESTONE CONTAINING NOT LESS THAN 85% OF TOTAL CARBONATE WITH MINIMUM OF 30% MAGNESIUM CARBONATES.
    SOD TYPE SHALL BE STRONGLY ROOTED, FRESHLY CULTIVATED SOD, NOT LESS THAN 1 YEAR OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES.
11. PROPOSED PLANT MATERIAL WILL NOT INTERFERE WITH ANY EXISTING AND/OR PLANNED UNDERGROUND OR OVERHEAD UTILITIES.
12. APPLY TEMPORARY SEEDING WHENEVER GRADING OPERATIONS ARE TEMPORARILY HALTED FOR OVER 14 DAYS AND FINAL GRADING OF EXPOSED SURFACES IS TO BE COMPLETED WITHIN ONE YEAR. APPLY TEMPORARY SEEDING TO SOIL STOCKPILES.
13. APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS, WHICH SHOW SIGNS OF EXCESSIVE EROSION.
14. THE GUYING OF TREES IS OPTIONAL BUT, THE LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR THE STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIALS. THE GUYING DETAILS ARE AN APPROVED METHOD OF TREE GUYING, OR EQUAL.
15. CONTRACTOR SHALL ADHERE TO ALL LOCAL LANDSCAPE ORDINANCES.

PLANT SCHEDULE

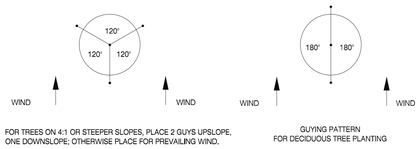
DECIDUOUS TREES	QTY	COMMON NAME / BOTANICAL NAME	SIZE	CAL	CONT
	3	RED MAPLE / Acer rubrum 'October Glory' TM	12-14`H	3"	B&B
EVERGREEN TREES	**QTY**	**COMMON NAME / BOTANICAL NAME**	**SIZE**	**CAL**	**CONT**
	1	WHITE FIR / Abies concolor	30-50`H	3"	
FLOWERING TREES	**QTY**	**COMMON NAME / BOTANICAL NAME**	**SIZE**	**CAL**	**CONT**
	1	REDBUD / Cercis canadensis	8-10`H	2"	B&B
	2	DOGWOOD / Cornus florida	15-30' H	2"	
	4	CRYPE MYRTLE / Lagerstoemia indica	10-12' H	2.5"	multi trunk B&B
EVERGREEN SHRUBS	**QTY**	**COMMON NAME / BOTANICAL NAME**	**SIZE**	**CONT**	
	5	BLUE POINT JUNIPER / Juniperus chinensis `Blue Point`	3-4`H	B&B	
	6	DWARF NANDINA / Nandina domestica `Gulf Stream`	12-15"H	3 gal	



TREE PLANTING & GUYING

SCALE: N.T.S.

2



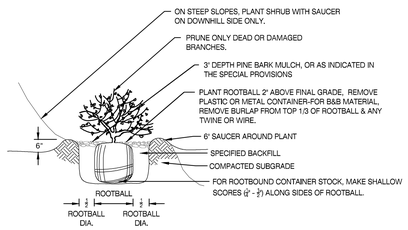
FOR TREES ON 4:1 OR STEEPER SLOPES, PLACE 2 GUYS UPSLOPE, ONE DOWNSLOPE; OTHERWISE PLACE FOR PREVAILING WIND.

GUYING PATTERN
FOR DECIDUOUS TREE PLANTING

GUYING PATTERN

SCALEN.T.S.

3



SHRUB PLANTING DETAIL

SCALE: N.T.S.

4

Know what's below.
Call before you dig.
In Tennessee call 811 or 1-800-351-1111

GRAPHIC SCALE

20 0 10 20 40 60

1 INCH = 20'

MBI

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, ALABAMA 35540

PROJECT NO.: 180789.04

NOTES

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- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/2019
DESIGNED BY:	L.S.B.
DRAWN BY:	S.J.C.
REVIEWED BY:	D.J.M.

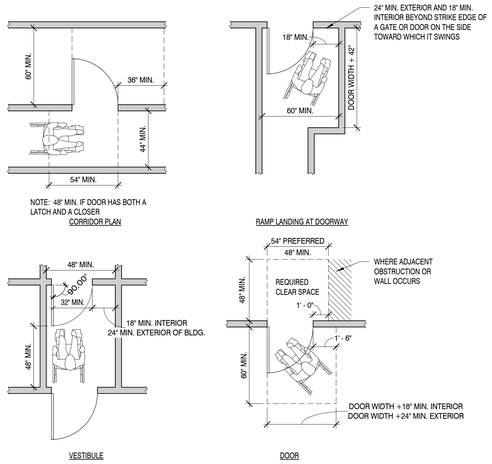
SHEET TITLE:

SITE LANDSCAPE PLAN

SHEET NO.:

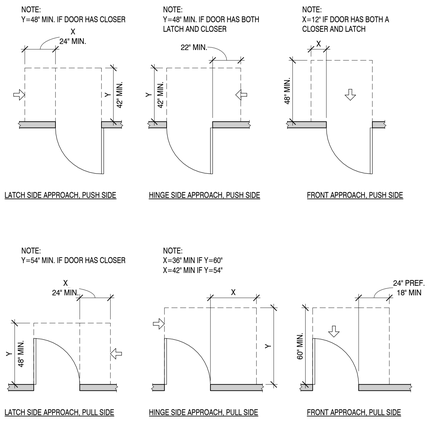
L100

NOTES:
1. CLEAR SPACES MUST BE LEVEL TO PREVENT WHEELCHAIRS FROM ROLLING WHEN THE OCCUPANT RELEASES THE WHEEL GRIPS TO REACH FOR THE DOOR. 1/4" SLOPE PER FOOT IS ALLOWED FOR DRAINAGE.
2. WHERE DOORS OPEN ONTO BUT NOT INTO A CORRIDOR. THE REQUIRED LEVEL AREA BEYOND THE DOORS MAY BE A MINIMUM OF 48" A.F.F.



CORRIDOR CLEARANCES 1

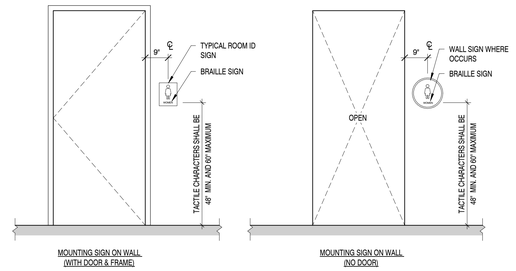
SCALE : 1/4" = 1'-0"



DOOR CLEARANCES 2

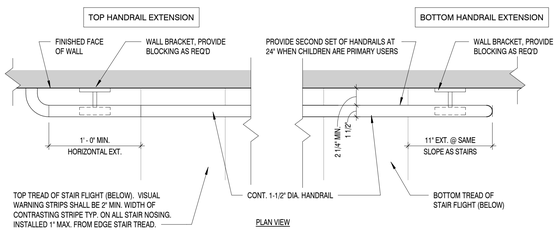
SCALE : 1/4" = 1'-0"

NOTES:
1. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT A DOOR, THE SIGN SHALL BE ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAVES, THE SIGN SHALL BE TO THE RIGHT OF THE RIGHT-HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR TO THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING RAISED CHARACTERS AND BRAILLE SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18 INCHES (455 MM) MINIMUM BY 18 INCHES (455 MM) MINIMUM, CENTERED ON THE RAISED CHARACTERS IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
2. RAISED CHARACTERS SHALL BE 48 INCHES (1200 MM) MINIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE LOWEST RAISED CHARACTER AND 60 INCHES (1525 MM) MAXIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE HIGHEST RAISED CHARACTER.



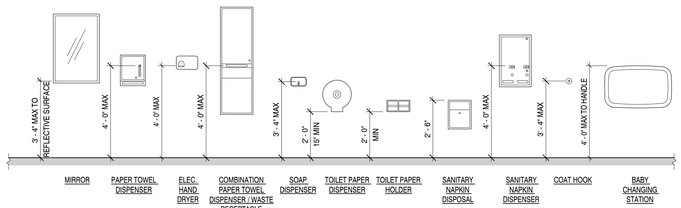
SIGNAGE NOTES AND DETAILS 3

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



STAIR HANDRAIL DETAILS AND NOTES 4

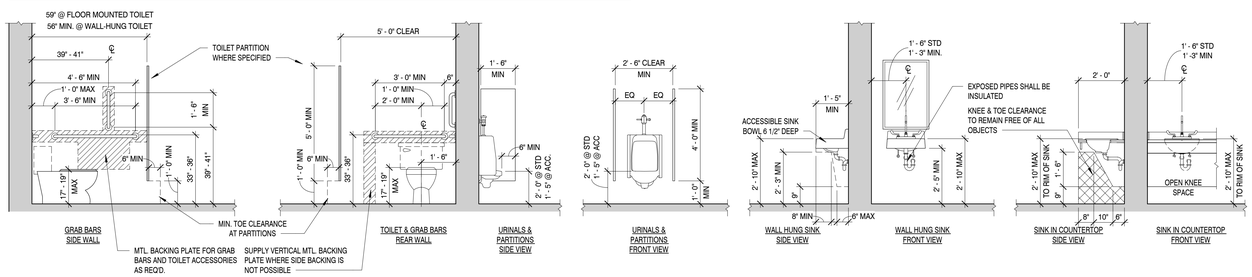
SCALE : 1 1/2" = 1'-0"



RESTROOM ACCESSORY MOUNTING HEIGHTS 5

SCALE : 3/8" = 1'-0"

NOTES:
1. ALL GRAB BARS SHALL BE 1 1/4" - 1 1/2"Ø W/ 1 1/2" CLEAR BETWEEN GRAB BAR & FINISH SURFACE OF WALL.
2. FIXED SIDE WALL GRAB BARS SHALL BE 42" MIN. IN LENGTH, LOCATED 12" MAX. FROM REAR WALL AND EXTENDING 54" MIN. FROM REAR WALL. IN ADDITION, A VERT. GRAB BAR 18" MIN. IN LENGTH SHALL BE MOUNTED WITH THE BOTTOM OF THE BAR BETWEEN 39" - 41" A.F.F. AND THE CENTER LINE OF THE BAR LOCATED BETWEEN 39" - 41" FROM REAR WALL. [ANSI 604.5.1]
3. REAR WALL GRAB BAR SHALL BE 36" MIN. IN LENGTH, AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12" MIN. ON SIDE CLOSEST TO WALL, AND 24" MIN. ON THE TRANSFER SIDE. [ANSI 604.5.2]
4. ALLOWABLE STRESS SHALL NOT BE EXCEED FOR MATERIALS USED WHERE A VERT. OR HORZ. FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE. [ANSI 609.8]
5. GRAB BARS SHALL BE INSTALLED IN A HORIZ. POSITION, 33" MIN - 36" MAX. A.F.F. MEASURED TO THE TOP OF THE GRIPPING SURFACE. [ANSI 609.4]



PLUMBING FIXTURES DETAILS 6

SCALE : 3/8" = 1'-0"

GENERAL NOTES

1. THE ARCHITECT HAS MADE EVERY EFFORT TO SET FORTH IN THE CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS AND DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS SHALL NOT EXCUSE HIM FROM PROVIDING A COMPLETED FACILITY AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. IN THE EVENT OF DISCREPANCIES, CONTRACTOR SHALL PRICE THE MORE EXPENSIVE AND EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

2. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. THE DRAWINGS, GENERAL NOTES AND SPECIFICATIONS ARE COMPLIMENTARY, AND WHAT IS CALLED FOR BY ANY WILL BE BINDING AS IF CALLED FOR BY ALL. WORK SHOWN OR REFERRED TO ON ANY DRAWING SHALL BE PROVIDED AS THOUGH SHOWN ON ALL RELATED DRAWINGS. IF THERE IS ANY CONFLICT OR DISCREPANCY WITHIN OR BETWEEN ANY OF THE CONTRACT DOCUMENTS INVOLVING THE QUALITY OR QUANTITY OF WORK REQUIRED, THE WORK OF HIGHEST QUALITY AND/OR GREATEST QUANTITY SHOWN OR SPECIFIED SHALL BE FURNISHED.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL CONTRACT DOCUMENTS AND FIELD CONDITIONS, AND CONFIRM THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION.

4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT. THE CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS ANNOTATED WITH THE LATEST REVISIONS AND CLARIFICATIONS FOR THE USE BY ALL.

5. CONDUCT OPERATIONS IN SUCH A MANNER AS TO MINIMIZE INTERFERENCE WITH USE OF PUBLIC WAYS AND ADJACENT USED FACILITIES. DO NOT CLOSE, BLOCK OR OTHERWISE OBSTRUCT USE OF PUBLIC WAYS OR FACILITIES WITHOUT WRITTEN CONSENT OF AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES TO CLOSED OR OBSTRUCTED FACILITIES AS REQUIRED BY LOCAL REGULATIONS.

6. EXCEPT WHERE OTHERWISE SPECIFIED, THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER TO MAINTAIN ALL WORK, MATERIALS, APPARATUS, AND FIXTURES FROM INJURY OR DAMAGES. AT THE END OF THE DAY'S WORK, ALL NEW WORK LIKELY TO BE DAMAGED SHALL BE COVERED OR OTHERWISE PROTECTED AS REQUIRED.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS OWN TELEPHONE AND TOILET FOR ALL SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TAPS, EXTENSIONS, VALVES, OR OTHER DEVICES NECESSARY TO RUN POWER TOOLS AND EQUIPMENT. SUCH MODIFICATIONS TO EXISTING UTILITIES MUST BE REMOVED AT COMPLETION OF THE PROJECT.

8. THE CONTRACTOR SHALL LIMIT THE INGRESS AND EGRESS OF WORKERS AND EQUIPMENT TO THE CONSTRUCTION SITE TO AUTHORIZED PERSONS ONLY. DAMAGE TO ANY EXISTING INTERIOR OR EXTERIOR CONSTRUCTION SHALL BE REPAIRED TO "LIKE NEW" CONDITION UNDER THIS CONTRACT.

9. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ADEQUATE SAFETY BARRICADES FOR PROTECTION OF JOB PERSONNEL AND THE PUBLIC AND CLEAR ACCESS IN AND OUT OF THE WORK SITE SO AS TO FACILITATE DAILY TRAFFIC MOVEMENT, DELIVERIES, AND SAFETY. REMOVE BARRICADES WHEN NO LONGER REQUIRED.

10. REMOVE DEBRIS, RUBBISH, AND OTHER SUBSTANCES FROM SITE. LEGALLY TRANSPORT AND DISPOSE OF SUCH MATERIALS OFF-SITE. BURYING OR BURNING OF "TO BE REMOVED" MATERIALS ON THE PROJECT SITE IS FORBIDDEN.

11. COOPERATE WITH THE APPLICABLE CITY OR OTHER GOVERNMENT OFFICIALS AND INSPECTORS AT ALL TIMES. IF SUCH OFFICIAL OR INSPECTOR DEEMS SPECIAL INSPECTION NECESSARY, PROVIDE ALL ASSISTANCE AND FACILITIES THAT WILL EXPEDITE HIS INSPECTION.

12. ALL DETAILS OF CONSTRUCTION SHALL CONFORM WITH THE APPLICABLE CODES (SEE PROJECT INFORMATION ON COVER SHEET)

13. PROVIDE HIGH SECURITY SURFACE MOUNTED BOX W/ TAMPER SWITCH (FIRE DEPARTMENT KEY BOX) AT THE ENTRANCE. THREE COMPLETE SETS OF KEYS MUST BE PROVIDED. KEYS MUST BE PROVIDED FOR ALL ROOMS CONTAINING FIRE AND LIFE SAFETY SYSTEM CONTROLS. PRIOR TO INSTALLATION VERIFY EXACT LOCATION AND EXACT TYPE OF BOX REQUIRED WITH LOCAL AUTHORITY HAVING JURISDICTION.

14. MOUNT FIRE EXTINGUISHERS LISTED IN SPECIFICATIONS AT LOCATIONS SHOWN AND/OR DIRECTED BY FIRE DEPARTMENT CODE OFFICIAL HAVING JURISDICTION.

15. INSTALL ALL MANUFACTURED ITEMS, MATERIALS, AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDED SPECIFICATIONS, UNLESS OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK.

16. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO AFFECT ALL INSTALLATIONS INDICATED ON THE DRAWINGS. THE WORK SHALL ALSO INCLUDE ALL MATERIALS, DETAIL AND LABOR NECESSARY FOR THE SUCCESSFUL INSTALLATION OF THE WORK DESCRIBED HEREIN.

17. ALL DIMENSIONS ARE TO FACE OF CONC. BLOCK, CONC. PANEL, FACE OF EXISTING FINISH, OR FACE OF NEW STUD, UNLESS OTHERWISE NOTED. "CLEAR" DENOTES FINISH TO FINISH DIMENSIONS.

18. CONTRACTOR IS TO COORDINATE THE BUILDING PLANS WITH THE CIVIL AND SURVEY DRAWINGS FOR EXACT ELEVATIONS AND SLOPES OF EXTERIOR GRADES FOR INSTALLATION OF NEW EXTERIOR STAIRS, RAMPS AND SIDEWALKS. CONTRACTOR TO FIELD VERIFY EXTERIOR GRADES AT BUILDING ENTRANCES TO ALIGN WITH FINISHED FLOOR ELEVATIONS AND/OR NEW STAIR/RAMP ELEVATIONS. GRADING AT BUILDING PERIMETER TO SLOPE AWAY FROM BUILDING MIN. 1/4" PER FOOT.

19. ALL GRADES, LINES, LEVELS, AND DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY ERROR OR INCONSISTENCY SHALL BE REPORTED TO THE ARCHITECT FOR INSTRUCTIONS PRIOR TO START OF CONSTRUCTION.

20. CONTRACTOR IS TO FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR POSSIBLE CONFLICTS.

21. CONTRACTOR IS TO FIELD VERIFY LOCATIONS AND RUNS OF ALL NEW AND EXISTING STORM SEWER PIPING AND ROOF TIE-INS. REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO START OF CONSTRUCTION.

22. DO NOT INTERRUPT EXISTING UTILITIES IN OCCUPIED FACILITIES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. IF INTERRUPTION IS ALLOWED, PROVIDE ALTERNATE TEMPORARY SERVICES ACCEPTABLE TO GOVERNING AUTHORITIES. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES 48 HOURS PRIOR TO ANY DEMOLITION WORK.

23. CONTRACTOR SHALL PERFORM HIGH QUALITY PROFESSIONAL WORK. JOIN MATERIALS TO UNIFORM ACCURATE FITS SO THEY MEET WITH NEAT, STRAIGHT LINES, FREE OF SMEARS OR OVERLAPS. INSTALL EXPOSED MATERIALS APPROPRIATELY LEVEL, PLUMB AND AT THE ACCURATE RIGHT ANGLES, OR FLUSH WITH ADJOINING MATERIALS. WORK OF EACH TRADE SHALL MEET ALL NATIONAL STANDARDS PUBLISHED BY THAT TRADE.

24. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS. ANY DIFFERENCES BETWEEN DIMENSIONS INDICATED ON THE DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR INSTRUCTIONS AND CONSIDERATIONS BEFORE PROCEEDING WITH THE WORK.

25. FURNISH AND INSTALL ALL REQUIRED BACKING FOR ALL SHELVES, CABINETS, FIXTURES, HANDRAILS AND EQUIPMENT. COORDINATING WITH OWNER AND CONTRACTOR FOR EXACT SIZE, NUMBER, AND LOCATION PRIOR TO START OF CONSTRUCTION. METAL BACKING PLATES TO BE FLAT STOCK (20 GAUGE MIN.) WHEN APPLIED TO METAL FRAMING. ALL WOOD BLOCKING, NAILERS, ETC. MUST BE FIRE RETARDANT TREATED.

26. GLAZING IN DOORS AND ADJACENT PANELS MUST BE TEMPERED. RESPONSIBILITY OF GLAZING SUBCONTRACTOR TO VERIFY & PLACE TEMPERED GLASS AS REQUIRED BY THE LOCAL BUILDING CODE & INSPECTOR.

27. SPOUT OUTLETS FOR WHEELCHAIR ACCESSIBLE DRINKING FOUNTAINS SHALL BE 36" MAX A.F.F. AND FOR STANDING PERSONS SHALL BE 38" MIN A.F.F. AND 43" MAX. A.F.F.

28. PROVIDE WATER RESISTANT & MOLD RESISTANT GYP. BD. AT ALL WET LOCATIONS.

29. FILL ALL C.M.U. CELLS BELOW FINISH FLOOR OR FINISHED GRADE, WHICHEVER IS HIGHER SHALL BE SOLID GROUTED.

30. PROVIDE ADA COMPLIANT SIGNAGE AT ALL TOILET AND BATHROOMS. APPROPRIATELY IDENTIFIED AS "MEN" AND "WOMEN".

31. ALL TOILET ROOMS AND BATHROOMS WALLS SHALL EXTEND FROM FINISH FLOOR TO FLOOR/ ROOF DECK ABOVE, PROVIDE SOUND BATT INSULATION IN ENTIRE STUD CAVITY.

32. ALL WALLS WITHIN 24" OF SERVICE SINK, URINAL AND/ OR WATER CLOSET SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE, TO A HEIGHT OF NOT LESS THAN 48" A.F.F. IF TILE OR FRP IS NOT SPECIFIED PROVIDE EPOXY PAINT, COLOR TO BE SELECTED BY ARCHITECT.

33. ALL WALL BASE IN TOILET ROOMS, BATHROOMS AND KITCHENS SHALL BE COVED AND EXTEND UPWARD ONTO THE WALL A MIN. OF 4" A.F.F.

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

GENERAL NOTES AND ACCESSIBILITY DETAILS

SHEET NO.:

A000

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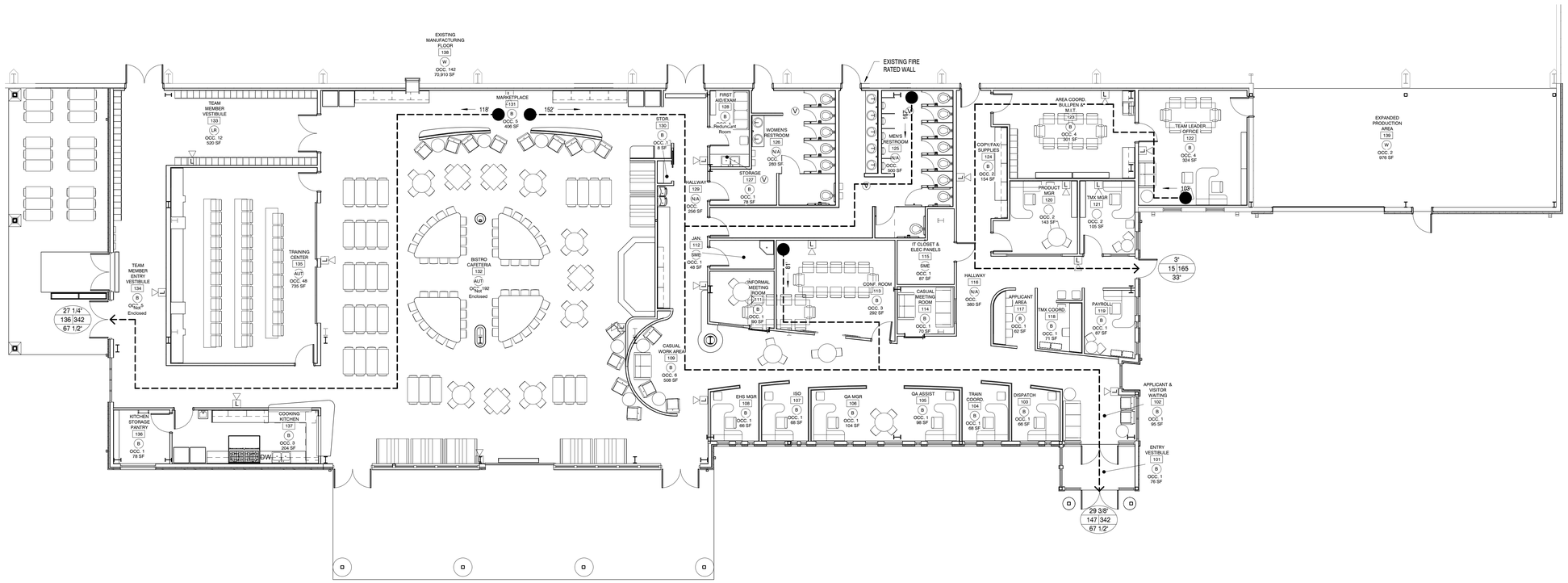


FIRST FLOOR LIFE SAFETY PLAN

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

1

BUILDING OCCUPANCY

BUILDING OCCUPANCY CLASSIFICATIONS PER IBC CHAPTERS 3, 4, 5

BUILDING OCCUPANCY GROUP: *IBC CHAPTER 3*

○ GROUP A-1	○ GROUP H-1	○ GROUP M
○ GROUP A-2	○ GROUP H-2	○ GROUP R-1
○ GROUP A-3	○ GROUP H-3	○ GROUP R-2
○ GROUP A-4	○ GROUP H-4	○ GROUP R-3
○ GROUP A-5	○ GROUP H-5	○ GROUP R-4
○ GROUP B	● GROUP I-1	○ GROUP S-1
○ GROUP E	○ GROUP I-2	○ GROUP S-2
○ GROUP F-1	○ GROUP I-3	○ GROUP U
○ GROUP F-2	○ GROUP I-4	

MIXED USE / OCCUPANCY: *IBC SECTIONS 508 / 509*

○ ACCESSORY OCCUPANCIES	*IBC SECTION 508.2*
○ NONSEPARATED OCCUPANCIES	*IBC SECTION 508.3*
○ SEPARATED OCCUPANCIES	*IBC SECTION 508.4*
○ INCIDENTAL USES	*IBC SECTION 509*

SPECIAL REQUIREMENTS: *IBC CHAPTERS 4, 5*

○ HIGH-RISE BUILDING	*IBC SECTION 403*
○ ATRIUM	*IBC SECTION 404*
○ HAZARDOUS MATERIALS	*IBC SECTION 414*
○ MEZZANINE	*IBC SECTION 505.2*
○ EQUIPMENT PLATFORM	*IBC SECTION 505.3*

CONSTRUCTION TYPE AND ALLOWABLE BUILDING AREA

BUILDING AREAS AND CONSTRUCTION TYPE PER IBC CHAPTER 5

CONSTRUCTION TYPE:
IBC CHAPTER 5

CLASS	TYPE I	II	III	IV	V
A					
B	●				
HT					

BUILDING AREA MODIFICATIONS: *IBC CHAPTER 5*

● AUTOMATIC SPRINKLER SYSTEM	
○ HEIGHT INCREASE	*IBC SECTION 504.2*
○ AREA INCREASE	*IBC SECTION 506.3*
○ FRONTAGE INCREASE	*IBC SECTION 506.2*
○ UNLIMITED AREA	*IBC SECTION 507*

BUILDING AREA AND HEIGHT: *IBC TABLE 503*

MAXIMUM AREA ALLOWED:	UNLIMITED
ACTUAL BUILDING AREA:	182,200
MAXIMUM HEIGHT ALLOWED:	1 STORY
ACTUAL BUILDING HEIGHT:	1 STORY

FIRE RESISTANCE RATING REQUIREMENTS

FIRE RESISTANCE RATING REQUIREMENTS PER IBC TABLE 601

TYPE OF CONSTRUCTION:	IIB
PRIMARY STRUCT FRAME:	0 HOURS
BEARING WALLS (EXT):	0 HOURS
BEARING WALLS (INT):	0 HOURS
NONBEARING WALLS AND PARTITIONS (EXT):	PER IBC TABLE 602
NONBEARING WALLS AND PARTITIONS (INT):	0 HOURS
FLOOR CONSTRUCTION:	0 HOURS
ROOF CONSTRUCTION:	0 HOURS

IBC TABLE 602: EXTERIOR WALL FIRE RATING

SEPERATION DISTANCE	CONS TYPE	OCCUPANCY GROUP H	F-1, M, S-1	A, B, E, F-2, I, R, S-2, U
X < 5	ALL	3	2	1
5 ≤ X ≤ 10	IA	3	2	1
	OTHERS	2	1	1
10 ≤ X ≤ 30	IA, IB	2	1	1
	IIB, VB	1	0	0
	OTHERS	1	1	1
X ≥ 30	ALL	0	0	0

LIFE SAFETY CODE SPACE FUNCTIONS PER IBC TABLE 1004.1.2

ABBREV	SPACE FUNCTION	SF PER PERSON	GROSS / NET SF
AUT	ASSEMBLY - UNCONCENTRATED (TABLES AND CHAIRS)	15	NSF
B	BUSINESS AREAS	100	GSF
LR	LOCKER ROOMS	50	GSF
N/A	CORE	0	
SME	ACCESSORY STORAGE AREA / MECHANICAL ROOM	300	GSF
W	WAREHOUSES	500	GSF

LIFE SAFETY LOAD CALCULATIONS

AREA NO.	NAME	SQ.FT.	OCCUPANT LOAD LOAD FACTOR	CALCULATED LOAD
ACCESSORY STORAGE AREA / MECHANICAL ROOM				
4	MECH/STOR.	Not Placed	300	
5	JAN./ELEC.	Not Placed	300	
8	FIRE RISER ROOM	Not Placed	300	
ASSEMBLY - UNCONCENTRATED (TABLES AND CHAIRS)				
7	BREAK ROOM/TRAINING	Not Placed	15	
BUSINESS AREAS				
2	BUSINESS OFFICES	Not Placed	100	
CORE				
3	RESTROOMS	Not Placed		
LOCKER ROOMS				
6	LOCKER ROOM	Not Placed	50	
WAREHOUSES				
1	EXISTING MANUFACTURING FLOOR	Not Enclosed	500	
GRAND TOTALS		0 SF		0

LIFE SAFETY PLAN LEGEND

AREA OCCUPANCY TAG
- AREA NAME
- AREA NUMBER
- AREA OCCUPANT TYPE
- AREA OCCUPANT LOAD
- AREA SQUARE FOOTAGE

DOOR / STAIR EGRESS TAG
- REQ WIDTH
- ACTUAL LOAD
- 30"
- 150 | 180
- 96"
- MAX LOAD
- ACTUAL WIDTH

F — FIRE ALARM PULL STATION

L — CEILING MOUNTED FIRE ALARM COMBINATION AUDIO/VISUAL SPEAKER STROBE DEVICE

L — CEILING MOUNTED FIRE ALARM VISUAL STROBE DEVICE

EXIT SIGN

S — CEILING MOUNTED SMOKE DETECTOR DEVICE

FACP — FIRE ALARM CONTROL PANEL

FEC — FIRE EXTINGUISHER CABINET MTD W/ HIGHEST OPERABLE PART @ 48" AFF MAX

INDICATES DISTANCE TO EXIT
##'

PATH OF TRAVEL

0 HOUR RATED WALL

1 HOUR RATED WALL

2 HOUR RATED WALL

FUTURE TENANT WALL

NOTE: ALL FURNITURE BY OWNER & SHOWN FOR COORDINATION PURPOSES ONLY

MEANS OF EGRESS

DOORS: *PER IBC 1008*
- THE CLEAR WIDTH OF AN EGRESS DOOR OPENING SHALL NOT BE LESS THAN 32" AND NOT MORE THAN 48". THE CLEAR HEIGHT OF AN EGRESS DOOR OPENING SHALL NOT BE LESS THAN 80".
- DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL WHERE SERVING A ROOM OR AREA CONTAINING AN OCCUPANT LOAD OF 50 OR MORE PERSONS OR A GROUP H OCCUPANCY.

STAIRWAYS: *PER IBC 1009*
- THE CLEAR WIDTH OF A STAIRWAY SHALL NOT BE LESS THAN 44", THE MINIMUM HEADROOM SHALL NOT BE LESS THAN 80" AS MEASURED FROM THE NOSING.

ADDITIONAL FIRE RESISTANCE RATING INFORMATION

DESCRIPTION	FIRE RATING	CODE
SHAFT / HOISTWAY ENCLOSURES		*PER IBC 713.4 / 3002.1*
• 4 STORIES OR GREATER	2 HR	
• LESS THAN 4 STORES	1 HR	
EXIT ENCLOSURES		*PER IBC 1022.2*
• 4 STORIES OR GREATER	2 HR	
• LESS THAN 4 STORES	1 HR	
EXIT PASSAGEWAYS	1 HR	*PER IBC 1023.3*

CORRIDOR FIRE RATING PER IBC TABLE 1018.1

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQ FIRE RATING W/ SPRINKLER SYSTEM
A	> 30	0 HOURS
B	> 30	0 HOURS
F	> 30	0 HOURS

EGRESS DOOR SCHEDULE

DOOR MARK	WIDTH REQUIRED	WIDTH PROVIDED	EGRESS OCCUPANT LOAD	MAXIMUM LOAD

LIFE SAFETY SYSTEMS:

LIFE SAFETY SYSTEMS ARE PER IBC CHAPTER 9

● AUTOMATC SPRINKLER SYSTEM PER NFPA 13	
○ FIRE ALARM SYSTEM PER NFPA 72	
○ PORTABLE FIRE EXTINGUISHERS PER NFPA 10	
○ STANDPIPE SYSTEM PER NFPA 14	

MIN NUMBER OF EXITS PER IBC 1015

OCCUPANT LOAD	MIN NUMBER OF EXITS PER STORY
1-500	2
501-1000	3
> 1000	4

COMMON PATH OF TRAVEL PER IBC 1014.3

OCCUPANCY	SPRINKLERED	MAX DISTANCE
A	YES	IBC 1028.8
B	YES	100 FT
F	YES	100 FT

MAXIMUM TRAVEL DISTANCE PER IBC 1016.2

OCCUPANCY	SPRINKLERED	MAX DISTANCE
A	YES	250 FT
B	YES	300 FT
F-1	YES	250 FT

EGRESS CAPACITY FACTORS

EGRESS CAPACITY FACTORS ARE PER: IBC 1005

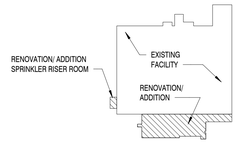
● AUTOMATC SPRINKLER SYSTEM	
○ EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM	
MINIMUM REQUIRED EGRESS WIDTH:	
STAIRWAYS:	0.3
OTHER EGRESS COMPONENTS:	0.2

SPACES WITH ONE EXIT PER IBC TABLE 1015.1

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E, F, M, U	49
H-1, H-2, H-3	3
H-4, H-5, I, R	10
S	29

DEAD END CORRIDOR PER IBC 1018.4

OCCUPANCY	SPRINKLER	MAX DISTANCE
A	YES	20 FT
B	YES	50 FT
F-1	YES	50 FT



COMPOSITE PLAN

SCALE :N.T.S.

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PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
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DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

LIFE SAFETY PLAN

SHEET NO.:

A001

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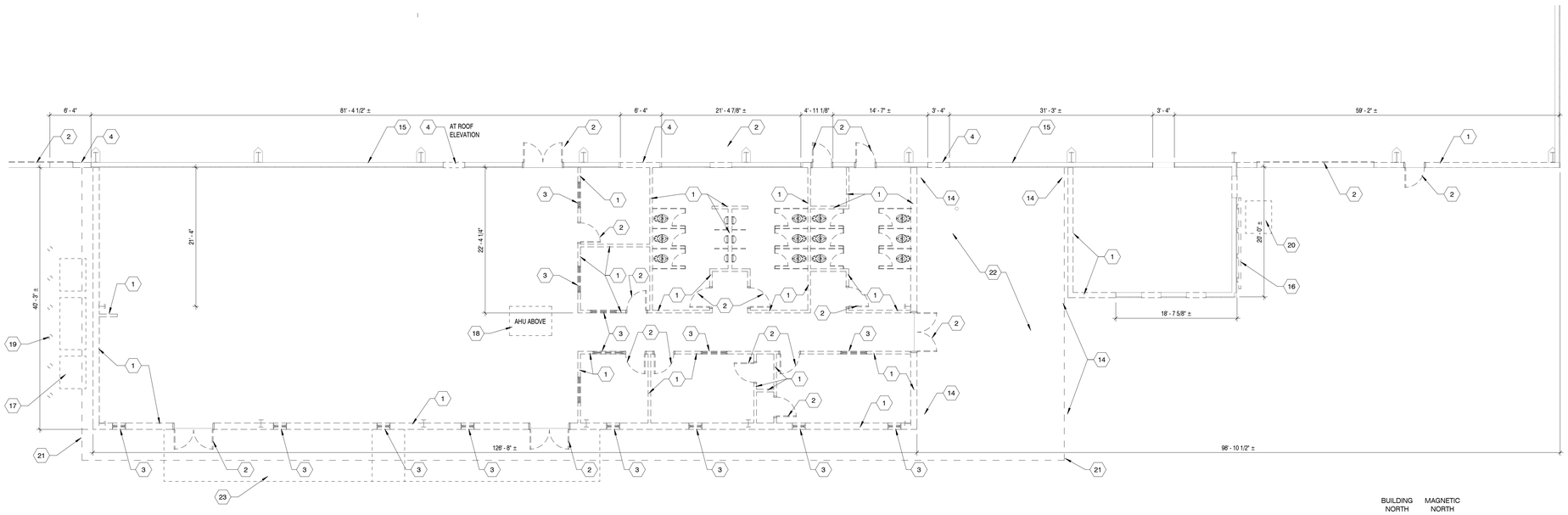


DEMOLITION FLOOR PLAN

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

1

BUILDING NORTH

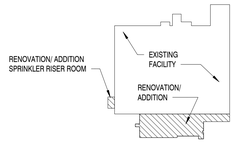
MAGNETIC NORTH

DEMOLITION PLAN KEYNOTES

1. EXISTING PARTITION/ WALL TO BE REMOVED.
2. EXISTING DOOR AND FRAME TO BE REMOVED
3. EXISTING WINDOW AND FRAME TO BE REMOVED.
4. PORTION OF EXISTING WALL TO BE REMOVED TO ALLOW FOR NEW DOOR/ WINDOW OPENING.
5. EXISTING GYP. BD. CEILING, ALUMINUM SLAT SOFFIT, AND/OR ACOUSTICAL CEILING TILE AND GRID TO BE REMOVED.
6. EXISTING LIGHT FIXTURES IN THIS AREA TO BE REMOVED.
7. EXISTING FLOOR FINISH TO BE REMOVED IN THIS AREA.
8. EXISTING MILLWORK TO BE REMOVED.
9. EXISTING STOREFRONT TO BE REMOVED.
10. EXISTING HVAC REGISTERS AND/OR DIFFUSERS TO BE REMOVED.
11. EXISTING SPRINKLER HEADS TO BE REMOVED.
12. EXISTING EXHAUST FANS TO BE REMOVED.
13. EXISTING MEZZANINE STAIRS TO REMAIN.
14. EXISTING STEEL COLUMN TO BE REMOVED.
15. EXISTING FIRE RATED WALL TO REMAIN.
16. EXIST ARMCO BARRIER & POSTS TO BE SAVED FOR FUTURE USE.
17. EXIST MECHANICAL UNITS TO BE REMOVED.
18. EXIST MECHANICAL AIR HANDLER TO BE REMOVED.
19. EXIST STEEL PIPE BOLLARDS TO BE REMOVED.
20. EXIST STEEL FRAMED PLATFORM TO BE REMOVED.
21. EXIST MANSARD PARAPET AND FRAMING AND SOFFIT TO BE REMOVED.
22. EXIST CONCRETE SLAB TO BE REMOVED.
23. EXIST CONCRETE RAMP AND GAURDRAIL TO BE REMOVED.

DEMOLITION NOTES

1. DO ALL DEMOLITION WORK REQUIRED TO REMOVE EXISTING WALLS, PAVING, FOUNDATIONS, SLABS, DOORS WINDOWS, ETC. INDICATED AND AS SHOWN ON THE DRAWINGS AND ANY OTHER NECESSARY ITEMS TO INSTALL THE NEW WORK.
2. CONTRACTORS SUBMITTING PROPOSALS SHALL DETERMINE THE QUANTITIES OF DEMOLITION WORK REQUIRED BY PERSONAL OBSERVATION AT THE BUILDING AND ON THE SITE PRIOR TO BIDDING.
3. MAINTAIN TEMPORARY BARRICADES FOR THE PROTECTION OF JOB PERSONNEL AND THE PUBLIC. REMOVEBARRICADES WHEN NO LONGER REQUIRED.
4. PROMPTLY REPAIR ANY DAMAGES CAUSED BY DEMOLITION WORK AT NO COST TO THE OWNER.
5. CONDUCT OPERATIONS IN SUCH A MANNER AS TO MINIMIZE INTERFERENCE WITH USE OF PUBLIC WAYS AND ADJACENT USED FACILITIES. DO NOT CLOSE, BLOCK OR OTHERWISE OBSTRUCT USE OF PUBLIC WAYS OR FACILITIES WITHOUT WRITTEN CONSENT OF AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES TO CLOSED OR OBSTRUCTED FACILITIES AS REQUIRED BY LOCAL REGULATIONS.
6. THE USE OF EXPLOSIVES IS NOT REQUIRED BY THE SCOPE OF WORK AND IS STRICTLY PROHIBITED.
7. EXISTING UTILITIES INDICATED TO REMAIN SHALL BE KEPT IN SERVICE AND PROTECTED FROM DAMAGE DURING DEMOLITION OPERATIONS.
8. DO NOT INTERRUPT EXISTING UTILITIES USED FOR OCCUPIED FACILITIES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES WHO HAVE JURISDICTION. IF INTERRUPTION IS ALLOWED, PROVIDE ALTERNATE TEMPORARY SERVICES ACCEPTABLE TO GOVERNING AUTHORITIES.
9. TO THE GREATEST EXTENT PRACTICABLE, LIMIT THE SPREAD OF DUST AND DIRT THROUGH THE USE OF WATER SPRINKLING, ENCLOSURES, AND OTHER SUITABLE METHODS. COMPLY WITH GOVERNING REGULATIONS WITH RESPECT TO ENVIRONMENTAL PROTECTION.
10. HISTORIC ARTIFACTS, INCLUDING CORNERSTONES, THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, ANTIQUES, AND OTHER ARTICLES OF HISTORIC SIGNIFICANCE SHALL REMAIN THE PROPERTY OF THE OWNER. NOTIFY OWNER'S REPRESENTATIVES IF SUCH ARTICLES ARE ENCOUNTERED. OBTAIN APPROVAL REGARDING METHOD OF REMOVAL. SALVAGE SUCH ARTICLES AND TURN THEM OVER TO THE OWNER.
11. REMOVE DEBRIS, RUBBISH AND OTHER SUBSTANCES FROM SITE. LEGALLY TRANSPORT AND DISPOSE OF SUCH MATERIALS OFF-SITE.
12. BURYING OF TO BE REMOVED MATERIALS ON THE PROJECT SITE IS PROHIBITED.
13. IF HAZARDOUS MATERIALS ARE ENCOUNTERED, COMPLY WITH APPLICABLE REGULATIONS IN HANDLING, REMOVING, AND PROTECTING AGAINST EXPOSURE OR ENVIRONMENTAL POLLUTION.
14. BURNING OF REMOVED MATERIALS ON THE PROJECT SITE IS PROHIBITED.
15. STRUCTURES NOTED FOR DEMOLITION WORK SHALL BE AVAILABLE FOR DEMOLITION UPON AWARD OF CONTRACT.
16. AVAILABILITY FOR DEMOLITION MUST BE CONFIRMED BY OWNER 48 HOURS PRIOR TO DEMOLITION.
17. CONTRACTORS SHALL COORDINATE WITH ALL UTILITY COMPANIES 48 HOURS PRIOR TO ANY DEMOLITIONWORK.
18. THE CONTRACTOR SHALL OBSERVE EXISTING CONDITIONS AND SHALL TAKE SUCH PRECAUTIONS AS NECESSARY. INCLUDING THE PLACEMENT OF TEMPORARY SHORING TO SUPPORT THE BUILDING STRUCTURE IF NECESSARY UNTIL NEW SUPPORTING CONSTRUCTION IS IN PLACE.
19. G.C. IS TO COORDINATE WITH OWNER'S REPRESENTATIVE ON ALL THE REMOVAL, REPLACEMENT AND/OR REUSE OF ANY EXISTING EQUIPMENT AND FIXTURES, BEFORE DEMOLITION.
20. WHERE EXISTING WALLS, DOORS, WINDOWS, COVERINGS, FLOORS, ETC. ARE TO BE REMOVED, THE CONTRACTOR SHALL REPAIR, LEVEL AND SMOOTH THE MALL SURFACES REMAINING TO RECEIVE NEW FINISHES.
21. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN PERFORMING DEMOLITION TO PREVENT THE SPREAD OF DUST AND DEBRIS AND TO PROTECT EXISTING MATERIALS AND FINISHES FROM DAMAGE.
22. CONTRACTOR TO REMOVE ANY AND ALL EXISTING TRIM, WALL COVERING, INSULATION AND ANY OTHER ITEMS NOT NOTED TO BE DEMOLISHED/REMOVED, PRIOR TO NEW CONSTRUCTION, VERIFY W/OWNER AND ARCHITECT PRIOR TO BIDDING AND PRIOR TO DEMOLITION FOR ALL ITEMS TO BE REMOVED.
23. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR SHALL VISIT THE JOB SITE TO REVIEW SCOPE OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION.
24. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES AND LABOR NECESSARY TO AFFECT ALL INSTALLATIONS INDICATED ON THE DRAWINGS. THE WORK SHALL ALSO INCLUDE ALL MATERIALS, DETAIL AND LABOR NECESSARY FOR THE SUCCESSFUL INSTALLATION OF THE WORK DESCRIBED HEREIN.
25. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS. ANY DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR INSTRUCTIONS AND CONSIDERATIONS BEFORE PROCEEDING WITH THE WORK.
26. ALL GRADES, LINES, LEVELS AND DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY ERROR OR INCONSISTENCY SHALL BE REPORTED TO THE ARCHITECT FOR INSTRUCTIONS PRIOR TO START OF CONSTRUCTION.
27. COOPERATE WITH THE APPLICABLE CITY OR OTHER GOVERNMENT OFFICIALS AND INSPECTORS AT ALL TIMES. IF SUCH OFFICIAL OR INSPECTOR DEEMS SPECIAL INSPECTIONS NECESSARY, PROVIDE ALL ASSISTANCE AND FACILITIES THAT WILL EXPEDITE HIS INSPECTION.
28. COOPERATE WITH THE APPLICABLE CITY OR OTHER GOVERNMENT OFFICIALS AND INSPECTORS AT ALL TIMES. IF SUCH OFFICIAL OR INSPECTOR DEEMS SPECIAL INSPECTIONS NECESSARY, PROVIDE ALL ASSISTANCE AND FACILITIES THAT WILL EXPEDITE HIS INSPECTION.
29. INSTALL ALL MANUFACTURED ITEMS, MATERIALS, AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURES RECOMMENDED SPECIFICATIONS, UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
30. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE, AS A MINIMUM STANDARD, WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION, CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK.
31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS OWN TELEPHONE (W/FAX), TOILET, WATER, AND ELECTRICITY FOR ALL PROJECT FUNCTIONS.
32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TAPS, EXTENSIONS, VALUES, OR OTHER DEVICES NECESSARY TO RUN POWER TOOLS AND EQUIPMENT. SUCH MODIFICATIONS TO EXISTING UTILITIES MUST BE REMOVED AT COMPLETION OF THE PROJECT.
33. THE CONTRACTOR SHALL LIMIT THE INGRESS AND EGRESS OF WORKERS AND EQUIPMENT TO THE CONSTRUCTION SITE TO AUTHORIZED PERSONS ONLY. DAMAGE TO EXISTING INTERIOR OR EXTERIOR CONSTRUCTION SHALL BE REPAIRED TO "LIKE NEW" CONDITIONS UNDER THIS CONTRACT.
34. EXCEPT WHERE OTHERWISE SPECIFIED, THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER TO MAINTAIN ALL WORK MATERIALS, APPARATUS AND FIXTURES FOR INJURY OR DAMAGES. AT THE END OF THE DAY'S WORK, ALL NEW WORK LIKELY TO BE DAMAGED SHALL BE COVERED OR OTHERWISE PROTECTED AS REQUIRED.
35. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ADEQUATE SAFETY BARRICADES AND CLEAR ACCESS IN AND OUT OF THE WORK SITE SO AS TO FACILITATE DAILY TRAFFIC MOVEMENT, DELIVERIES, AND SAFETY.
36. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION AS INDICATED.
37. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES AND PROCEDURES AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
38. DETAILS ARE INTENDED TO SHOW END RESULT DESIGNS. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
39. CONTRACTOR SHALL PERFORM HIGH QUALITY PROFESSIONAL WORK. JOIN MATERIALS TO UNIFORM ACCURATE FITS TO THEY MEET WITH NEAT, STRAIGHT LINES, FREE OF SMEARS OR OVERLAPS. INSTALL EXPOSED APPROPRIATELY LEVEL, PLUMB AND AT THE ACCURATE RIGHT ANGLES, OR FLUSH WITH ADJOINING MATERIALS. WORK OF EACH TRADE SHALL MEET ALL NATIONAL STANDARDS PUBLISHED BY THAT TRADE.
40. GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS ANNOTATED WITH THE LATEST REVISIONS AND CLARIFICATIONS FOR THE USE BY ALL.
41. THE DRAWINGS, SPECIFICATIONS AND GENERAL NOTES ARE COMPLIMENTARY, AND WHAT IS CALLED FOR BY ANY WILL BE BINDING AS IF CALLED FOR BY ALL. WORK SHOWN OR REFERRED TO ON ANY DRAWING SHALL BE PROVIDED AS THOUGH SHOWN ON ALL RELATED DRAWINGS. WHEN THERE IS A DISCREPANCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, GENERAL CONTRACTOR SHALL PROVIDE THE GREATER QUALITY AND HIGHEST QUALITY OF WORK INDICATED.
42. THE ARCHITECT HAS MADE EVERY EFFORT TO SET FORTH IN THE CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS AND DISCREPANCIES IN THE DRAWING AND SPECIFICATIONS SHALL NOT EXCUSE HIM FROM PROVIDING A COMPLETED FACILITY AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. IN THE EVENT OF DISCREPANCIES, CONTRACTOR SHALL PRICE THE MORE EXPENSIVE OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
43. GENERAL CONTRACTOR TO SCHEDULE AND CONTROL DEMOLITION OF ALL EXISTING ISSUES OR MATERIALS, TO COINCIDE WITH CONSTRUCTION SCHEDULE. CONTRACTOR TO VERIFY W/OWNERS PRIOR TO AND DURING BIDDING AND CONSTRUCTION FOR DEMOLITION OF ALL ITEMS AND COORDINATION OF DEMOLITION OF ITEMS.
44. ALL EFFORTS HAVE BEEN MADE TO NOTE TO TAG ALL ITEMS THAT ARE TO BE REMOVED OR DEMOLISHED PRIOR TO OR DURING CONSTRUCTION. GENERAL CONTRACTOR TO PROVIDE A LIST OF ALL ITEMS TO BE DEMOLISHED AND TO COORDINATE WITH A MEETING BETWEEN THE OWNER. ARCHITECT AND CONTRACTOR TO VERIFY ANY AND ALL ADDITIONAL ITEMS TO BE REMOVED. VERIFY W/ CONSTRUCTION DOCUMENTS FOR LOCATION OF NEW WALLS, MILLWORK OR NEW CONSTRUCTION ITEMS AND COORDINATE INSTALLATION AROUND EXISTING BUILDING/CONSTRUCTION.



COMPOSITE PLAN

SCALE :N.T.S.

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09/05/2019
REGISTERED ARCHITECT

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
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DRAWN BY:	VDN
REVIEWED BY:	WBS
SHEET TITLE:	

DEMOLITION PLAN

SHEET NO.:

A002

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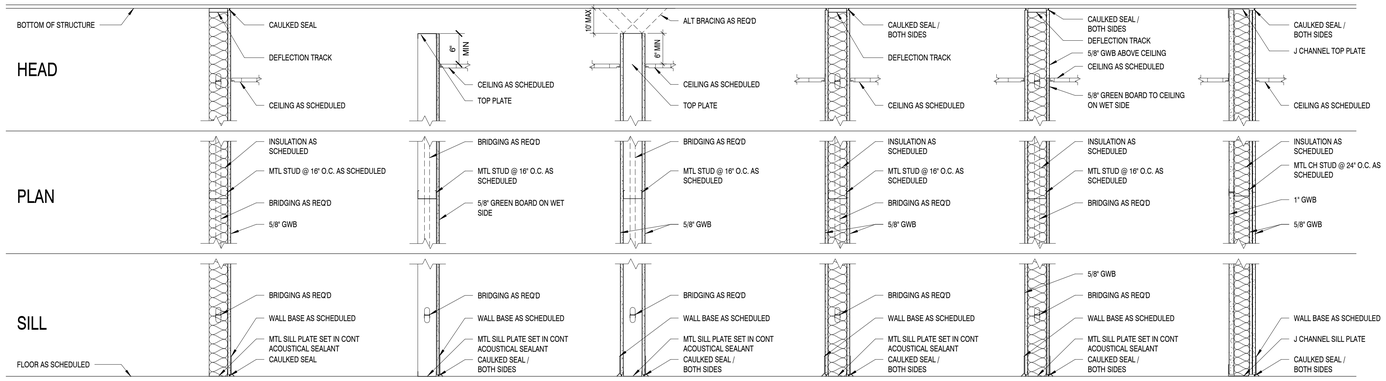
INTERIOR WALL TYPES LEGEND



WALL TYPE ID

F	METAL STUD FURRING WALL
FW	METAL STUD FURRING WALL WET LOCATION
S	METAL STUD PARTITION WALL
SD	METAL STUD PARTITION WALL DEMISING
SW	METAL STUD PARTITION WALL WET LOCATION
CH	METAL CH STUD SHAFT WALL

WALL TYPE NOTES:

WALL TYPE TAG

WALL TYPE ID — CORE THICKNESS

SD 10
2 A

FIRE RATING — ADDITIONAL COMPONENTS

WALL TYPE ID

S = METAL STUD
CH = METAL CH STUD
M = MASONRY / CMU
C = CONCRETE
W = WOOD STUD

CORE THICKNESS

METAL STUD	WOOD STUD	MASONRY
H = 7/8" HAT CHANNEL	2 = 2x2 STUD	4 = 4" CMU
1 = 1 5/8" STUD	3 = 2x3 STUD	6 = 6" CMU
2 = 2 1/2" STUD	4 = 2x4 STUD	8 = 8" CMU
3 = 3 5/8" STUD	6 = 2x6 STUD	12 = 12" CMU
4 = 4" STUD	8 = 2x8 STUD	
5 = 5 1/2" STUD	10 = 2x10 STUD	
6 = 6" STUD		
8 = 8" STUD		
10 = 10" STUD		
12 = 12" STUD		

STUD WALL FIRE RATING CONSTRUCTION

WALL RATING	STUD WALL CONSTRUCTION
0 = NO FIRE RATING	GWB AS SHOWN
1 = 1 HOUR FIRE RATING	GWB AS SHOWN
2 = 2 HOUR FIRE RATING	2 LAYERS GWB EACH SIDE
3 = 3 HOUR FIRE RATING	3 LAYERS GWB EACH SIDE
4 = 4 HOUR FIRE RATING	4 LAYERS GWB EACH SIDE
S = SMOKE BARRIER	GWB AS SHOWN

WALL TYPE ADDITIONAL COMPONENTS

ADDITIONAL COMPONENTS GROUP CODE	A	B	C	D	E	F	G	NOTES
ADD SOUND ATTENUATION BATTS	•							
STC RATING	45							
ADD RIGID INSULATION								
ADD SPRAYFOAM INSULATION								
PROVIDE LEAD LINED GYPSUM BOARD								
PROVIDE FOIL LINED GYPSUM BOARD								
PROVIDE SECURITY MESH ABOVE CEILING TO STRUCTURE ABOVE								
ADD SMOKE SEAL		•						

NOTES:

1. ALL FIRE RATED WALL ASSEMBLIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH UL 263
2. PROVIDE TYPE-X GWB WHERE WALLS ARE FIRE RATED
3. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE FIRE STOPPED AND SEALED IN ACCORDANCE WITH UL 263
4. PARTITION WALLS ARE UNINSULATED EXCEPT WHERE FIRE RATED OR WHERE NOTED IN THE ADDITIONAL COMPONENTS SCHEDULE.
5. SILL PLATES, TOP PLATES, AND DEFLECTION TRACKS SHALL BE OF SAME SIZE AND GAGE AS STUD
6. WHERE FURRING WALLS ARE UNINSULATED, GWB MAY STOP A MIN. OF 6" ABOVE CEILING
7. COORDINATE LOCATIONS OF EXPANSION JOINTS IN MASONRY WALLS WITH STRUCT DWGS
8. PROVIDE WATER RESISTANT BACKING BOARD ON BOTH SIDES OF WET WALLS WHERE BOTH SIDES ARE WET
9. PROVIDE WATER RESISTANT BACKING BOARD IN LIEU OF GWB AT THE FOLLOWING LOCATIONS.
   A. WHERE INDICATED BY WALL TYPE
   B. WET LOCATIONS SUCH AS WATER FOUNTAINS, SHOWER STALLS, TUB SURROUNDS.
   C. WHERE CERAMIC TILE FINISHES ARE INDICATED. REFER TO FINISH PLANS FOR ADDITIONAL INFORMATION.
   D. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITOR / MOP SINKS
10. WALL TYPES INDICATED ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH PLANS FOR ADDITIONAL INFORMATION.
11. WATER RESISTANT BACKING BOARD SHALL BE TYPE-X AND ON OUTSIDE LAYER WHERE WET WALLS ARE FIRE RATED.

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PROJECT INFORMATION

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CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

INTERIOR WALL TYPES

SHEET NO.:

A003

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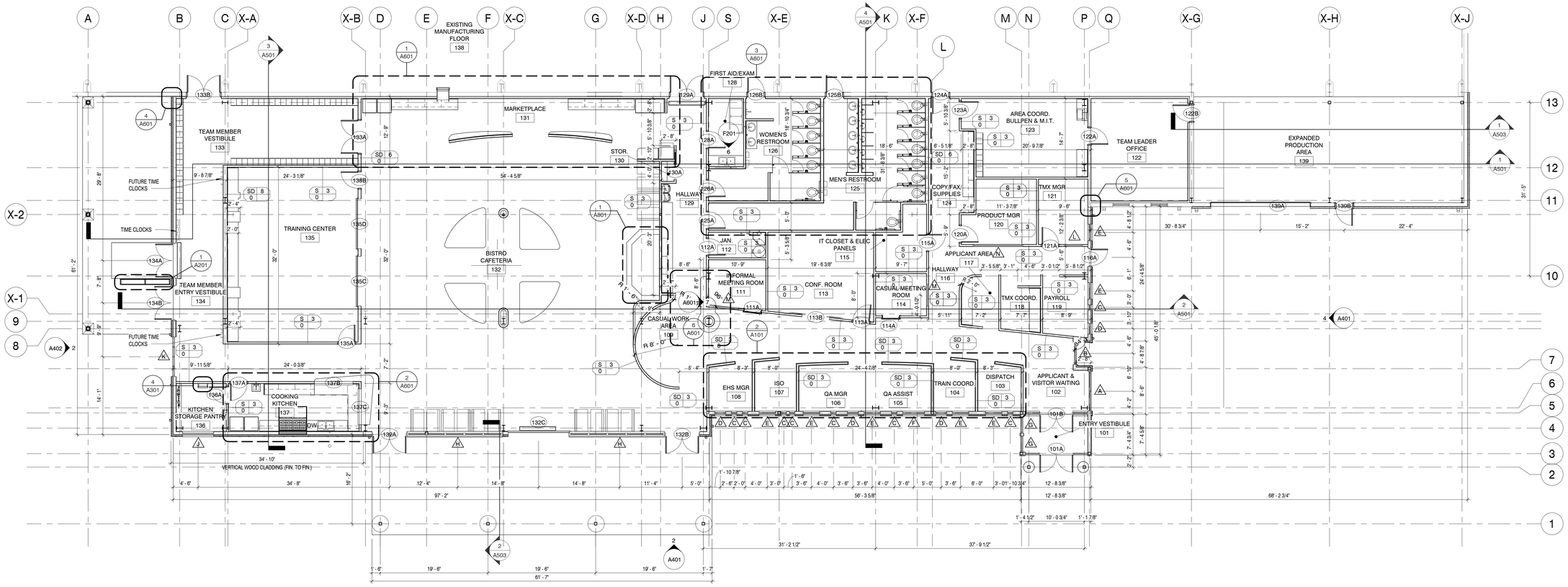
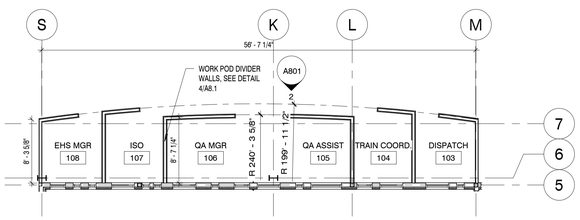


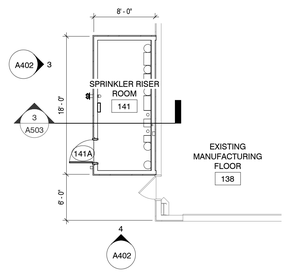
FIRST FLOOR PLAN

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



WORK POD CURVED WALL LAYOUT

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



RISER ROOM FLOOR PLAN

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

OPAQUE THERMAL ENVELOPE REQUIREMENTS

ROOFS	
INSULATION ENTIRELY ABOVE DECK	R-25CI
METAL BUILDING	R-19 + R-11 LS W/ R-5 THERMAL BLOCKS (a, b)
ATTIC & OTHER	R-38
WALLS, ABOVE GRADE	
MASS	R-9.5CI
METAL BUILDING	R-13 + R-13CI
METAL FRAMED	R-13 + R-7.5CI
WOOD FRAMED AND OTHER	R-13 + R-3.8CI OR R-20
WALLS, BELOW GRADE	
BELOW GRADE WALL (d)	R-7.5CI
FLOORS	
MASS	R-10CI
JOIST / FRAMING	R-30
SLAB-ON-GRADE FLOORS	
UNHEATED SLAB	R-10 FOR 24 BELOW
HEATED SLAB	R-15 FOR 24 BELOW
OPAQUE DOORS	
SWINGING	U-0.61
ROLL-UP OR SLIDING	R-4.75

FOR SI: 1 INCH = 25.4 MM. CI = CONTINUOUS INSULATION. NR = NO REQUIREMENT.

LS = LINER SYSTEM—A CONTINUOUS MEMBRANE INSTALLED BELOW THE PURLINS AND UNINTERRUPTED BY FRAMING MEMBERS. UNCOMPRESSED, UNFACED INSULATION RESTS ON TOP OF THE MEMBRANE BETWEEN THE PURLINS.

(a) ASSEMBLY DESCRIPTIONS CAN BE FOUND IN ANSI/ASHRAE/IESNA APPENDIX A

(b) WHERE USING R-VALUE COMPLIANCE METHOD, A THERMAL SPACER BLOCK SHALL BE PROVIDED, OTHERWISE USE THE U-FACTOR COMPLIANCE METHOD IN TABLE C402.1.2.

(c) R-5.7CI IS ALLOWED TO BE SUBSTITUTED WITH CONCRETE BLOCK WALLS COMPLYING WITH ASTM C 90, UNGROUTED OR PARTIALLY GROUTED AT 32 INCHES OR LESS ON CENTER VERTICALLY AND 48 INCHES OR LESS ON CENTER HORIZONTALLY, WITH UNGROUTED CORES FILLED WITH MATERIALS HAVING A MAXIMUM THERMAL CONDUCTIVITY OF 0.44 BTU-IN/H-FT2 °F.

(d) WHERE HEATED SLABS ARE BELOW GRADE, BELOW-GRADE WALLS SHALL COMPLY WITH THE EXTERIOR INSULATION REQUIREMENTS FOR HEATED SLABS.

(e) STEEL FLOOR JOIST SYSTEMS SHALL BE INSULATED TO R-38.

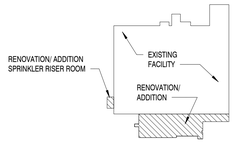
WALL LEGEND

- EXTERIOR WALL - SIDING ON MTL STUD
- WALL PARTITION - MTL STUD WALL
- WALL PARTITION - SOUND BARRIER - MTL STUD WALL
- ~~WALL PARTITION - CMU WALL~~ NOT USED
- ~~WALL PARTITION - 2 HOUR - CMU WALL - SEE UL U905~~ NOT USED
- WALL PARTITION - LOW WALL, 5' - 0" A.F.F. U.N.O.

- EJ = EXPANSION JOINT
- FOR MASONRY EXPANSION JOINTS - SEE STRUCTURAL SHEETS
- BRACE ALL METAL STUD WALLS TO STRUCTURE ABOVE @ 4'-0" O.C. MINIMUM.
- SEE INTERIOR WALL TYPES SHEET ON A0.x FOR MORE INFORMATION
- SEE WALL SECTIONS FOR MORE INFORMATION ON EXTERIOR WALL CONSTRUCTION
- INTERIOR WALLS ARE TYPE S-3-0 UNLESS OTHERWISE NOTED
- INTERIOR FURRINGS ARE TYPE F-3-0 UNLESS OTHERWISE NOTED

WALL TYPE TAG

WALL TYPE ID — CORE THICKNESS — FIRE RATING — ADDITIONAL COMPONENTS



COMPOSITE PLAN

SCALE :N.T.S.

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SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

FIRST FLOOR PLAN

SHEET NO.: A101

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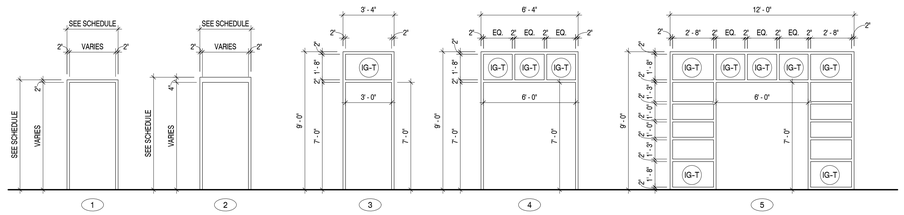
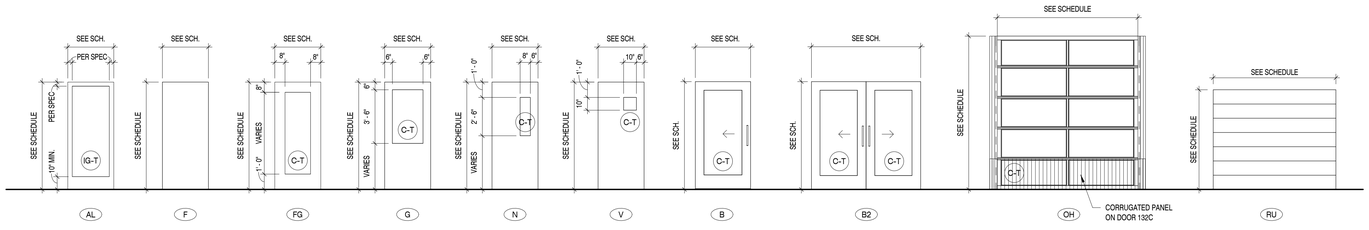
DOOR SCHEDULE

	DOORS								FRAMES			DETAILS				
NUMBER	D-TYPE	D-MATL	FULL WIDTH	PANELS	HEIGHT	THICK	FINISH	LABEL	F-TYPE	F-MATL	F-FINISH	HEAD	JAMB	T-HOLD	H-WARE	REMARKS
101A	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	5	AL	PRE-FINISHED	5/A202	10/A202	11/A202	1	
101B	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	5	AL	PRE-FINISHED	3/A202	8/A202		2	
111A	B	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--			PRE-FINISHED	9/A202	4/A202	14/A202	8	BARN DOOR
112A	F	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		12	
113A	AL	AL	3' - 0"	SINGLE	7' - 0"	1 3/4"	PRE-FINISHED	--	1	AL	PRE-FINISHED	2/A203	2/A203		9	
113B	B	WD	2' - 6"	PAIR	7' - 0"	2"	STAIN	--		AL	PRE-FINISHED	9/A202	3/A202	14/A202	10	BARN DOOR
114A	B	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--			PRE-FINISHED	9/A202	4/A202	14/A202	8	BARN DOOR
115A	N	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		12	
116A	AL	AL	3' - 0"	SINGLE	7' - 0"	1 3/4"	PRE-FINISHED	--	3	AL	PRE-FINISHED	5/A202	10/A202	11/A202	1	
120A	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		11	
121A	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		11	
122A	G	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		11	
122B	N	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		17	
123A	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		11	
124A	N	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		17	
125A	F	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		14	
125B	F	-	3' - 0"	SINGLE	7' - 0"	1 3/4"	-	--	1	HM	PAINT	18/A202	18/A202		6	CASED OPENING
126A	F	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		14	W/ AIR CURTAIN
126B	F	-	3' - 0"	SINGLE	7' - 0"	1 3/4"	-	--	1	HM	PAINT	18/A202	18/A202		6	CASED OPENING
128A	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		12	
129A	FG	WD	6' - 0"	PAIR	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		17	
130A	F	WD	2' - 8"	SINGLE	6' - 8"	1 1/2"	STAIN	--			PRE-FINISHED	2/A202	7/A202		18	POCKET DOOR
132A	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	4	AL	PRE-FINISHED	5/A202	10/A202	11/A202	1	
132B	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	4	AL	PRE-FINISHED	5/A202	10/A202	11/A202	1	
132C	OH	STL	11' - 0"		10' - 0"	2 1/8"	PRE-FINISHED	--		STL	PRE-FINISHED	16/A202	17/A202	19/A202	16	W/ AIR CURTAIN
133A	FG	WD	6' - 0"	PAIR	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		15	
133B	FG	WD	6' - 0"	PAIR	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	2/A202	7/A202		17	
134A	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	3	AL	PRE-FINISHED	5/A2.2	10/A202	11/A202	1	
134B	AL	AL	6' - 0"	PAIR	7' - 0"	1 3/4"	PRE-FINISHED	--	4	AL	PRE-FINISHED	5/A2.2	10/A202	11/A202	1	
135A	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A2.2	3/A202		9	
135B	FG	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A2.2	3/A2.2		9	
135C	OH	STL	9' - 0"		10' - 0"	2 1/8"	PRE-FINISHED	--		STL	PRE-FINISHED	16/A2.2	17/A202	19/A202	16	
135D	OH	STL	9' - 0"		10' - 0"	2 1/8"	PRE-FINISHED	--		STL	PRE-FINISHED	16/A2.2	17/A2.2	19/A202	16	
136A	N	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A2.2	3/A202		14	
137A	N	WD	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A2.2	3/A202		14	
137B	OH	STL	7' - 0"		5' - 2"	3"	PRE-FINISHED			STL	PRE-FINISHED	16/A2.2	17/A202		16	
137C	OH	STL	6' - 6"		5' - 2"	3"	PRE-FINISHED			STL	PRE-FINISHED	16/A2.2	17/A202		16	
139A	RU	STL	18' - 0"		16' - 0"	1 1/2"	PRE-FINISHED	--		STL	PRE-FINISHED	16/A202	17/A202	19/A202	16	
139B	F	STL	3' - 0"	SINGLE	7' - 0"	1 3/4"	STAIN	--	1	HM	PAINT	3/A202	3/A202		5	
141A	F	HM	3' - 0"	SINGLE	7' - 0"	1 3/4"	PAINTED	--	1	HM	PAINT	3/A202	3/A202		3	RISER ROOM
141B	F	HM	3' - 0"	SINGLE	7' - 0"	1 3/4"	PAINTED		1	HM	PAINT	3/A202	3/A202		3	ROOF ACCESS



DOOR FRAME TYPES

SCALE : 1/4" = 1'-0"



DOOR TYPES

SCALE : 1/4" = 1'-0"

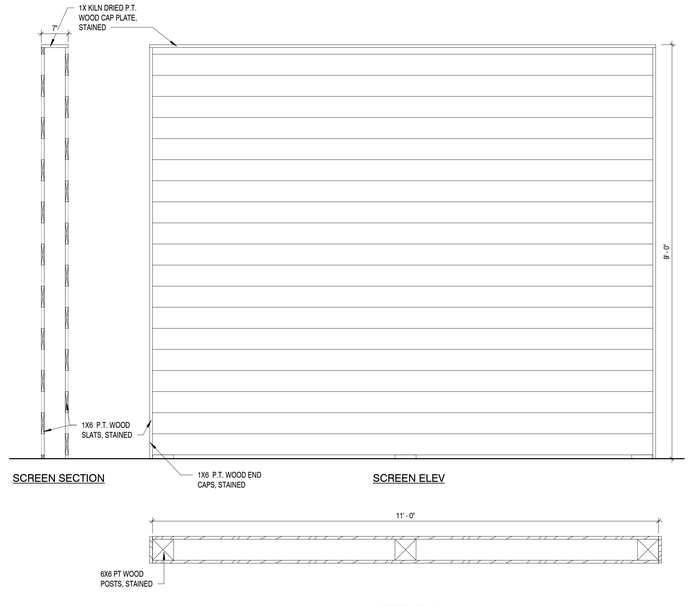
GENERAL DOOR NOTES

1. RATED DOORS ASSEMBLIES MUST HAVE RATED FRAMES, HARDWARE, CLOSERS AND OTHER RATED ACCESSORIES. ANY GLAZING SHALL BE CLEAR AND WIRELESS FIRE-RATED GLASS CERAMIC. PERMANENTLY LABEL EACH LITE W/ FIRE RATING LISTED AND LABELED BY UL.
2. CLOSERS AND POSITIVE LATCHING ARE REQUIRED ON FIRE RATED DOORS AND DOORS IN SMOKE TIGHT PARTITIONS.
3. INTERIOR WOOD DOORS TO BE FACTORY FINISH. WOOD SPECIES TO BE ROTARY CUT BIRCH.
4. EXTERIOR HOLLOW METAL DOORS ARE TO BE INSULATED.
5. EXTERIOR HOLLOW METAL DOORS AND FRAMES ARE TO BE FACTORY PRIMED AND FIELD PAINTED.
6. COORDINATE MASTER KEYING WITH OWNER.

GLAZING SCHEDULE

X

- C — 1/4" CLEAR GLASS
- C-T — 1/4" CLEAR GLASS, FULLY TEMPERED
- I-T — 1/2" THICK INTERIOR BUTT JOINTED GLASS PANELS, CLEAR UNCOATED, FULLY TEMPERED
- IG — 1" THICK INSULATED GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES
- IG-T — 1" THICK INSULATED GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, FULLY TEMPERED
- IS — 1" THICK INSULATED SPANDREL GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, CERAMIC COATING TO BE ON FORTH SURFACE
- IS-T — 1" THICK INSULATED SPANDREL GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, FULLY TEMPERED, CERAMIC COATING TO BE ON FORTH SURFACE
- F — 5/16" CLEAR AND WIRELESS FIRE-RATED GLASS CERAMIC (20 MIN - 3 HOUR FOR DOORS, 20 MIN - 90 MIN IN OTHER APPLICATIONS) FIRE RATING LISTED AND LABELED BY UL FOR FIRE RATING SCHEDULED AT OPENING LOCATIONS ON DRAWINGS, WHEN TESTED IN ACCORDANCE WITH ASTM E2074 AND E2010, NPFA 252 AND 257, AND UL 9, 10B AND 10C.



SCREEN DETAIL

1

SCALE : 3/4" = 1'-0"

MBI

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CONSULTANT

SEAL

STATE OF ALABAMA — ERIN E. HARLOW — 7404 — 09/05/2019 — REGISTERED ARCHITECT

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

DOOR SCHEDULE, DOOR/FRAME ELEVATIONS & DETAILS

SHEET NO.:

A201

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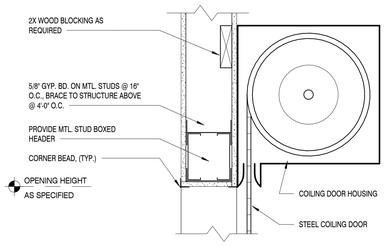
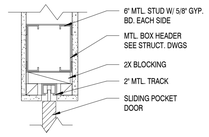


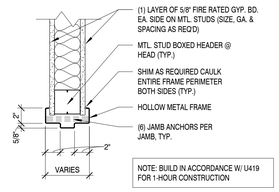
HEAD/JAMB DETAIL (1)

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



THRESHOLD DETAIL (2)

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



HEAD/JAMB DETAIL (3)

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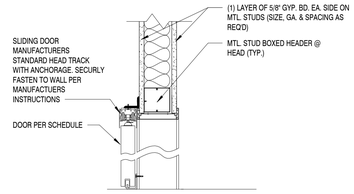
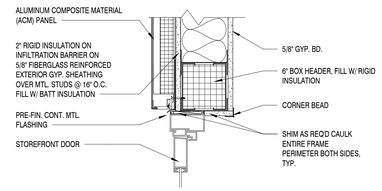


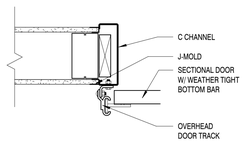
SLIDING DOOR HEADER (4)

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



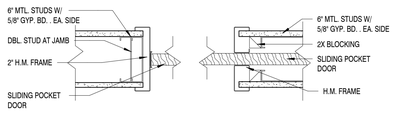
HEAD DETAIL (5)

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



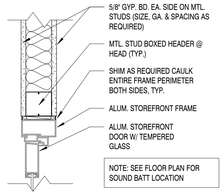
THRESHOLD DETAIL (6)

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



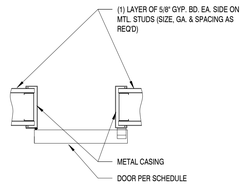
JAMB DETAIL (7)

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



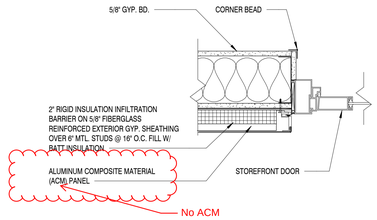
HEAD/JAMB DETAIL (8)

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



SLIDING DOOR JAMB (9)

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



JAMB DETAIL (10)

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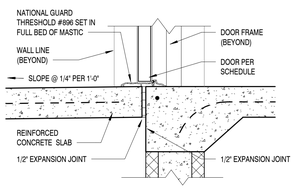

THRESHOLD DETAIL (11)

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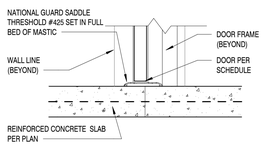

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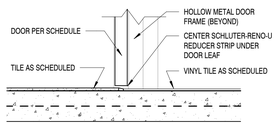
SCALE : 1 1/2" = 1'-0"



THRESHOLD DETAIL (13)

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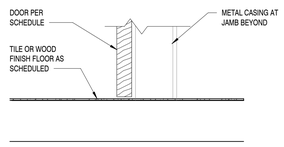
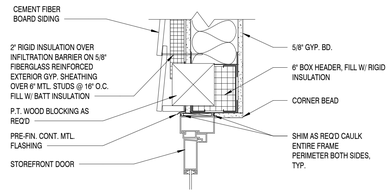


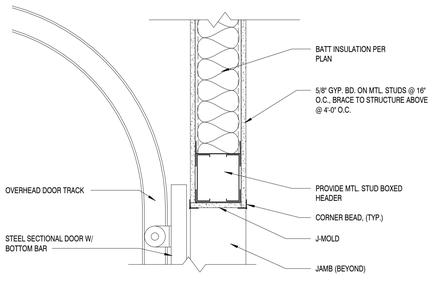
SLIDING DOOR THRESHOLD (14)

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



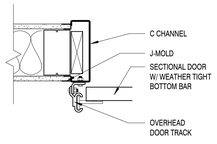
HEAD DETAIL (15)

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



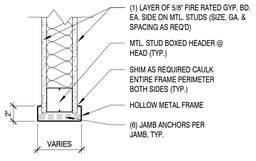
HEAD DETAIL (16)

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



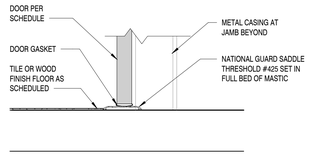
JAMB DETAIL (17)

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



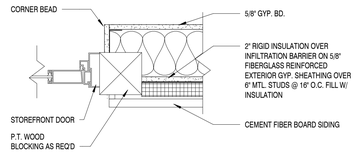
HEAD/JAMB DETAIL (18)

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



HEAD/JAMB DETAIL (19)

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



JAMB DETAIL (20)

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

MBI

MBI COMPANIES INC.
299 N. WEISGARBER ROAD
KNOXVILLE, TN 37919
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WEB: mbicompanies.com

CONSULTANT

SEAL

STATE OF ALABAMA
ERIN E. HARLOW
7404
09/05/2019
REGISTERED ARCHITECT

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PROJECT ADDRESS:

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ADDISON, AL 35540

PROJECT NO.: 180789.04

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- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

DOOR & WINDOW DETAILS

SHEET NO.:

A202

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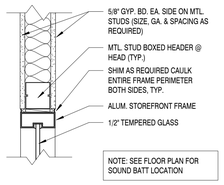
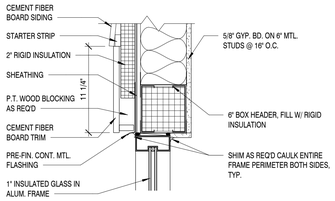


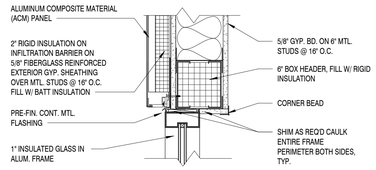
WINDOW HEAD/JAMB (1)

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



WINDOW HEAD (2)

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

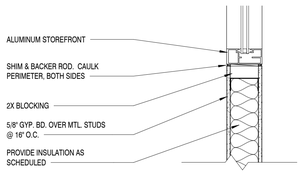


WINDOW HEAD (3)

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

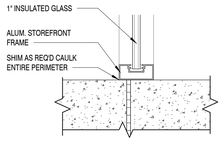
GLAZING SCHEDULE (X)

C	1/4" CLEAR GLASS
C-T	1/4" CLEAR GLASS, FULLY TEMPERED
I-T	1/2" THICK INTERIOR BUTT JOINTED GLASS PANELS, CLEAR UNCOATED, FULLY TEMPERED
IG	1" THICK INSULATED GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES
IG-T	1" THICK INSULATED GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, FULLY TEMPERED
IS	1" THICK INSULATED SPANDREL GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, CERAMIC COATING TO BE ON FORTH SURFACE
IS-T	1" THICK INSULATED SPANDREL GLASS WITH 1/2" AIR SPACE AND TWO 1/4" LITES, FULLY TEMPERED, CERAMIC COATING TO BE ON FORTH SURFACE
F	5/16" CLEAR AND WIRELESS FIRE-RATED GLASS CERAMIC (20 MIN - 3 HOUR FOR DOORS, 20 MIN - 90 MIN IN OTHER APPLICATIONS) FIRE RATING LISTED AND LABELED BY UL FOR FIRE RATING SCHEDULED AT OPENING LOCATIONS ON DRAWINGS, WHEN TESTED IN ACCORDANCE WITH ASTM E2074 AND E2010, NPFA 252 AND 257, AND UL 9, 10B AND 10C.



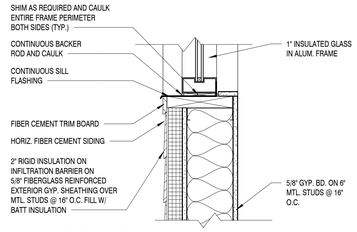
WINDOW SILL (4)

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



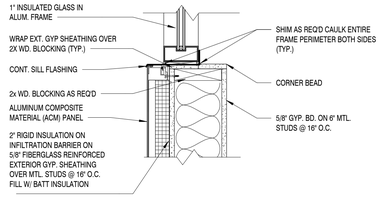
WINDOW SILL (5)

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



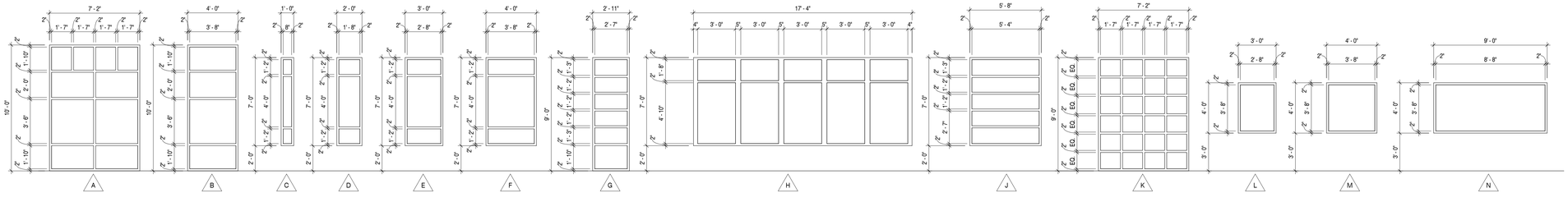
WINDOW SILL (6)

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



WINDOW SILL (7)

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



WINDOW ELEVATIONS

SCALE : 1/4" = 1'-0"

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7404
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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
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- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

WINDOW ELEVATIONS AND DETAILS

SHEET NO.:

A203

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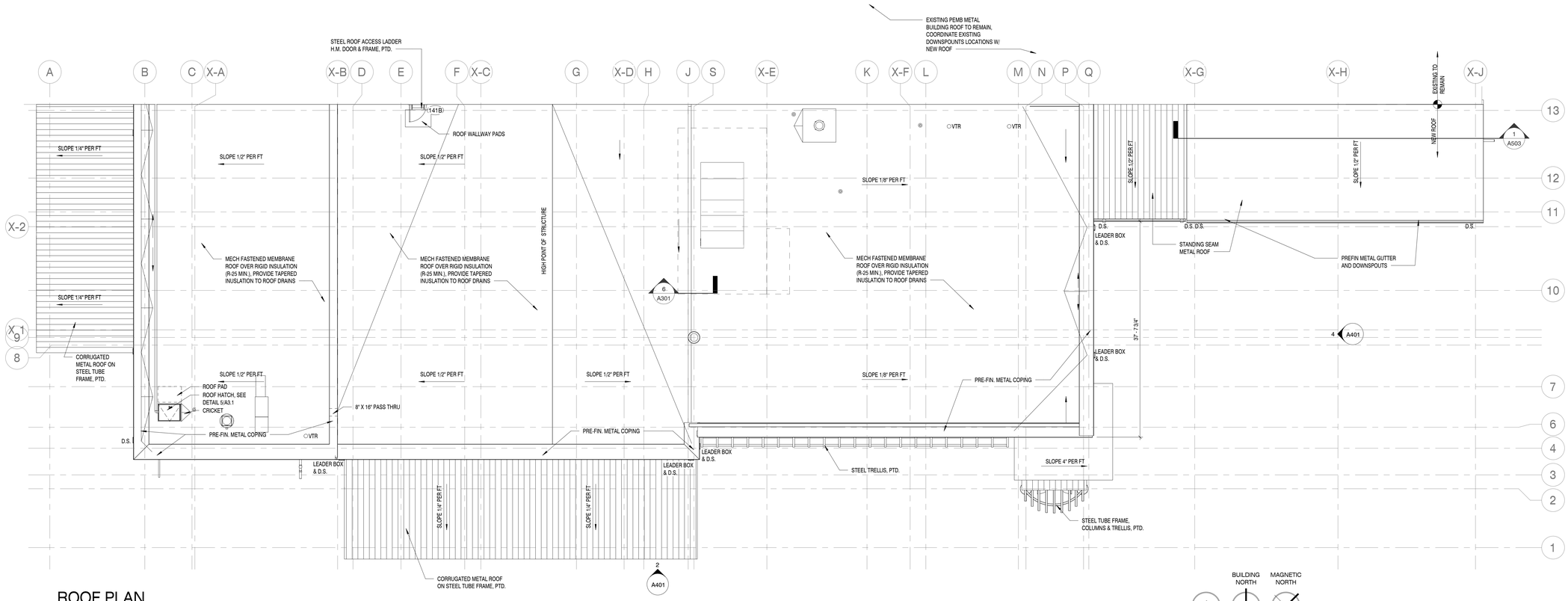
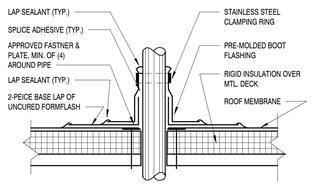


ROOF PLAN

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

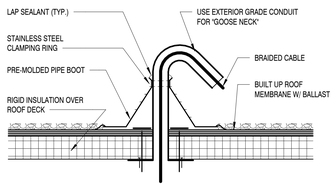
1



VENT PIPE PEN. DTL

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

2



ROOF CABLE PEN. DTL

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

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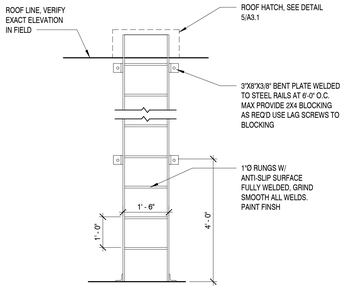
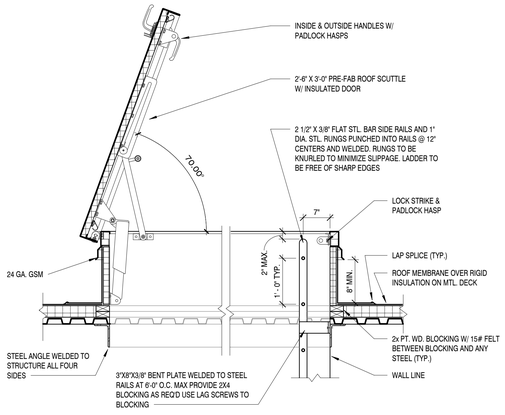


LADDER TO ROOF DETAIL

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

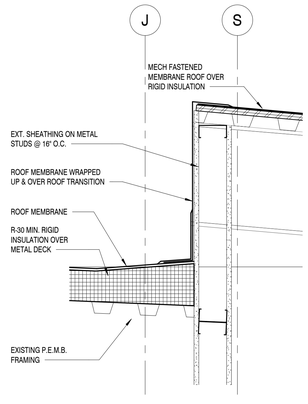
4



ROOF SCUTTLE DETAIL

SCALE : 3/4" = 1'-0"

5



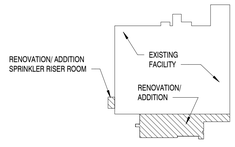
ROOF DETAIL

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

6

ROOF GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY NUMBER, TYPE, AND LOCATIONS OF ALL UTILITIES AND EQUIPMENT, INCLUDING BUT NOT LIMITED TO SATELLITE DISHES, HVAC UNITS, FANS, VENT PIPES, ETC. THAT WILL AFFECT HIS SCOPE OF WORK. CONTRACTOR SHALL INCLUDE IN HIS BID ALL NECESSARY WORK TO COORDINATE THE INSTALLATION OF NEW WORK WITH EXISTING UTILITIES AND EQUIPMENT.
2. THE CONTRACTOR SHALL AT ALL TIMES PROTECT ALL EXISTING INTERIOR SPACES EXPOSED DURING CONSTRUCTION AGAINST DAMAGE DUE TO WEATHER OR CONSTRUCTION.
3. REUSE EXISTING CURBS, THOSE CURBS THAT ARE TOO SHORT BECAUSE OF ADDITIONAL INSULATION SHALL RECEIVE NEW TALLER NAILERS AT TOP OF CURB.
4. COORDINATE STAGING AREAS AND CONSTRUCTION ACCESS WITH OWNER PRIOR TO START OF CONSTRUCTION.
5. REPAIR AND RESEED ANY EXISTING GRASS AREAS DISTURBED DURING CONSTRUCTION OR STAGING.
6. PROVIDE SPLASH BLOCKS ON 24" X 24" PROTECTION MATS AT ALL EXISTING ROOF DRAINS FROM HIGH ROOF. VERIFY QUANTITY NEEDED IN FIELD PRIOR TO BIDDING.
7. AT ALL LADDERS BETWEEN ROOF TRANSITIONS, PLACE 3/4" PLYWOOD OVER INSULATION THEN RUN NEW MEMBRANE OVER NEW PLYWOOD AND TURN UP WALL AS DETAILED.
8. PROVIDE NEW ROOF ACCESSORIES INCLUDING FLASHING BOOTS, COUNTER FLASHING, DRIP EDGES, COPING, AND ALL OTHER ACCESSORIES REQUIRED TO PROVIDE A WATER TIGHT ROOF SYSTEM THAT WILL MEET THE ROOF WARRANTY REQUIREMENTS.
9. REMOVE EXISTING ROOFING MEMBRANE AT ALL LOCATIONS SPECIFIED IN PLANS.
10. VERIFY MIN SLOPE OF 1/8" PER FOOT AT ALL ROOF CURBS AND CRICKETS
11. MINIMUM ROOF INSULATION TO MEET OPAQUE THERMAL ENVELOPE REQUIREMENT CHART LISTED ON A1.1 (R-25 CONTINUOUS INSULATION)
12. PROVIDE WALK PADS AROUND ALL HVAC EQUIPMENT TO MEET MANUFACTURER'S RECOMMENDATIONS.
13. ALL EXPOSED STEEL TO BE PAINTED. COLOR SELECTION BY OWNER/ARCHITECT.



COMPOSITE PLAN

SCALE :N.T.S.

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PROJECT INFORMATION

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CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

ROOF PLAN AND DETAILS

SHEET NO.: A301

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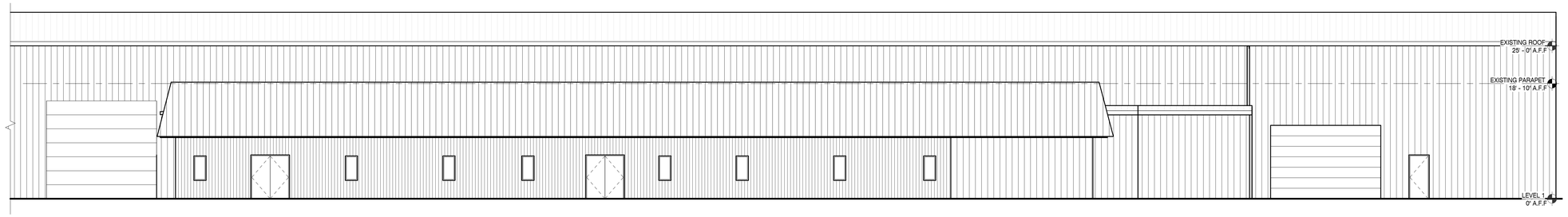
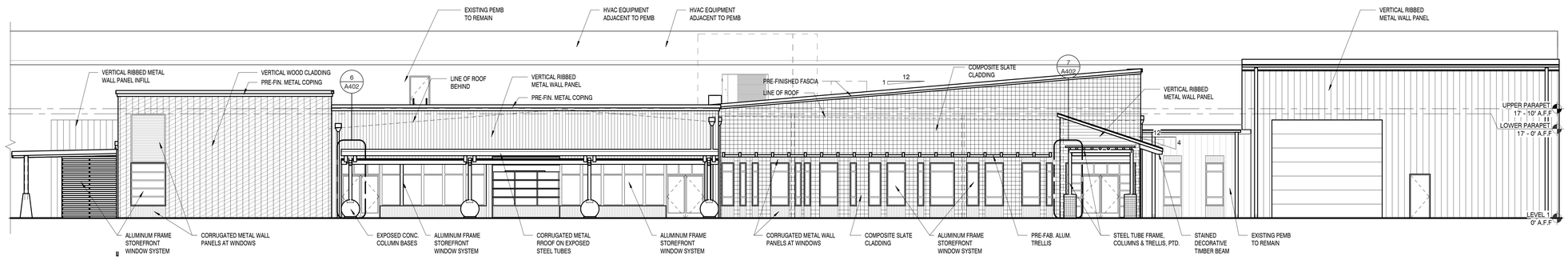


EXISTING SOUTH ELEVATION

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

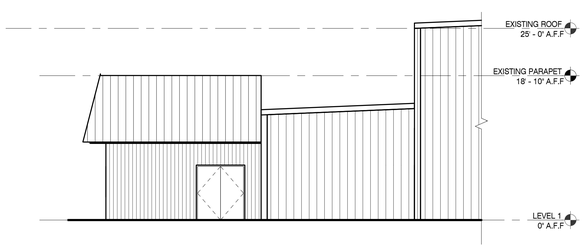
1



PROPOSED SOUTH ELEVATION

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

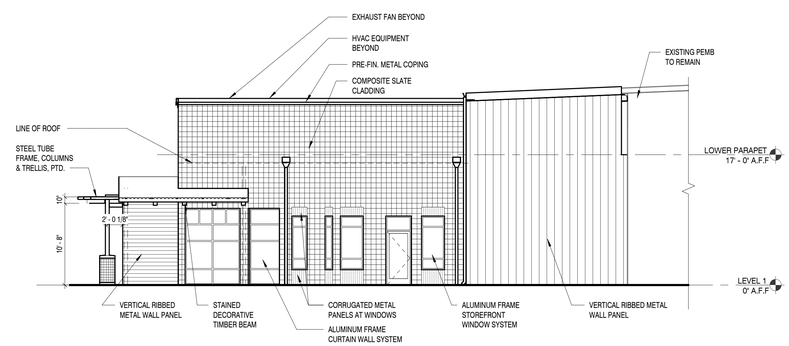
2



EXISTING EAST ELEVATION

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

3



PROPOSED EAST ELEVATION

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

4

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PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

EXTERIOR ELEVATIONS

SHEET NO.:

A401

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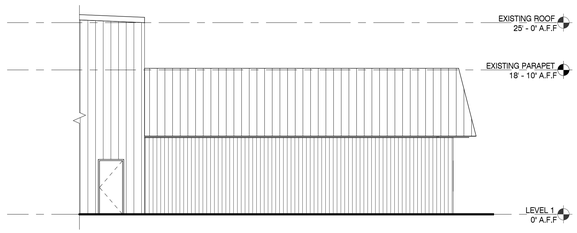

EXISTING WEST ELEVATION 1

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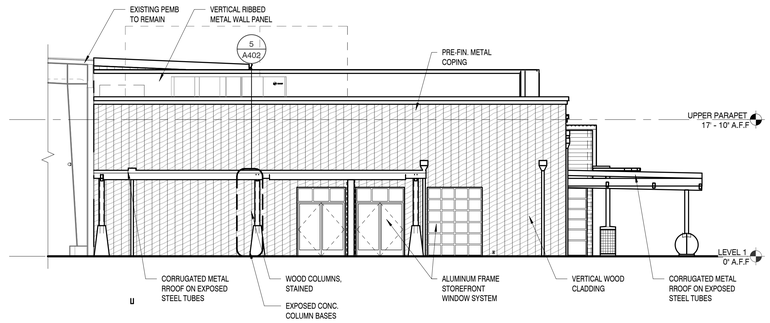

PROPOSED WEST ELEVATION 2

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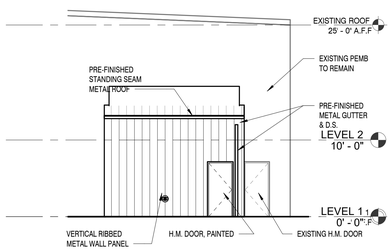
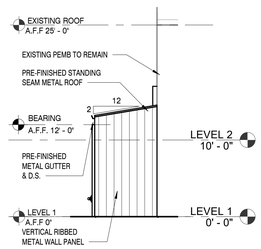


RISER ROOM ELEVATION 3

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



RISER ROOM ELEVATION 4

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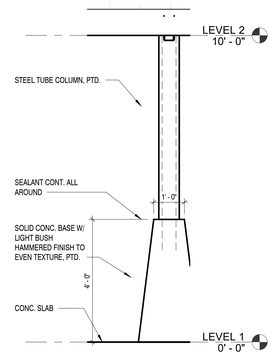
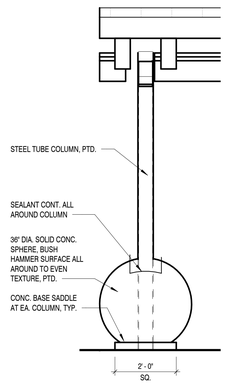


ELEV

COLUMN ELEVATION 5

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



COLUMN ELEVATION 6

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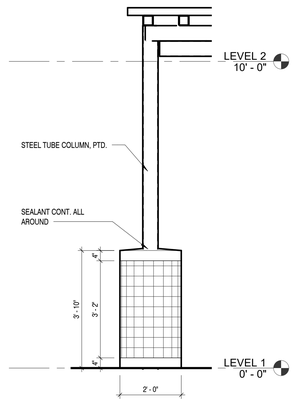

COLUMN ELEVATION 7

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

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PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

EXTERIOR ELEVATIONS

SHEET NO.:

A402

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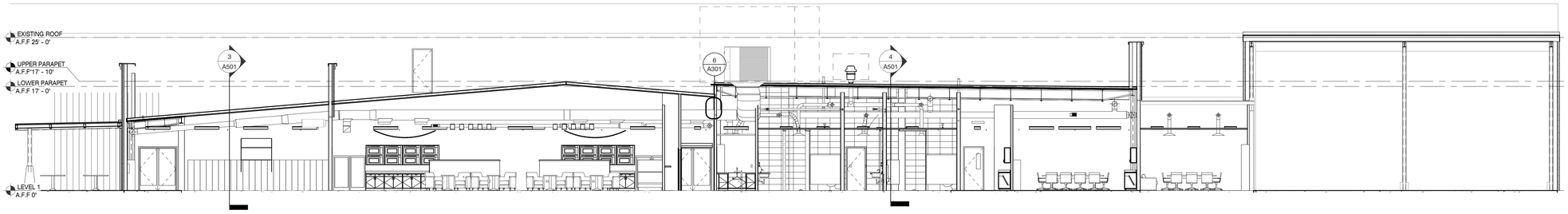
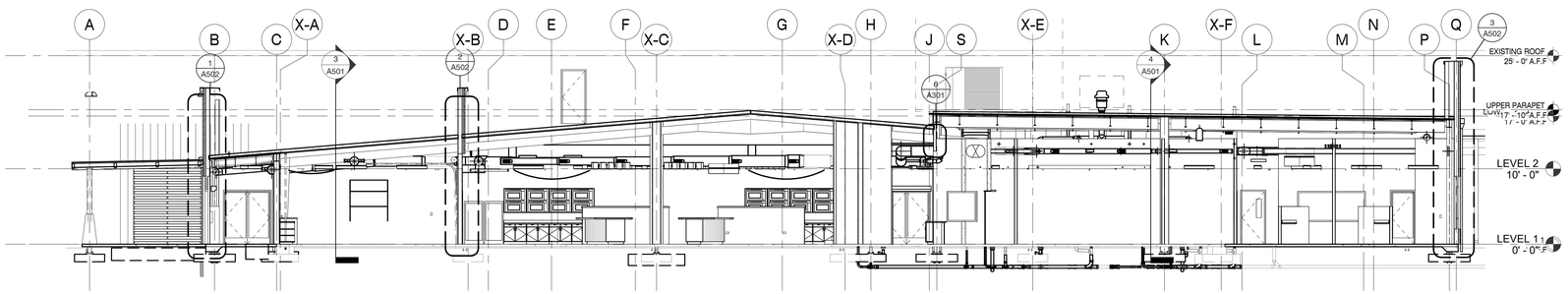


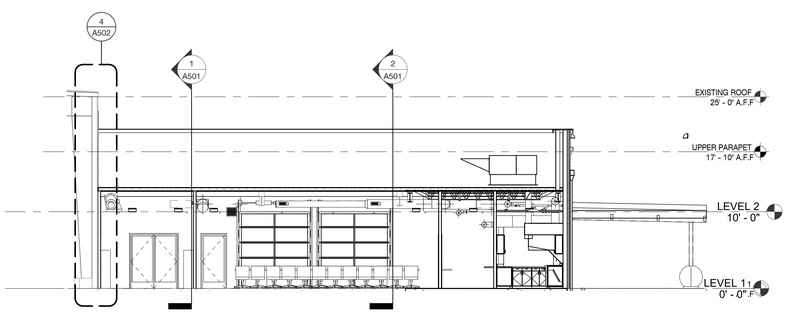
BUILDING SECTION 1

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



BUILDING SECTION 2

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



BUILDING SECTION 3

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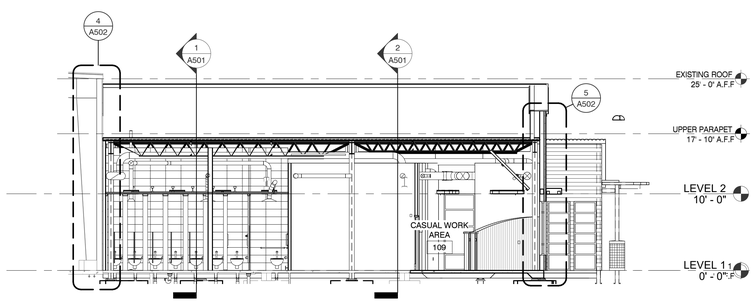

BUILDING SECTION 4

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

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SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

BUILDING SECTIONS

SHEET NO.:

A501

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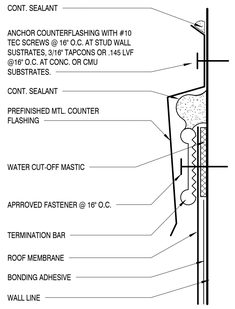

TERM. DTL. W/ SURF. MTD. COUNTER FLASHING (6)

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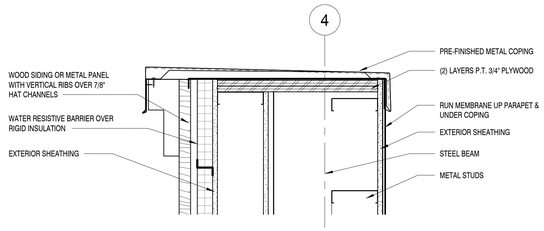
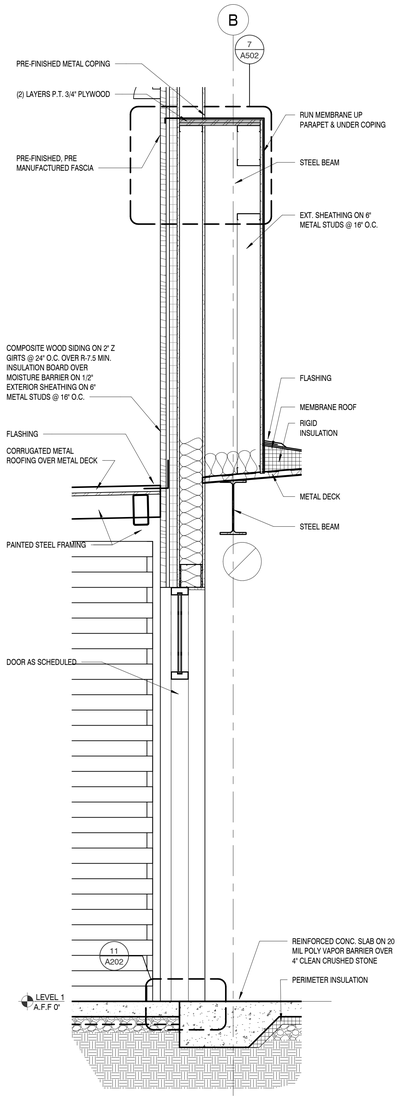


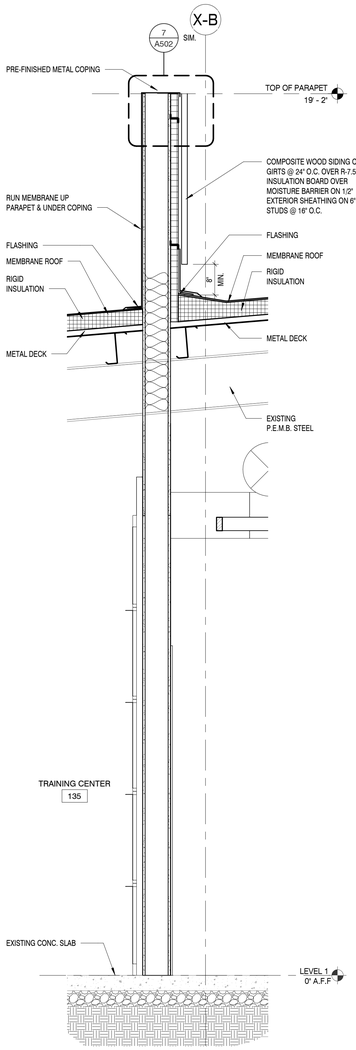
PARAPET DETAIL (7)

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



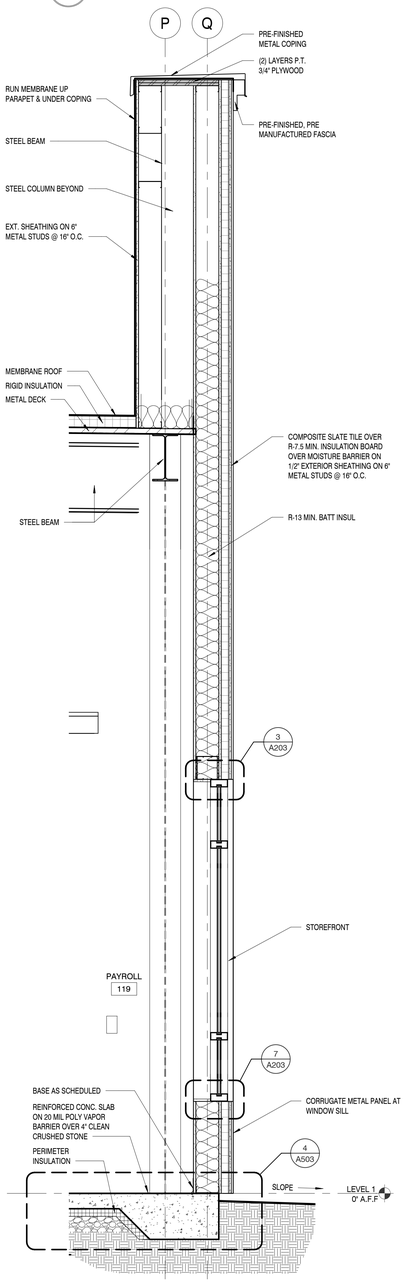
WALL SECTION (1)

SCALE : 3/4" = 1'-0"



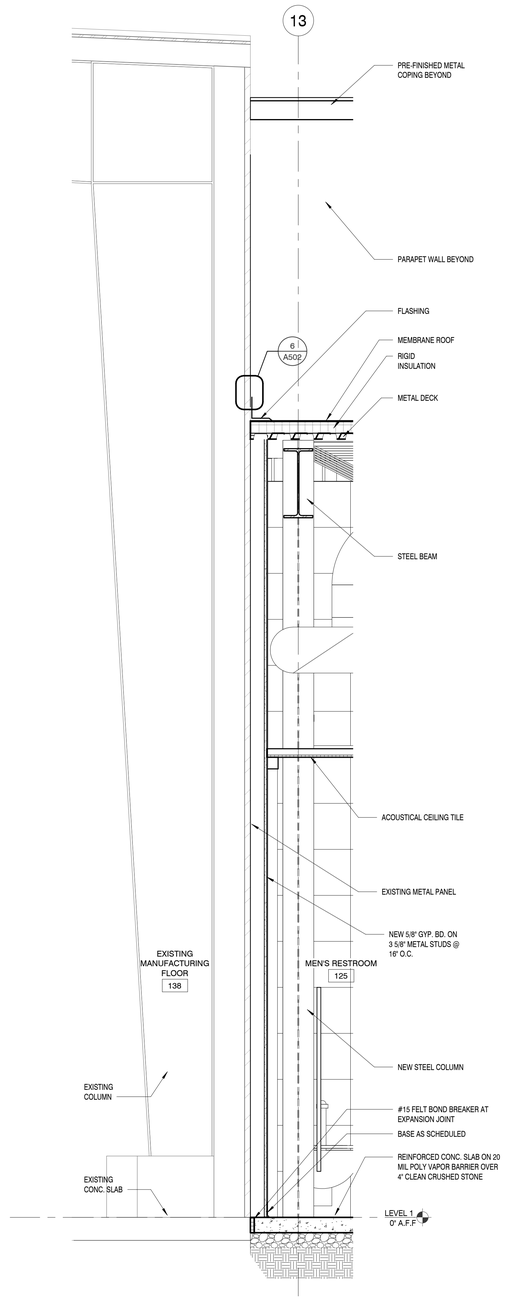
WALL SECTION (2)

SCALE : 3/4" = 1'-0"



WALL SECTION (3)

SCALE : 3/4" = 1'-0"



WALL SECTION (4)

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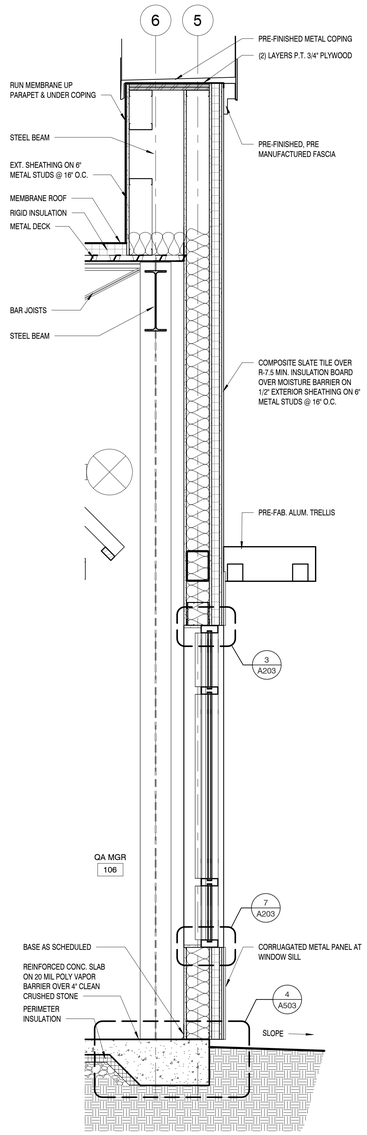

WALL SECTION (5)

SCALE : 3/4" = 1'-0"

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WEB: mbicompanies.com

CONSULTANT

SEAL

STATE OF ALABAMA
ERIN E. HARLOW
7404
09/05/2019
REGISTERED ARCHITECT

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

WALL SECTIONS

SHEET NO.:

A502

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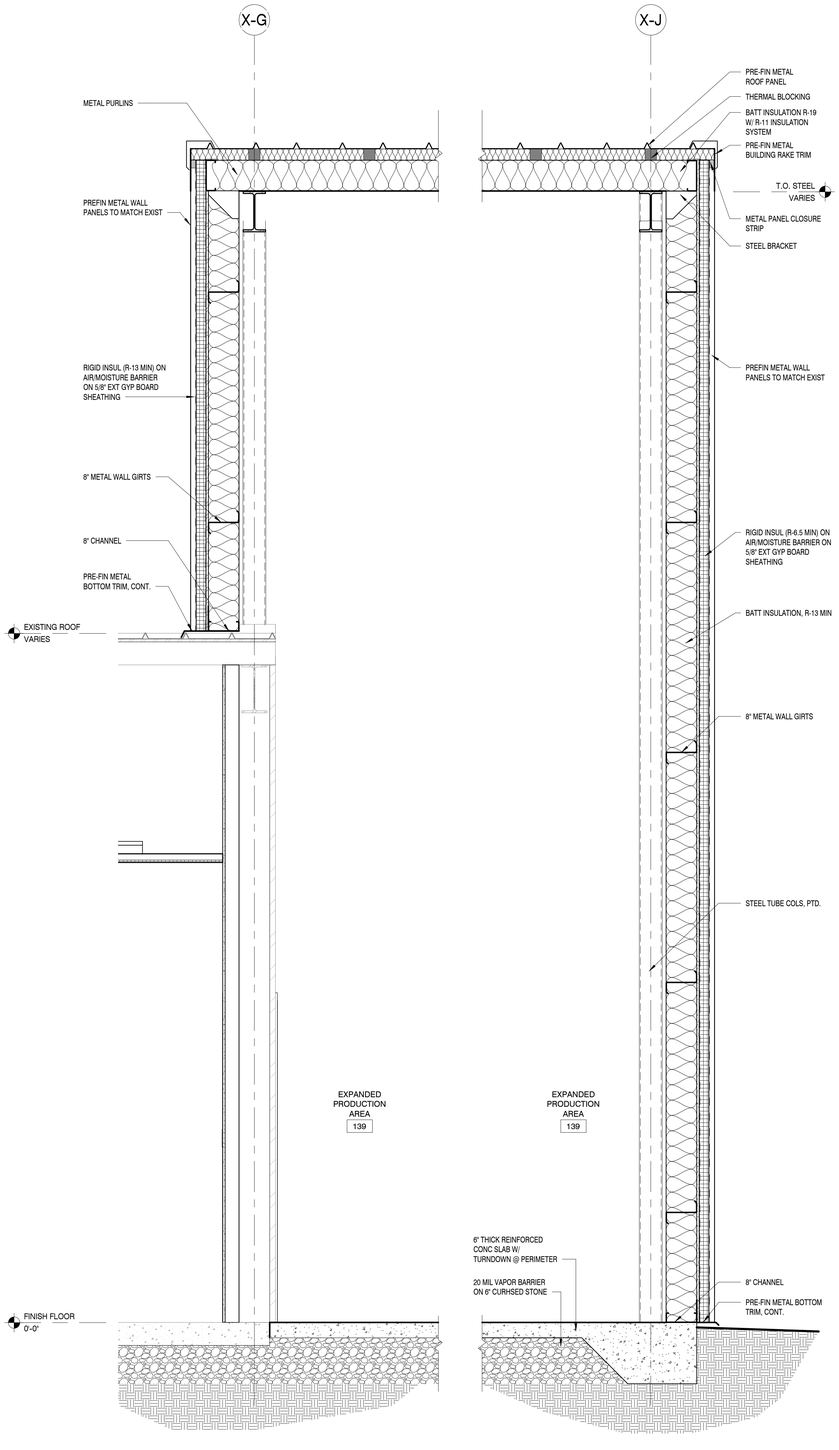
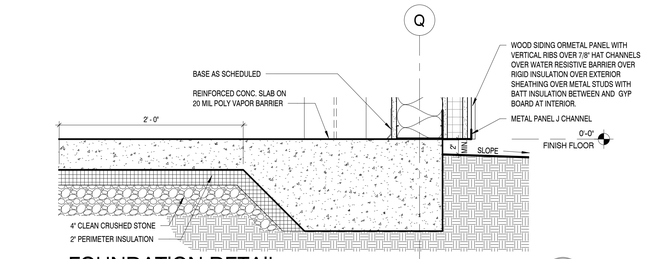


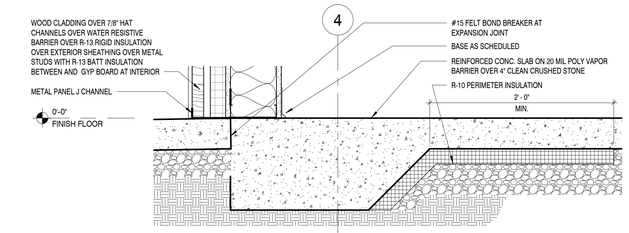
WALL SECTION 1

SCALE : 3/4" = 1'-0"



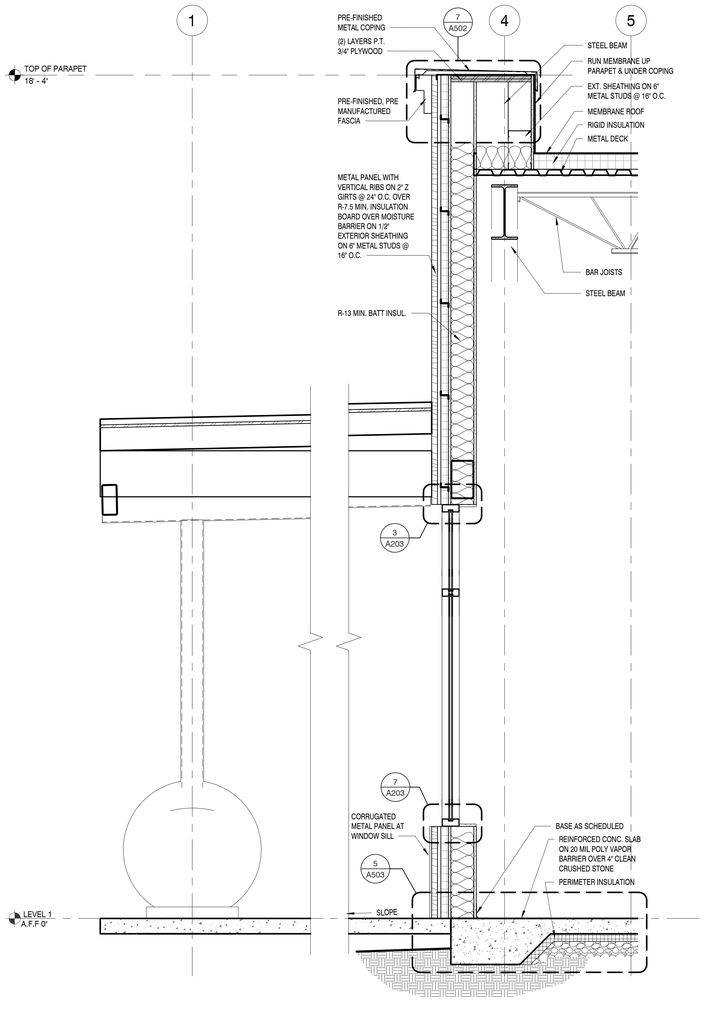
FOUNDATION DETAIL 4

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



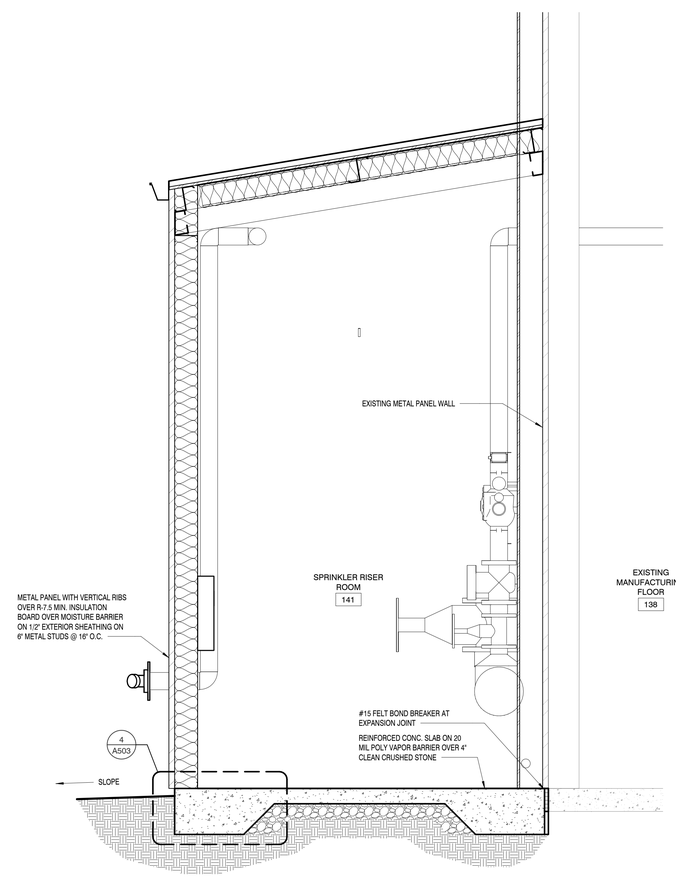
FOUNDATION DETAIL 5

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



WALL SECTION 2

SCALE : 3/4" = 1'-0"



BUILDING SECTION 3

SCALE : 3/4" = 1'-0"

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7404
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PROJECT NO.: 180789.04

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REVISION INFORMATION

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KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

WALL SECTIONS

SHEET NO.:

A503

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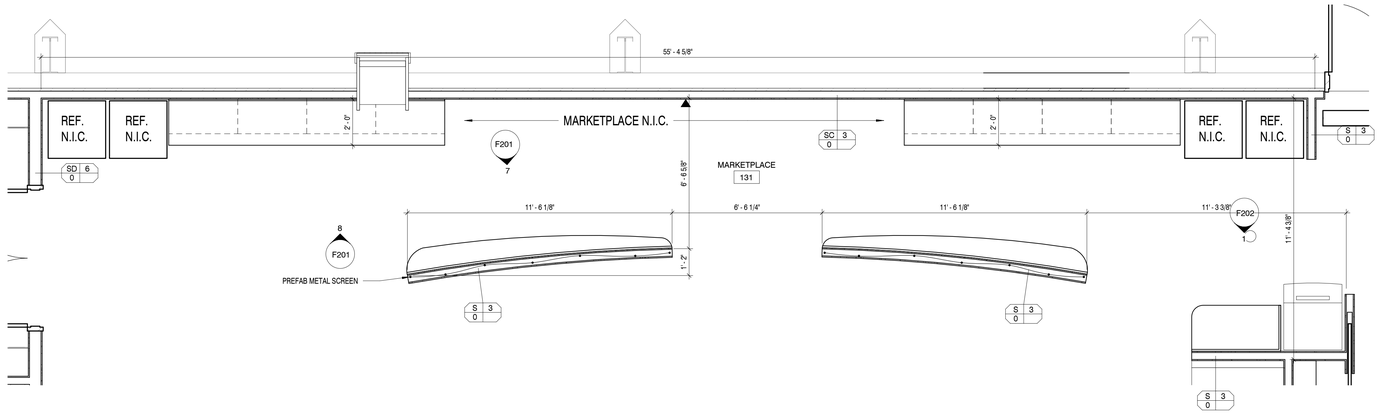
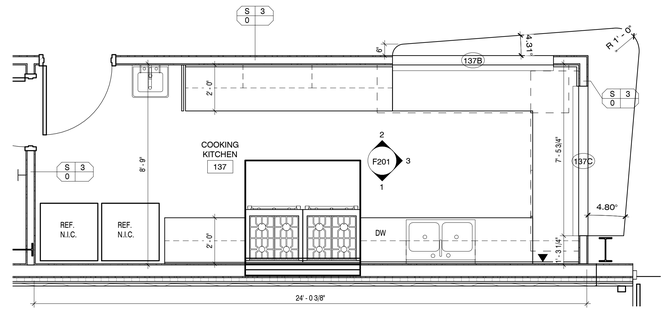


ENLARGED MARKETPLACE PLAN

SCALE : 3/8" = 1'-0"

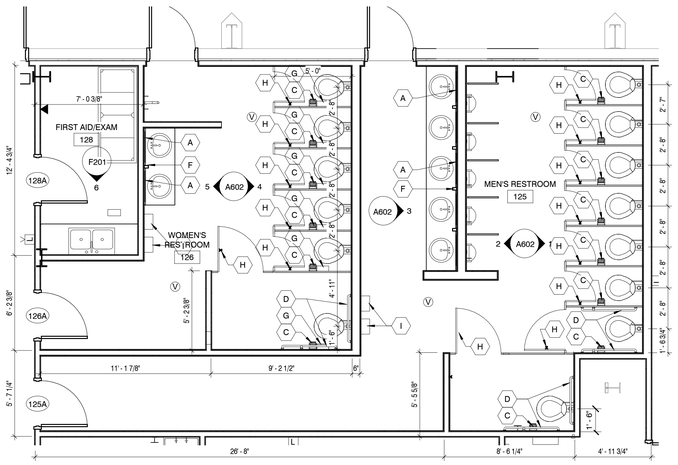
1



ENLARGED WARMING KITCHEN PLAN

SCALE : 3/8" = 1'-0"

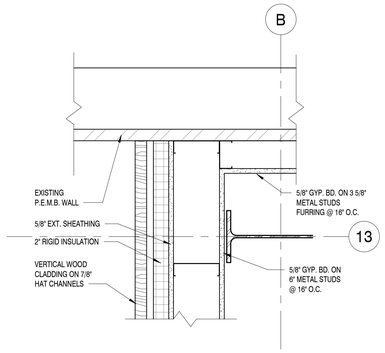
2



ENLARGED RESTROOM PLAN

SCALE : 1/4" = 1'-0"

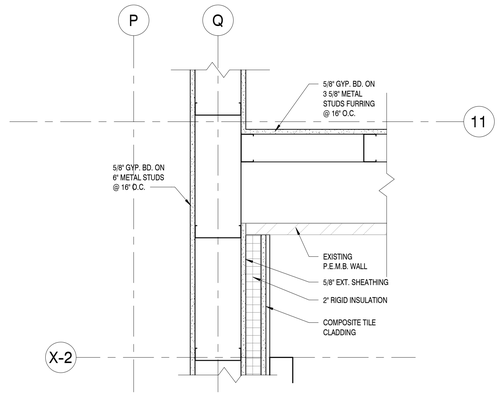
3



WALL DETAIL

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

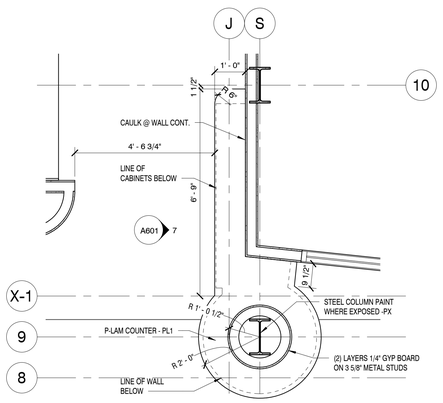
4



WALL DETAIL

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

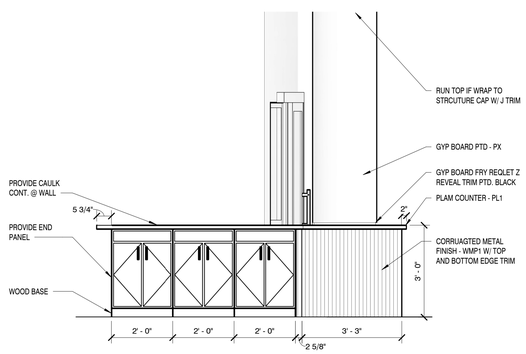
5



COLUMN WRAP DETAIL

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

6



COLUMN WRAP ELEVATION

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

7

RESTROOM ACCESSORIES (X)

A. 24" x 36" FRAMELESS MIRROR W/ 1/4" FLOAT PLATE SET IN SILICONE. (40" A.F.F. TO BOTTOM OF REFLECTIVE SURFACE).

B. NOT USED

C. TOILET TISSUE DISPENSER (WALL MOUNTED). DISPENSER SHALL BE LOCATED ITHIN 12" OF THE FRONT EDGE OF THE TOILET SEAT. (1 PER STALL)

D. 42" & 36" HORIZ. AND 18" VERT. STAINLESS STEEL GRAB BAR, (SURFACE MOUNTED). 1 1/4" - 1 1/2"O MOUNTED 1 1/2" FROM WALL.

E. NOT USED

F. SOAP DISPENSER

G. FEMININE NAPKIN RECEPTACLE

H. COAT HOOK

I. AUTOMATIC HAND DRYER

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KNOXVILLE, TN 37919

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CONSULTANT

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18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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REVISION INFORMATION

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KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

ENLARGED PLANS AND DETAILS

SHEET NO.:

A601

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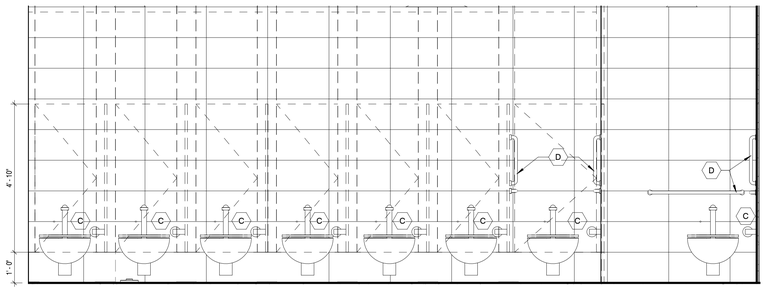
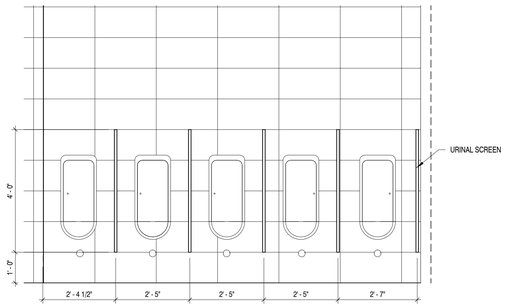


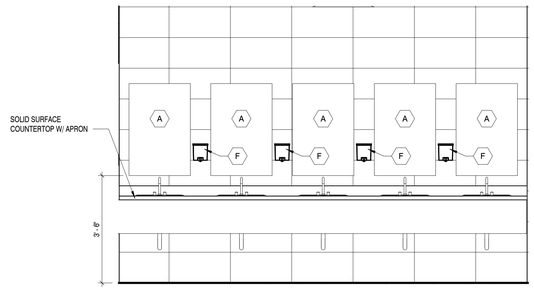
MEN'S RESTROOM ELEVATION 1

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



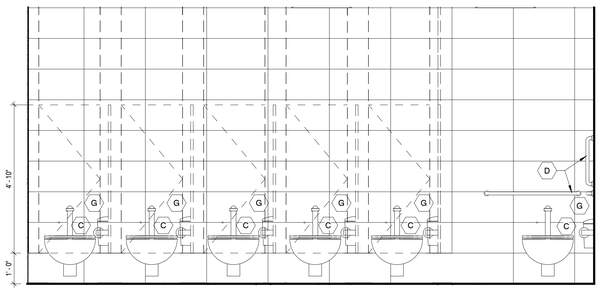
MEN'S RESTROOM ELEVATION 2

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



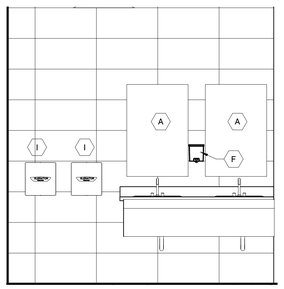
MEN'S RESTROOM ELEVATION 3

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



WOMEN'S RESTROOM ELEVATION 4

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



WOMEN'S RESTROOM ELEVATION 5

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

RESTROOM ACCESSORIES X

A. 24" x 36" FRAMELESS MIRROR W/ 1/4" FLOAT PLATE SET IN SILICONE. (40" A.F.F. TO BOTTOM OF REFLECTIVE SURFACE).

B. NOT USED

C. TOILET TISSUE DISPENSER (WALL MOUNTED). DISPENSER SHALL BE LOCATED ITHIN 12" OF THE FRONT EDGE OF THE TOILET SEAT. (1 PER STALL)

D. 42" & 36" HORIZ. AND 18" VERT. STAINLESS STEEL GRAB BAR, (SURFACE MOUNTED), 1 1/4" - 1 1/2"Ø MOUNTED 1 1/2" FROM WALL.

E. NOT USED

F. SOAP DISPENSER

G. FEMININE NAPKIN RECEPTACLE

H. COAT HOOK

I. AUTOMATIC HAND DRYER

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ADDISON, AL 35540

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REVISION INFORMATION

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KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

ENLARGED ELEVATIONS

SHEET NO.:

A602

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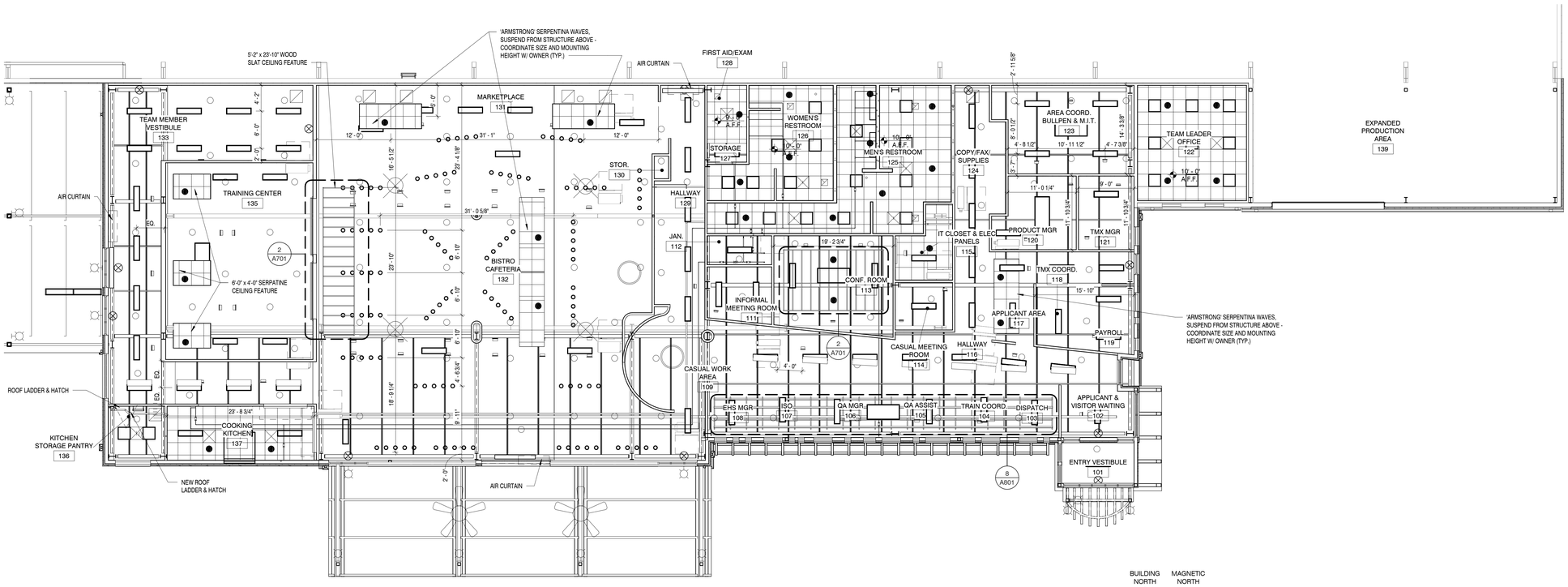
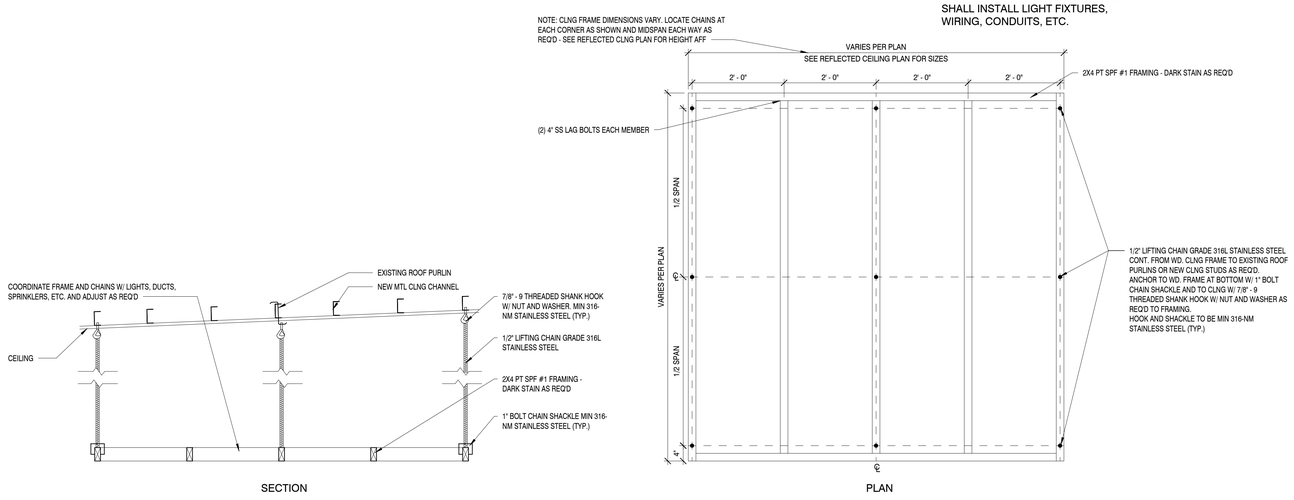


FIRST FLOOR REFLECTED CEILING PLAN

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

1

NOTE: ALL LIGHT FIXTURES TO BE SUPPLIED BY OWNER CONTRACTOR SHALL INSTALL LIGHT FIXTURES, WIRING, CONDUITS, ETC.



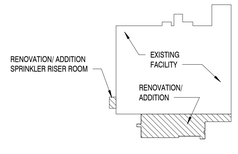
INT. CEILING FRAME DETAIL

SCALE : 3/4" = 1'-0"

2

REFLECTED CEILING LEGEND

- 2'-5" X 5'-3" LED FIXTURE
- 2' X 2' LED FIXTURE
- 4'-0" SURFACE LINEAR LIGHTING
- 8" SUSPENDED CAN DOWN LIGHT
- COMBINATION EMERGENCY LIGHT AND EXIT LIGHT
- EXIT LIGHT
- EMERGENCY LIGHT
- HVAC SUPPLY DIFFUSER
- HVAC R/A GRILL
- EXHAUST FAN
- 24"X24" ACOUSTICAL CEILING TILE
- 10' - 0" A.F.F. — CEILING HEIGHT UNLESS OTHERWISE NOTED



COMPOSITE PLAN

SCALE :N.T.S.

MBI

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KNOXVILLE, TN 37919

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DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

REFLECTED CEILING PLAN AND DETAILS

SHEET NO.: A701

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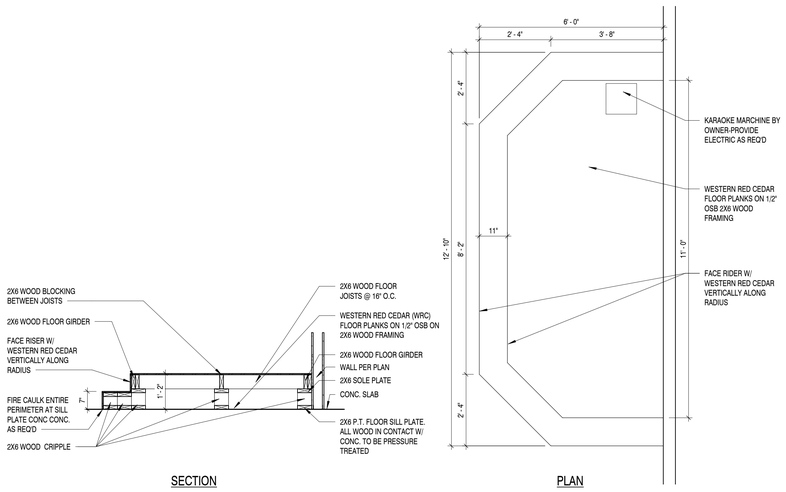
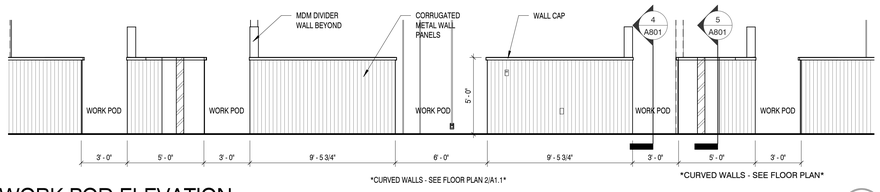


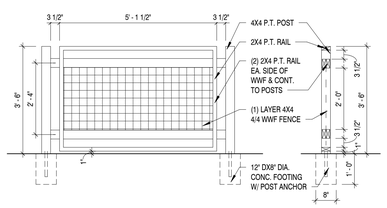
PLATFORM DETAIL (1)

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



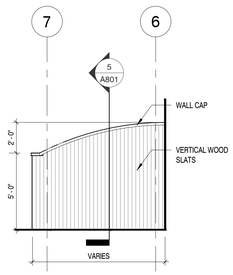
WORK POD ELEVATION (2)

SCALE : 1/4" = 1'-0"



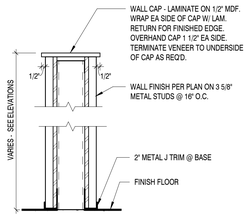
FENCE DETAIL (3)

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



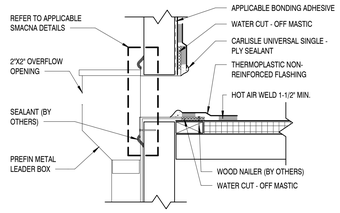
WORK POD SIDE ELEVATION (4)

SCALE : 1/4" = 1'-0"



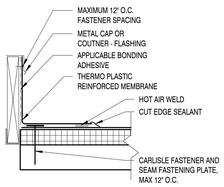
WORK ROD WALL SECTION (5)

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



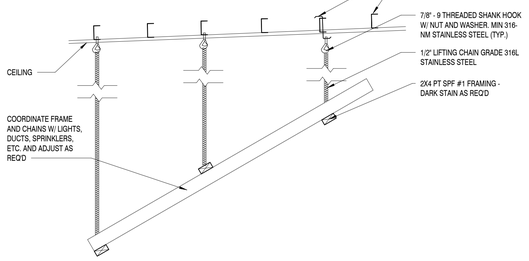
VENT PIPE PEN. DTL (6)

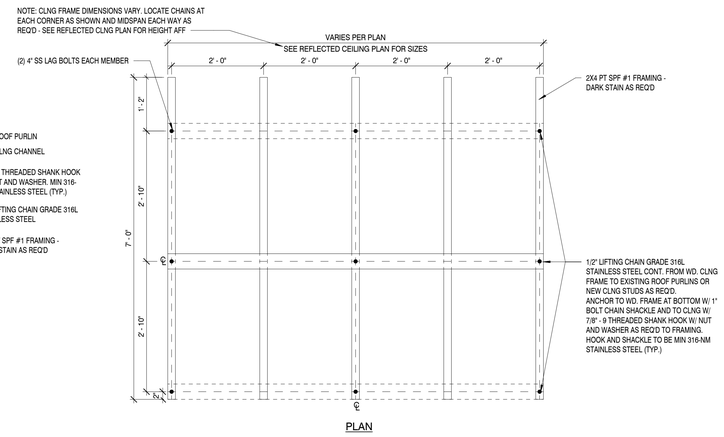
SCALE : 1 1/2" = 1'-0"



VENT PIPE PEN. DTL (7)

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





WOOD SLAT CEILING FRAME DETAIL (8)

SCALE : 3/4" = 1'-0"

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.:	180789.04

NOTES

ACTIVE DESIGN PHASE

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

MISC. DETAILS AND NOTES

SHEET NO.:

A801

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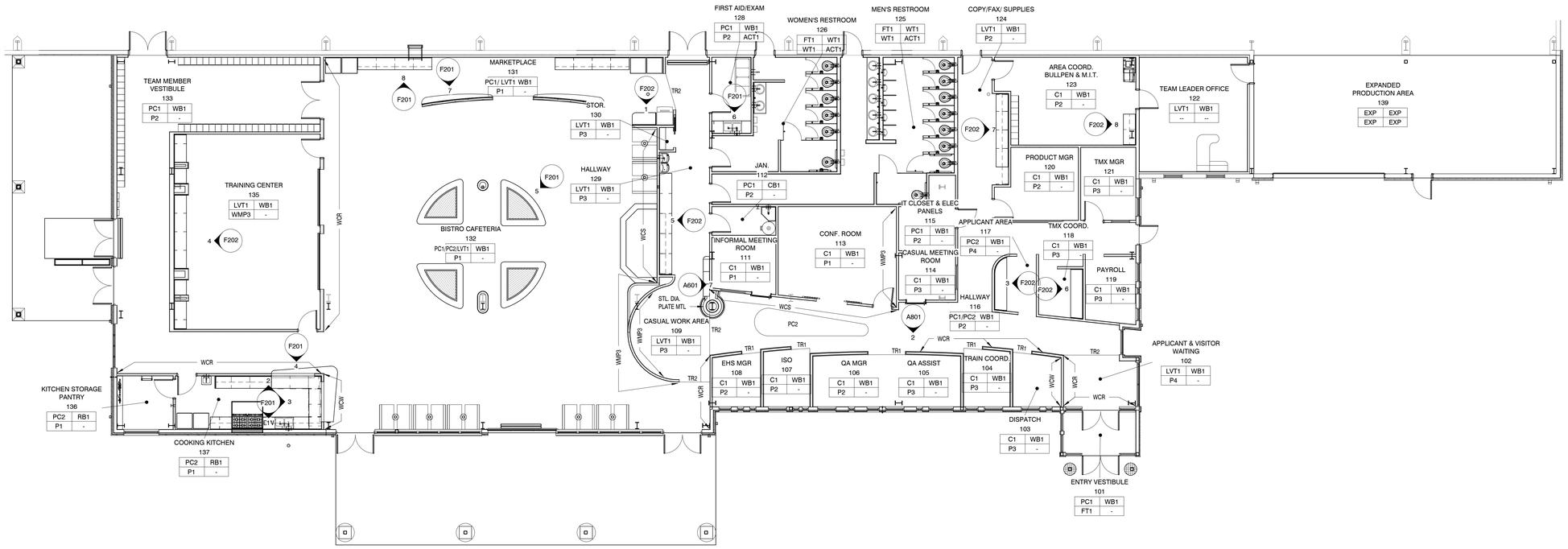


FINISH FLOOR PLAN

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

1

BUILDING NORTH

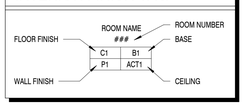
MAGNETIC NORTH

FINISH SCHEDULE

JOB NAME: CLAYTON ADDISON MANUFACTURING FACILITY (943)

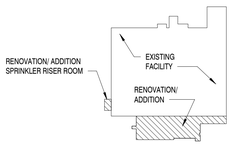
CODE	ITEM	MANUFACTURER	DESCRIPTION
	FLOORING		NOTE: LOCATE THE FLOOR FINISH CHANGE AT DOOR OPENINGS AT THE CENTERLINE OF THE DOOR LEAF
C1	CARPET	SHAW CONTRACT	KHAKI 17761, COLOR AS SELECTED BY OWNER
C2	CARPET	MOHAWK	STARTING OVER GT316, 739 BLAST
LVT1	LUXURY VINYL TILE	SHAW CONTRACT	NATURAL CHOREOGRAPHY. "CUT" STYLE 0922V, COLOR: MUSHROOM 22155
FT1	FLOOR TILE	--	--
WB1	WOOD BASE	--	1X6 PAINTED P5
RB1	RUBBER BASE	JOHNSONITE	29 MOONROCK 4" CONC/LVT FLOOR AREAS
PC1	POLISHED CONCRETE	_____	LEVEL 2 SATIN, CLASS B FINE AGGREGATE - DARK COLOR
PC2	POLISHED CONCRETE	_____	LEVEL 2 SATIN, CLASS B FINE AGGREGATE - LIGHT COLOR
TR1	TRANSITION	TREDSAFE	DT023, COLOR: NATURAL SATIN (LVT TO CARPET)
TR2	TRANSITION	TREDSAFE	DT066, COLOR: NATURAL SATIN (LVT TO CONCRETE)
TR3	TRANSITION	SCHLUTER	DILEX-AHKA-AE (WALL TILE TO CONRETE FLOOR)
TR4	TRANSITION	SCHLUTER	QUADEC AE (WALL TILE TO GYP. BD.)
	WALLS		
P1	PAINT	SHERWIN WILLIAMS	COLOR: 7613 AQUA SPHERE
P2	PAINT	SHERWIN WILLIAMS	COLOR: 7506 LOGGIA
P3	PAINT	SHERWIN WILLIAMS	COLOR: 7663 MONORAIL SILVER
P4	PAINT	SHERWIN WILLIAMS	COLOR: 6236 GRAYS HARBOR
P5	PAINT	SHERWIN WILLIAMS	COLOR: 7675 SEALSKIN (1X6 TRIM/BASEBOARDS/DOOR FRAMES)
WT1	WALL TILE	DALTILE	LINDEN POINT GRIGIO LP21, 12X24, HORIZONTAL OFFSET PATTERN, GROUT: CUSTOM BUILDING PRODUCTS, 543 DRIFTWOOD
WCS	M STONE	--	SUMLINE STONE LAMINATES, SLATE VENEER, 2mm THICK, COLOR: AS SELECTED BY OWNER
WCW	WOOD PLANK	--	COMPOSITE WOOD SIDING, WESTERN CEDAR
WMP1	METAL PANEL	--	--
WMP2	CORRUGATED METAL PANEL	--	1.25"X1.25", 28 GA. W/ 2" J TRIM TOP AND BOTTOM
WMP3	METAL PANEL	PAC CLAD	7/8" 24 GA. CORRUGATED PANEL, EXPOSED FASTENERS, "WEATHERED COPPER" W/ TRIM ACCESSORIES TOP AND BOTTOM
	PLASTIC LAMINATE		
PL1	P. LAM	WILSONART	COLOR: TBD (COUNTERTOPS)
PL2	P. LAM	FORMICA	COLOR: 6414-NG BLACK RIFTWOOD (FACE OF CABINETS)
	CEILING		
ACT1	ACOUSTICAL CEILING TILE	ARMSTRONG	STYLE: ULTIMA-1912 BEVELED TEGULAR, SIZE: 24" x 24" x 3/4", COLOR: WHITE FINE TEXTURE, GRID: 9/16"
GB1	GYP. BD. BULKHEAD	SHERWIN WILLIAMS	PAINT (P1) UNLESS NOTED OTHERWISE
	MISC		
MTL1	CORRUGATED MTL WALL PANEL	_____	CORRUGATED METAL PANEL 1 1/4"X1/4" GALVANIZED 28 GA PANEL W/ 2" JTRIM HEAD/BASE CAP
WRC	WESTERN RED CEDAR	_____	CLEAR WESTERN RED CEDAR SLATS 1" THICK X 4", 6", 8" WIDE - STAGGER SIZES & PROVIDE 4" SLAT BASE @ TOP/BOTTOM INTERIOR AREAS (STAIN: BROWN SEMI-SOLID STAIN ON ALL WESTERN CEDAR)
TP1	TOILET PARTITIONS	GLOBAL PARTITIONS	STAINLESS STEEL SATIN #4, CEILING HUNG
SS1	SOLID SURFACE	CORIAN	AQUA-LITE

INTERIOR FINISH TAG



GENERAL INTERIOR NOTES

1. ETR = EXISTING TO REMAIN
2. CLEAN & APPLY CLEAR SEALANT TO EXPOSED STRUCTURE/STEEL.
3. CLAYTON TO HAVE THE OPTION TO FURNISH INTERIOR FINISH PRODUCTS THAT WILL BE CONTRACTOR INSTALLED. CONTRACTOR TO COORDINATE WITH CLAYTON ON OWNER FURNISHED/CONTRACTOR INSTALLED ITEMS.
4. ALL TVS & EQUIPMENT TO BE OWNER FURNISHED CONTRACTOR INSTALLED. FURNITURE BY OWNER.
5. ALL FURR DOWNS TO BE PAINTED P1 UNLESS OTHERWISE NOTED
6. ALL HOLLOW METAL PAINT SHALL HAVE SEMI-GLOSS FINISH
7. CONTRACTOR TO PROVIDE APPROPRIATE TRANSITIONS AS REQUIRED
8. PRIOR TO CONSTRUCTION, CONTRACTOR TO SUBMIT ALL SAMPLES TO ARCHITECT FOR REVIEW AND APPROVAL
9. ALL GYPSUM WALL BOARD TO BE PAINTED
10. CONTRACTOR SHALL PROVIDE APPROPRIATE SEAM SEALANT FOR ALL TRANSITIONS
11. CONTRACTOR SHALL PROVIDE CARPET TILE ADHESIVES AS RECOMMENDED BY THE CARPET TILE MANUFACTURER.



COMPOSITE PLAN

SCALE :N.T.S.

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PROJECT NO.: 180789.04

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DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

FINISH FLOOR PLAN

SHEET NO.:

F101

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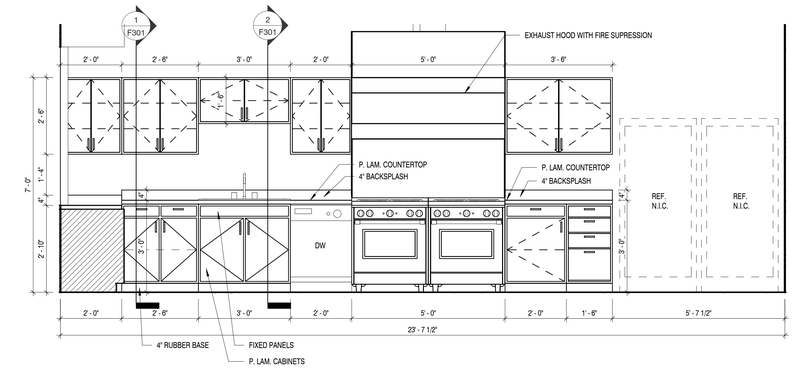
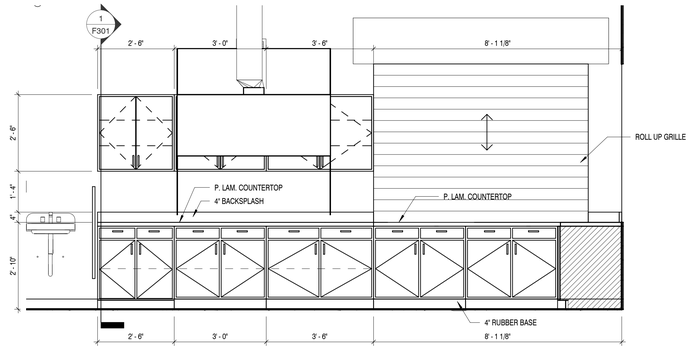


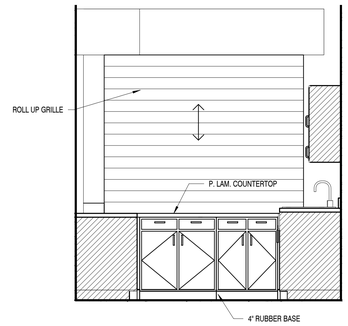
WARMING KITCHEN INT. ELEVATION (1)

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



WARMING KITCHEN INT. ELEVATION (2)

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



WARMING KITCHEN INT. ELEVATION (3)

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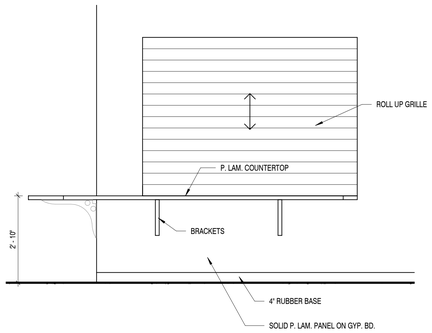

BISTRO INT. ELEVATION (4)

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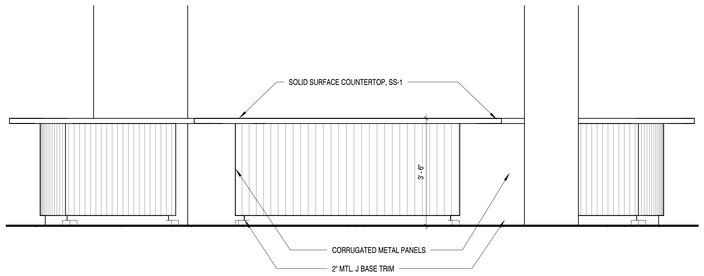

BISTRO INT. ELEVATION (5)

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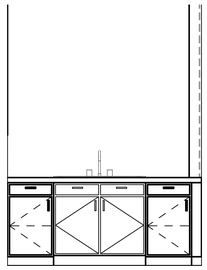

FIRST AID ELEVATION (6)

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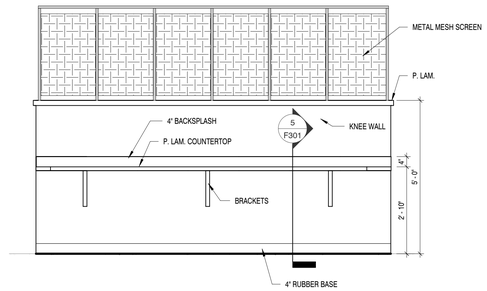

MARKETPLACE INT. ELEVATION (7)

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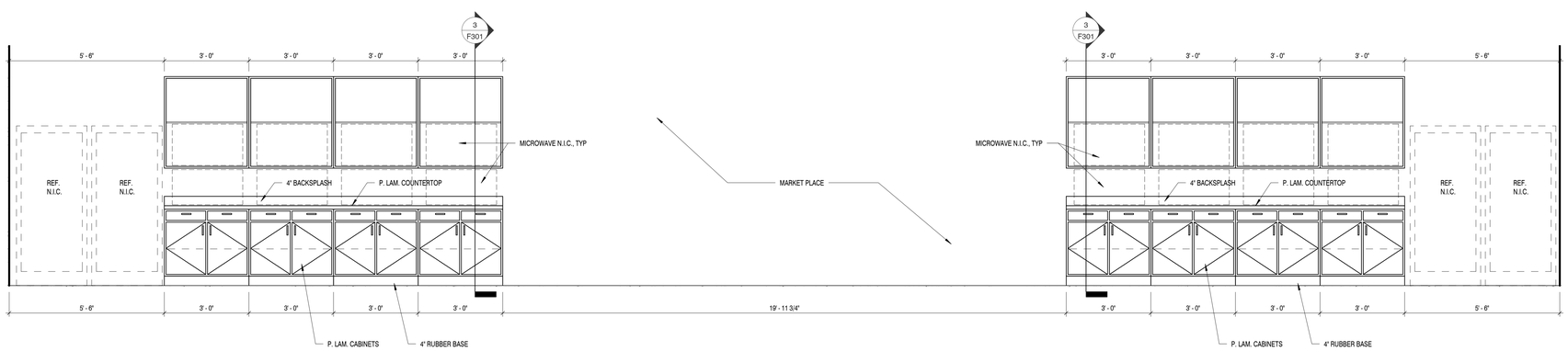

MARKETPLACE INT. ELEVATION (8)

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

GENERAL MILLWORK NOTES

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION NECESSARY TO FABRICATE MILLWORK.
2. SEE DRAWINGS, SCHEDULES AND DETAILS FOR LOCATION, QUANTITY AND DESIGN OF MILLWORK REQUIRED.
3. MILLWORK IS DEFINED AS ALL SHOP FABRICATED CABINETRY AND COUNTERTOPS, INCLUDING THE INSTALLATION OF THEM AS NECESSARY TO COMPLETE THE WORK.
4. ALL WORK SHALL CONFORM TO THE QUALITY STANDARDS OF THE ARCHITECTURAL WOODWORK INDUSTRY (AWI) FOR CUSTOM GRADE.
5. FURNISH ALL ITEMS OF ROUGH HARDWARE AND WOOD BLOCKING OR OTHER ACCESSORIES SHOWN OR REQUIRED TO PROPERLY SECURE THE WORK IN PLACE.
6. CABINET MANF. SHALL HAVE A PROVEN HISTORY OF PRODUCING FINE QUALITY MILLWORK.
7. CONTRACTOR SHALL NOT DELIVER OR INSTALL MILLWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETE AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY AT OCCUPANCY LEVELS DURING THE REMAINDER OF CONSTRUCTION PERIOD.
8. CONTRACTOR TO FIELD VERIFY WHERE MILLWORK IS INDICATED TO FIT TO OTHER CONSTRUCTION. VERIFY DIMENSIONS AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.
9. CONTRACTOR TO COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.
10. CONTRACTOR TO LOCATE CONCEALED FRAMING, BLOCKING AND REINFORCEMENTS THAT SUPPORT WOODWORK BY FIELD MEASURING BEFORE BEING ENCLOSED AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.
11. CONTRACTOR TO COORDINATE SIZES AND LOCATIONS OF FRAMING, BLOCKING, FURRING, REINFORCEMENTS AND OTHER RELATED UNITS OF WORK AS INDICATED TO ENSURE THAT ARCHITECTURAL WOODWORK CAN BE SUPPORTED AND INSTALLED AS INDICATED.

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SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

INTERIOR ELEVATIONS

SHEET NO.:

F201

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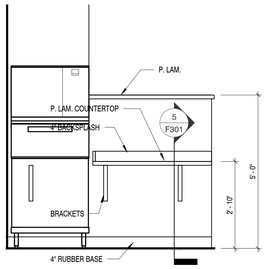
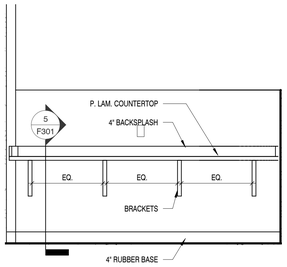


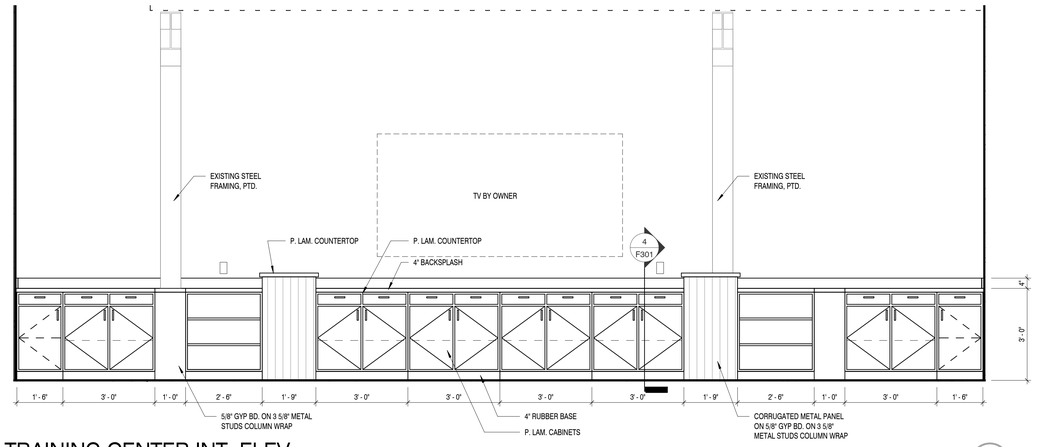
CONDIMENT COUNTER 1

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



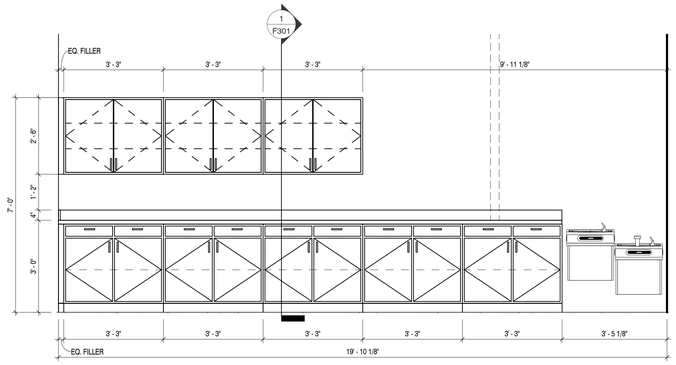
APPLICANT AREA INT. ELEVATION 3

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



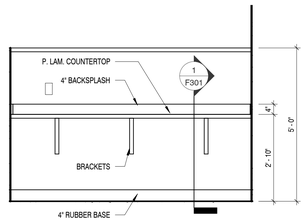
TRAINING CENTER INT. ELEV. 4

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



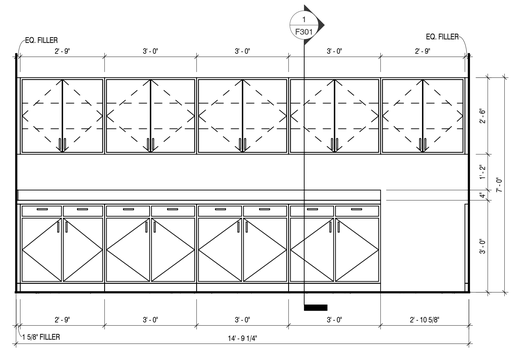
HALLWAY INT. ELEVATION 5

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



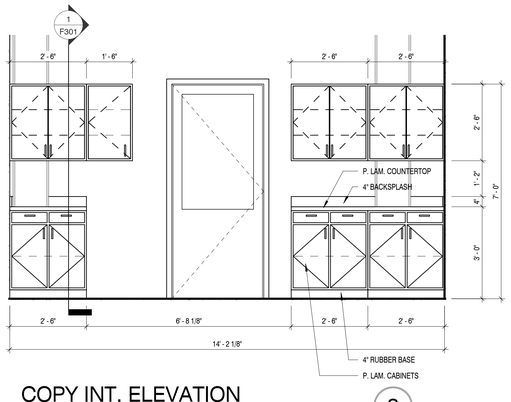
TMX COORD. ELEVATION 6

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



HALLWAY INT. ELEV. 7

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



COPY INT. ELEVATION 8

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

GENERAL MILLWORK NOTES

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION NECESSARY TO FABRICATE MILLWORK.
2. SEE DRAWINGS, SCHEDULES AND DETAILS FOR LOCATION, QUANTITY AND DESIGN OF MILLWORK REQUIRED.
3. MILLWORK IS DEFINED AS ALL SHOP FABRICATED CABINETRY AND COUNTERTOPS, INCLUDING THE INSTALLATION OF THEM AS NECESSARY TO COMPLETE THE WORK.
4. ALL WORK SHALL CONFORM TO THE QUALITY STANDARDS OF THE ARCHITECTURAL WOODWORK INDUSTRY (AWI) FOR CUSTOM GRADE.
5. FURNISH ALL ITEMS OF ROUGH HARDWARE AND WOOD BLOCKING OR OTHER ACCESSORIES SHOWN OR REQUIRED TO PROPERLY SECURE THE WORK IN PLACE.
6. CABINET MANF. SHALL HAVE A PROVEN HISTORY OF PRODUCING FINE QUALITY MILLWORK.
7. CONTRACTOR SHALL NOT DELIVER OR INSTALL MILLWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETE AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY AT OCCUPANCY LEVELS DURING THE REMAINDER OF CONSTRUCTION PERIOD.
8. CONTRACTOR TO FIELD VERIFY WHERE MILLWORK IS INDICATED TO FIT TO OTHER CONSTRUCTION. VERIFY DIMENSIONS AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.
9. CONTRACTOR TO COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.
10. CONTRACTOR TO LOCATE CONCEALED FRAMING, BLOCKING AND REINFORCEMENTS THAT SUPPORT WOODWORK BY FIELD MEASURING BEFORE BEING ENCLOSED AND INDICATE MEASUREMENTS ON SHOP DRAWINGS.
11. CONTRACTOR TO COORDINATE SIZES AND LOCATIONS OF FRAMING, BLOCKING, FURRING, REINFORCEMENTS AND OTHER RELATED UNITS OF WORK AS INDICATED TO ENSURE THAT ARCHITECTURAL WOODWORK CAN BE SUPPORTED AND INSTALLED AS INDICATED.

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STATE OF ALABAMA
ERIN E. HARLOW
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09/05/2019
REGISTERED ARCHITECT

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH
SHEET TITLE:	

INTERIOR ELEVATIONS

SHEET NO.:

F202

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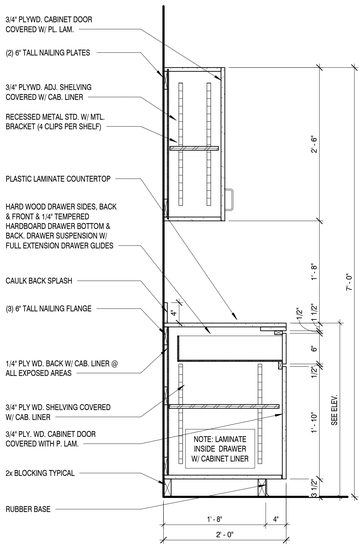
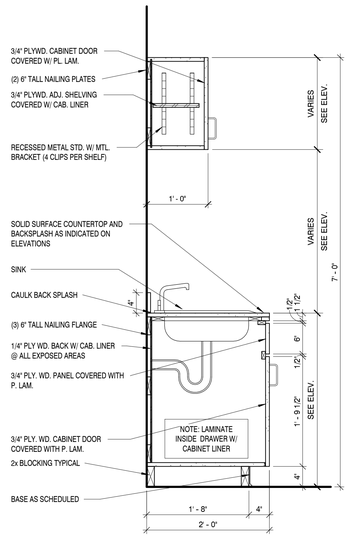


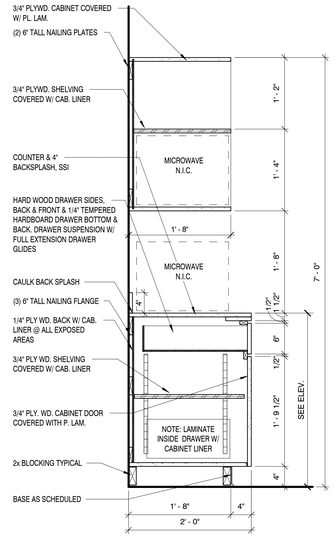
MILLWORK SECTION 1

SCALE : 1" = 1'-0"



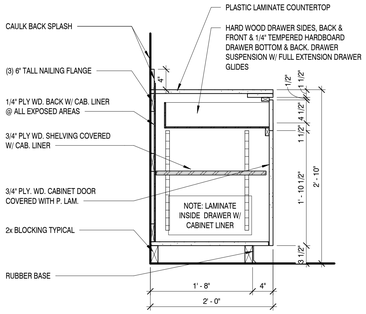
MILLWORK SECTION 2

SCALE : 1" = 1'-0"



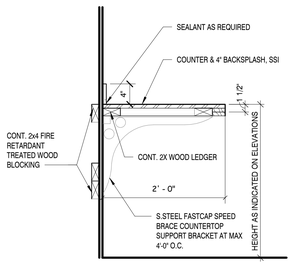
MILLWORK SECTION 3

SCALE : 1" = 1'-0"



MILLWORK SECTION 4

SCALE : 1" = 1'-0"



COUNTERTOP SUPPORT SECTION 5

SCALE : 1" = 1'-0"

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	MES
DRAWN BY:	ARV
REVIEWED BY:	EEH

SHEET TITLE:

INTERIOR ELEVATIONS & MILLWORK DETAILS

SHEET NO.:

F301

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ARCH E1

GENERAL NOTES

1. Structural drawings are intended to be used in close coordination with the civil, architectural, mechanical, plumbing and electrical drawings. Any discrepancies or omissions shall be brought to the attention of the Architect and resolved prior to the beginning of construction.
2. Submit written request to the Architect for approval of any proposed change to the requirements of the contract documents. Splicing, cutting, notching or other alterations to structural members are not permitted without written authorization of the Structural Engineer. Any unauthorized deviation from the contract documents, and correction thereof, is the responsibility of the Contractor.
3. The Contractor is responsible for the means and methods of construction in regards to job site safety.
4. The Contractor shall verify all dimensions and conditions. The Architect shall be notified of any discrepancies.
5. The Contractor is responsible for bracing the structure prior to the completion of all roof, floor, and wall diaphragms.
6. The Contractor shall coordinate the structural foundation and framing layouts with other trades.
7. Where live loads for which each floor or portion thereof a commercial or industrial building is or has been designed to exceed 50 psf, such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply using durable signs.

SUBMITTAL NOTES

1. The Structural Engineer's review is only for general conformance with the design concept, the construction documents and specifications. Corrections or comments made on this review do not relieve the contractor from compliance with the plans and specifications. Comments on this review do not authorize an increase in the construction budget.
2. Approval of shop drawings does not indicate acceptance of deviations from the contract documents, unless accepted by the Engineer in writing prior to submission of shop drawings. Conflicts resulting from such deviations, conflicts between this work and the work of other trades due to such deviations, and dimensional conflicts as a result of such deviations shall be deemed the Contractor's responsibility.
3. Any changes to the details shown in these contract documents shall be submitted in writing by RFI and approved by the Architect and Engineer prior to submitting shop drawings. All such changes shall be "bubbled" on the shop drawings and referenced to the proper RFI.
4. Submittals shall conform to the requirements of the contract documents. Non-conforming or non-reviewed submittals will be returned without review.
5. Submittals shall be checked and marked "Reviewed - No Exceptions Taken" by the Contractor prior to submittal to the Architect. Submittals that have not been reviewed by the Contractor prior to submittal will be returned without review.
6. Submittals shall not contain reproductions of the contract documents. Submittals containing such reproductions will be returned without review.
7. Submit the following items for the Engineer's review:
   a) Concrete mix designs
   b) Reinforcing steel
   c) Construction joint locations in structural floors (1)
   d) Contraction joint locations in masonry walls
   e) Structural steel (2)(3)
   f) Steel joists and joist girders
   g) Metal deck
   h) Cold-formed steel framing (2)(3)
   Footnotes:
   (1) Approved construction joint locations may require additional reinforcing
   (2) See material specific notes for items to be reviewed by a Specialty Engineer
   (3) Calculations shall be submitted and signed/sealed by the Specialty Engineer

DESIGN CODES AND SPECIFICATIONS

Building Code	2015 International Building Code
Design Loads	ASCE 7-10: Minimum Design Loads for Buildings and Other Structures
Concrete	ACI 318-11: Building Code Requirements for Structural Concrete
	ACI 315-99: Manual of Standard Practice for Detailing Concrete Structures
	ACI 301-10: Specifications for Structural Concrete
	ACI 305.1-06: Specifications for Hot Weather Concrete
	ACI 306.1-90: Standard Specification for Cold Weather Concreting
	ACI 302.1R-04: Guide for Concrete Floor and Slab Construction
	ACI 304.R-00: Guide for Measuring, Mixing, Transporting and Placing...
	CRSI 8th Edition: Placing Reinforcing Bars
	AWS D1.4/D1.4M-2011: Structural Welding Code - Reinforcing Steel
Steel	AISC 360-10: Specification for Structural Steel Buildings
	AWS D1.1/D1.1M-2010: Structural Welding Code - Steel
Masonry	ACI 530-11: Building Code Requirements for Masonry Structures
Cold-formed Steel	AISI S100-10: North American Specification for the Design of Cold-formed Steel Structural Members, 2010.
	SSMA (ICC ES: ESR-3064P): Steel Stud Manufacturers Association Product Technical Information
Wood	2012 NDS: National Design Specification for Wood Construction
Aluminum	ADM1-10: Aluminum Design Manual

DESIGN LOADS

1. Dead Load	
Flat Roof (less than 1:12 slope)	30 psf
Sloped Roof (1:12 slope and greater)	20 psf
2. Live Load	
Roof	20 psf
3. Snow Load	
Ground Snow Load, Pg	10 psf
Risk Category	II
Importance Factor, I	1.0
Exposure Factor, Ce	1.0
Thermal Factor, Ct	1.0
Flat Roof Snow Load, Pf	7 psf
4. Wind Load	
Ultimate Wind Speed	115 mph
Nominal Wind Speed	90 mph
Risk Category	II
Exposure Category	C
Enclosure Classification	Enclosed
Internal Pressure Coefficient	±0.18
Mean Roof Height, h	17.83 ft
Velocity Pressure, qh	15.2 psf
Wall C&C Pressure (zone 5)	
Effective Area < 50 sf	+15.5 / -20.0 psf
50 sf ≤ Effective Area < 100 sf	+14.7 / -18.5 psf
Effective Area ≥ 100 sf	+14.0 / -17.0 psf
Roof C&C Pressure (flat roof, zone 3)	
Effective Area < 50 sf	+10.0 / -26.5 psf
50 sf ≤ Effective Area < 100 sf	+10.0 / -23.6 psf
Effective Area ≥ 100 sf	+10.0 / -21.0 psf
Note: Wind pressures above are reported at nominal level (0.6W)	
5. Seismic Load	
Risk Category	II
Importance Factor, I	1.0
Site Class	D
Mapped Acceleration Parameters	
Ss	25.0%
S1	11.7%
Design Spectral Acceleration Parameters	
Sds	0.267
Sd1	0.182
Seismic Design Category	C
Analysis Method	Equivalent Lateral Force
Basic Seismic Force Resisting System	
Bearing Wall System: Structural Steel System not Specifically Detailed for Seismic Resistance	
Response Modification Coefficient, R	3
System Overstrength Factor, Ωo	2.5
Deflection Amplification Factor, Cd	3
Seismic Base Shear Coefficient, Cs	0.089

SPECIALTY ENGINEER REQUIREMENTS

1. Steel pan stairs shall be designed by the steel fabricator's specialty engineer. The design shall include stringers, treads, hand railings, platforms, pan inserts, miscellaneous supports and connections. Shop drawings shall be submitted for review and must be signed and sealed by a Professional Engineer registered in the same state as the project location. Shop drawings not signed and sealed will be rejected without review. A minimum design live load of 100 psf shall be used.
2. Handrails, posts and support connections shall be designed by the steel fabricator's specialty engineer. Shop drawings shall be submitted for review and must be signed and sealed by a Professional Engineer registered in the same state as the project location. Shop drawings not signed and sealed will be rejected without review. Design loads shall conform to all requirements of the governing building code. Handrail assemblies guards shall also be designed for the following minimum criteria:
   a) 50 lbs per linear foot in any direction
   b) Single concentrated load of 200 lbs applied in any direction
   c) Intermediate rails designed to withstand a horizontal applied normal load of 50 lbs on an 1'-0" x 1'-0" area
   d) Grab bars to resist a single concentrated load of 250 lbs applied in any direction
3. Exterior curtain walls shall be designed by the vendor's specialty engineer. The design shall include frame, glass, glazing and connections. Shop drawings shall be submitted for review and must be signed and sealed by a Professional Engineer registered in the same state as the project location. Shop drawings not signed and sealed will be rejected without review. Design loads shall conform to all requirements of the governing building code. Shop drawings shall contain anticipated load reactions that will be applied to the supporting structure.

FOUNDATION NOTES

1. Foundation design parameters have been assumed and should be verified by a Geotechnical Engineer prior to construction.
2. Foundation design parameters:
   a) Minimum Frost Protection Depth = 18"
   b) Allowable Soil Bearing Pressure = 2000 psf
   c) Subgrade Modulus = 100 pci
3. All footings shall bear on firm undisturbed residual soil and/or engineered earth fill compacted to 98% of its maximum dry density as per ASTM D698 (Standard Proctor), unless noted otherwise. THE SOIL BEARING CAPACITY IS TO BE VERIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
4. Provide the minimum frost depth protection depth from finished grade to the bottom of any exterior footing or turn down building slab. Also provide a minimum of 1'-0" cover from finished grade to the top of any exterior footing. Contractor to coordinate the location and depths of footing steps as required by finished grade conditions.
5. Contractor to coordinate the location and depths of footing steps as required to allow for the passage of underground plumbing and utilites.
6. Backfill retaining walls with clean crushed stone (No. 57 or 67 size) 2-6" wide (minimum) from the top of the footing to within 1'-0" of finished grade.
7. Provide 6" diameter perforated pipe footing drains at all retaining walls and foundation walls in which finished grade occurs above the finished floor elevation. Footing drains are to be totally independent and not connect with any other type of water drainage systems except at the footing drain terminations. The Architect or Structural Engineer should approve connections at the footing drain terminations.
8. Provide continuous waterstops between footings and concrete/masonry walls at locations where finished grade is located above the adjacent finished floor or at floor pits (i.e. elevator shaft).
9. Contractor shall treat soil under slabs, footings and crawl spaces with EPA approved chemical vermin control or as required per the building code.
10. Refer to the mechanical, plumbing or electrical drawings for concrete pads and foundations not shown on the structural drawings.

CONCRETE NOTES

1. All concrete elements shall be installed and detailed in accordance with the appropriate ACI documents. Contractor to have copies of the ACI documents at the job site during construction.
2. Concrete compressive strength, f'c, at 28-days shall be as follows at minimum unless noted otherwise:
   a) Footings: 3000 psi (2500 psi used in design)
   b) Grade Beams and Pile Caps: 4000 psi
   c) Interior Slabs on Grade Less Than 6" Thick: 3000 psi (non air entrained)
   d) Interior Slabs on Grade Greater Than or Equal to 6" Thick: 4000 psi (non air entrained)
   e) Formed Walls, Beams, Structural Slabs and Stairs: 4000 psi
   f) Elevated Slabs: 4000 psi
   g) CMU Core Fill: 3000 psi
   h) Concrete Exposed to Weather: 4000 psi (w/ 4%-6% air entrainment)
3. The maximum water-to-cement ratios shall be as follows:
   a) Concrete exposed to freezing and thawing: 0.50
   b) Concrete subject to deicers and/or required to be watertight: 0.45
   c) All other concrete types: 0.58
4. Concrete mix designs shall be submitted as follows:
   a) Each mix design shall be labeled to indicate the area in which the concrete is to be placed (i.e. foundations, slab on grade, columns, etc.). Failure to do so will cause delay and/or rejection of submittals.
   b) Proposed mix design shall be in accordance with Method 1 or Method 2 of ACI 301. Provide supporting data in tabular form for each separate proposed mix.
   c) Submit concrete mix designs for each proposed class of concrete.
5. Fly ash, meeting ASTM C618 Class C or Class F may be used to replace up to 25% of Portland cement. Contractor and supplier shall coordinate to ensure that required set times for concrete are not adversely affected by use of fly ash. Contractor and all concrete subcontractors shall have experience with handling, placing and finishing concrete with fly ash.
6. Grout used in grout beds under column base plates shall be cement based, non-shrink grout. The grout shall exhibit no shrinkage in accordance with ASTM C827, "Test Method for Early Volume Change of Cementitious Mixtures" and shall have a minimum 28-day compressive strength of 5000 psi when tested in accordance with ASTM C109, "Test Method for Compressive Strength of Hydraulic Cement Mortars."
7. The following minimum concrete cover shall be provided for reinforcing bars:
   a) Cast against and permanently exposed earth: 3"
   b) Formed and exposed to earth or weather (#6 thru #18 bars): 2"
   c) Formed and exposed to earth or weather (#5 bars, W31 wire and smaller): 1-1/2"
   d) Slabs, walls & joists formed and not exposed to weather or in contact with the ground (#11 bar and smaller): 3/4"
   e) Beams, girders & columns formed and not exposed to weather or in contact with the ground: 1-1/2"
8. Unless noted otherwise, slabs on grade shall be 4" thick with 6x6-W1.4xW1.4 W.W.F. on 15 mil polyethylene vapor barrier on 4" thick crushed stone base.
9. Slab on grade contraction joints may be saw cuts 1/8" wide x 1/4 slab thickness as detailed or other submitted and approved method. Joints shall be placed at 24'-0" o.c. maximum spacing. Areas created by joints shall have a maximum aspect ratio of 1.5:1.
10. Slab on grade construction joints shall be as detailed or other submitted and approved method.
11. Vapor barrier shall be placed over prepared base material where indicated below slabs on grade. Vapor barrier shall be no less than 15 mil thick in accordance with ACI 302.1R.
12. Vapor barrier shall conform to ASTM E1745, Class B or higher unless noted otherwise. The membrane shall have a water-vapor permeance rate no greater than 0.3 perms when tested in accordance with ASTM E154, Section 11, a minimum tensile strength of 30 lb/in when tested in accordance with ASTM E154, Section 9 and a resistance to puncture of 1700 grams in accordance with ASTM E154, Section 10.
13. Vapor barrier shall be arranged in a layout to minimize seams and penetrations. Overlap all seams a minimum of 6" and seal with tape. All penetrations must be sealed using a combination of seam tape and mastic in accordance with manufacturer's latest printed instructions.
14. See architectural, mechanical, plumbing, fire protection and electrical drawings for drips, chamfers, reglets, slots, sleeves, rustications, inserts and anchors not noted on structural drawings. Unless shown on structural drawings, no openings larger than 12" x 12" shall be placed in slabs or walls without prior approval from the Architect or Engineer. Approvals must be obtained prior to fabrication of steel and placement of concrete.
15. Contractor to include with contract price an allowance for two (2) cubic yards of reinforced concrete including materials and labor.

REINFORCING STEEL NOTES

1. Reinforcing steel and accessories shall be detailed, fabricated and placed in accordance with the latest edition of the ACI Detaling Manual. Provide shop drawings for reinforcing steel prior to fabrication.
2. Bar reinforcing shall conform to ASTM A615, Grade 60.
3. Welded bar reinforcing shall conform to ASTM A706, Grade 60.
4. Bar reinforcing lap splices shall be Class "B" but not less than 24", unless noted otherwise.

REINFORCING STEEL NOTES

5. Reinforcing shall be held securely in position with standard accessories in accordance with ACI 315 and CRSI Manual of Standard Practice.
6. Welded wire fabric shall conform to ASTM A185.
7. Welded wire fabric lap splices shall be the cross wire spacing plus 6" but not less than 10"
8. Welded wire fabric located in concrete slabs shall be located in the center of the slab unless noted otherwise. Supports used shall be spaced at a maximum of 3'-0" o.c. in any direction.
9. Provide top steel reinforcing, same size and spacing as bottom steel, in footings at any location where the soil changes from residual to engineered fill. Top steel shall extend 8'-0" minimum each side of the soil transition area. Use #3 stirrups at 18" o.c. at these locations to tie top and bottom steel.
10. Provide top steel reinforcing, same size and spacing as bottom steel, in footings at any corner in load bearing walls. Top steel shall extend 8'-0" minimum each way from the wall corner. Use #3 stirrups at 18" o.c. at these locations to tie top and bottom reinforcing.
11. Provide (2) #4 bars x 4'-0" long in slabs on grade at all re-entrant corners, contraction joint terminations and isolation joint terminations.
12. Provide 2'-6" x 2'-6" corner bars at the corners of all continuously reinforced elements such as footings, walls, bond beams, etc. Corner bars shall be the same size, spacing, location and quantity as the continous reinforcing.

STRUCTURAL STEEL NOTES

1. Structural steel shall be designed, fabricated, erected, etc. as per the AISC Manual of Steel Construction.
2. Submit shop drawings of structural steel prior to fabrication.
3. Connections not detailed on the structural drawings should be designed and detailed by the steel detailer under direct supervision of a Professional Engineer experienced in design of this work and licensed in the state where the project is located.
4. Member reactions shown on the structural drawings are given as maximum loads derived from the Allowable Stress Design load combinations prescribed by ASCE 7.
5. Allowable Strength Design (ASD) values are to be utilized in the selection or completion of the connection details.
6. Unless specific member reactions are shown on the structural drawings, connections shall develop the following loads found in the AISC Steel Construction Manual:
   a) Simple span beam shear connections: 1/2 of the maximum total uniform load capacity tabulated in Part 3 for the given shape and span
   b) Simple span beam moment connections: 90% of Allowable plastic moment (0.9Mp) strength tabulated in Part 3 for the given shape
   c) Brace connections (compression): Allowable axial compressive strength tabulated in Part 4 for the given shape and unbraced length
   d) Brace connections (tension): Allowable axial tension strength tabulated in Part 5 for the given shape
7. Structural calculations signed and sealed by a Professional Engineer shall be submitted with shop drawings for the following connections if not specifically detailed on the structural drawings:
   a) Shear connections with reaction greater than 100 kips
   b) Field bolted moment connections
   c) Braced frame connections
   d) Collector beam connections
   e) Truss connections
8. Structural steel material to be as follows:
   a) Channels, angles and plates: ASTM A36
   b) W- and WT-shapes: ASTM A992
   c) Pipes: ASTM A53 Grade B
   d) HSS: ASTM A500 Grade B
9. Bolted connections shall be bearing type, snug-tightened joints unless noted otherwise and should utilize 3/4" Ø (min.) high strength bolts conforming to ASTM A325.
10. Welded connections should utilize E70 electrodes.
11. Structural steel shall receive a shop coat of rust-inhibitive primer unless noted otherwise. Contractor shall coordinate fire proofing requirements of structural steel with architectural drawings to determine whether the chosen fire proofing material can tolerate the primer.
12. Structural steel exposed to weather shall be hot dipped galvanized in accordance with ASTM A123 unless directed otherwise by the Architect.
13. Protect structural steel from earth, gravel and/or concrete with 1/8" thick hydrocide mastic.
14. Beams supported by concrete or masonry walls to bear on a steel bearing plate, measuring 6" wide x 12" long x 1/2" thick, with (2) 1/2" diameter x 6" long headed studs cast into the wall unless noted otherwise.
15. Columns shall be anchored at minimum with (4) 3/4" diameter x 9-1/2" embed (measured from top of footing to center of embedded washer) ASTM F1554 Grade 36 anchor rods unless noted otherwise. Anchor rods shall be straight and fitted with a double nut and washer at embedded end. Threads shall project a minimum of 4" above the top of base plate and shall receive double nuts and washers for leveling. Provide 1-1/2" minimum between top of footing and bottom of base plate for placement of non-shrink grout.
16. Post-installed adhesive anchors may be considered as a substitute for 3/4" diameter cast-in-place anchor rods provided the adhesive anchors are field tested to resist forces specified by the Structural Engineer. Submit request to Structural Engineer prior to installation for approval. See Post-Installed Anchor Notes for approved adhesive anchors.
17. Post-installed adhesive anchors for connecting steel members to concrete or masonry shall use approved adhesive anchors listed in Post-Installed Anchor Notes. Threaded rods shall be ASTM A36 material unless noted otherwise. Submit request to Structural Engineer to use alternate adhesive anchor for approval prior to installation.
18. Post-installed expansion/screw anchors for connecting steel members to concrete or masonry shall use approved mechanical anchors listed in Post-Installed Anchor Notes. Submit request to Structural Engineer to use alternate expansion/screw anchor for approval prior to installation.
19. HSS4X4 or 4" pipe and smaller columns shall have 3/4" top plates sizes as required and 12x12x3/4" base plates unless noted otherwise.
20. HSS5X5, HSS6X6, 5" pipe or 6" pipe columns shall have 3/4" top plates sized as required and 14x14x3/4" base plates unless noted otherwise.
21. Welding shall be performed by operators qualified in accordance with AWS tests for the types of welding required for this project. All welders must be certified for the type of welding specified and shall be in accordance with an approved WPS. All quality procedures and personnel shall be in accordance with AWS D1.1.
22. Minimum welds unless noted otherwise:
   a) Bar joists to supports: 1/8" x 2" fillet weld each side
   b) Joist girders to supports: 1/4" x 2" fillet weld each side
   c) All others not specified: 1/8" x 2" long fillet weld except where noted as "all around"
23. Roof deck shall be 1-1/2", 22 gauge, Type B painted steel decking meeting the requirements of the Steel Deck Institute unless noted otherwise. Deck shall be welded to the supporting steel with 5/8" puddle welds on a 36/4 pattern with (2) #10 screw sidelap fasteners per span unless noted otherwise.
24. Form deck for elevated concrete slabs shall be 1", 22 gauge, Type C galvanized steel decking meeting the requirements of the Steel Deck Institue unless noted otherwise. Deck shall be welded to the supporting steel with 5/8" puddle welds on a 36/4 pattern with (2) #10 screw sidelap fasteners per span unless noted otherwise.
25. Metal deck shall be erected with a minimum three (3) span condition and shall lap at the centerline of supports a minimum of 2". Provide a minimum end bearing of 2" on supports. Metal deck shall be erected and fastened in accordance with the manufacturer's specifications and erection pay-outs.
26. Provide at minimum a L4X4X1/4 edge angle at the perimeter of all roof decks and at all openings in roof decks unless noted otherwise.
27. Provide at minimum a 1/4" edge angle at the perimeter of all elevated slabs and at all openings in elevated slabs unless noted otherwise.
28. Refer to civil, architectural, mechanical, plumbing, fire protection and electrical drawings for structural steel items not shown on the structural drawings.
29. Refer to Specialty Engineer Requirements for additional criteria for steel stairs and handrails.
30. Contractor to include with the contract price an allowance for one (1) ton of structural steel including materials and labor.

STEEL JOIST AND GIRDER NOTES

1. Steel joists, joist girders and associated bridging shall be designed, fabricated, erected, etc. as per the latest edition of the SJI Standard Specifications and the applicable OSHA standards.
2. Steel joists shall be designed for the uniform Allowable Stress Design (ASD) loads specified in the SJI Load Tables and Weight Tables for Steel Joists and Joist Girders and the concentrated loads indicated on the drawings and/or joist diagrams.
3. Joist manufacturer to supply material and specification for installation of field located elements such as diagonals to be placed at HVAC supports, bottom chord extensions not sized on the drawings, etc.
4. Submit shop drawings of steel joists and joist girders prior to fabrication.
5. All joists and joist girders framing into columns shall have erection bolts and be field welded into final position. Bottom chords are to be extended to columns and stabilized by a vertical stabilizer plate to prevent rotation during erection. Bottom chord should not be rigidly attached to vertical stabilizer plate unless noted otherwise. Vertical stabilizer plate shall be a minimum of 6" x 6" and shall extend a minimum of 3" below the bottom chord of the joist with a 13/16" hole to provide an attachment point for guying or plumbing cables.

STEEL JOIST AND GIRDER NOTES

6. Any hangers except ceiling support wires supported from joists shall be placed at panel points and connected without drilling holes in joists or field welding.
7. K-series joists supported by masonry walls to bear on 4x6x3/8" minimum bearing plates with (1) 1/2" diameter x 4" long headed studs unless noted otherwise.
8. LH-series joists supported by masonry walls to bear on 6x9x1/2" minimum bearing plates with (3) 1/2" diameter x 6" long headed studs unless noted otherwise.
9. Coordinate elevations of wall ledgers and beams when parallel to steel joists with spans equal to or greater than 60'-0" to accommodate standard joist camber.

GALVANIZED STEEL NOTES

1. All steel exposed to earth or weather, including exposed lintel angles, shall be galvanized unless directed otherwise by Architect.
2. Hot-dip galvanizing shall be performed in accordance with ASTM A123 for fasteners with minimum coating thickness as specified in ASTM standards. Standard practice for galvanization shall be performed in accordance with ASTM A385.
3. Galvanizer shall submit certificate of conformance as a part of the steel shop drawing submittal stating that project specifications have been met.
4. If galvanized steel is stored for a period in excess of one month after galvanization, galvanizer and/or fabricator shall package and store steel by methods required to prevent tight or nested stacks and to allow development of zinc coating.
5. For a material thicker than 3/4", drill holes in steel. For material 3/4" or less, punched holes are acceptable. Punched holes shall be punched undersized and then reamed an additional 1/8" overall. All holes shall be tapped after galvanizing to remove coating on interior surface of hole.
6. All bolts used for connections at galvanized steel members shall be galvanized per noted standards.
7. Weld rods used for welds at galvanized steel shall be composed of no more than 25% silicon material.
8. Damaged areas, bare spots, welds and field connections shall be touch-up galvanized per methods stipulated in ASTM A780.
9. Refer to ASTM A143, A384 and D6386 for additional standard practices related to special conditions for hot-dip galvanizing.
10. Galvanized faying surfaces at slip critical connectios shall be hot-dip galvanized in accordance with ASTM A123 and shall be roughened by means of hand wire brushing. Power wire brushing is not permitted.

COLD-FORMED STEEL (CFS) NOTES

1. Cold-formed steel framing shall be designed, detailed and installed per the latest editions of the NASPEC and SSMA Product Technical Information.
2. Cold-formed steel framing not designed and detailed in the structural drawings shall be designed by a specialty engineer employed by the framing sub-contractor. The design shall include exterior and interior wall assemblies, ceiling assemblies and other miscellaneous framing.
3. Submit shop drawings which include the following items:
   a) Plan layout showing location of cold-formed steel framing members and assemblies, including type, spacing and gauge of members
   b) Accesories and details required for proper installation
   c) Permanent and/or supplemental bracing, strapping, bridging, etc.
   d) Structural calculations, signed and sealed by a Professional Engineer registered in the same state as the project location, to verify the framing assembly's ability to meet or exceed the loads set forth by the governing building code
4. For proprietary cold-formed steel framing materials to be considered as an equal product, the Contractor shall submit product data, installation details and any other supplemental information required by the Structural Engineer with the shop drawing submittal.
5. Cold-formed steel material and minimum yield strength shall be as follows based on material thickness:
   a) 33 and 43 mil: ASTM A653 Grade A, Fy = 33 ksi
   b) 54, 68 and 97 mil: ASTM A653 Grade D, Fy = 50 ksi
6. Deflection criteria for walls shall be as follows:
   a) Interior: Height (inches) / 240
   b) Exterior: Height (inches) / 240
   c) Support masonry veneer: Height (inches) / 600
7. All structural cold-formed steel framing shall be factory color coded to provide a suitable visible means of field checking for proper location of gauge material. Submit color coding schedule with shop drawing submittal prior to installation.
8. Interior non-load bearing walls shall be sized as follows unless noted otherwise in the structural drawings or as directed by the specialty engineer (stud size @ spacing / maximum unbraced height). Walls assumed to be supported at top and bottom of wall at 4'-0" on center max.
   a) 362S125-18 @ 16" o.c. / 10'-10"
   b) 362S125-27 @ 16" o.c. / 12'-8"
   c) 362S125-33 @ 16" o.c. / 15'-4"
   d) 362S125-43 @ 16" o.c. / 16'-8"
   e) 600S125-27 @ 16" o.c. / 19'-6"
   f) 600S125-33 @ 16" o.c. / 22'-8"
   g) 600S125-43 @ 16" o.c. / 24'-9"
9. Exterior non-load bearing walls shall be sized as follows unless noted otherwise in the structural drawings or as directed by the specialty engineer (stud size @ spacing / maximum unbraced height). Walls assumed to be supported at top and bottom of wall at 4'-0" on center max.
   a) 600S162-33 @ 16" o.c. / 14'-3"
   b) 600S162-43 @ 16" o.c. / 15'-7"
   c) 600S162-54 @ 16" o.c. / 16'-8"
   d) 800S162-43 @ 16" o.c. / 19'-7"
   e) 800S162-54 @ 16" o.c. / 21'-1"
10. Continuous lateral bracing such as cold-formed steel channels welded or suitably fastened to each stud shall be provided at 4'-0" on center in the following instances unless noted otherwise:
   a) Load bearing walls
   b) Exterior walls
   c) Interior non-load bearing partition walls without gypsum board applied to each side
11. Wall studs shall be positioned vertically between top and bottom tracks and spaced no greater than 16" on center unless noted otherwise. Securely anchor each stud to the top or bottom track with (2) #12-14 x 5/8" hex or pan head screws with one screw in each flange.
12. Wall studs shall be cut to proper length to provide a tight fit between the stud and the web of the track so as not to have the screws carrying the structural loads.
13. Top and bottom tracks shall be the same gauge as the studs unless noted otherwise.
14. At track butt joints, abutting pieces of track shall be securely anchored to a common structural element or be butt welded and/or mechanically spliced together.
15. Top and bottom tracks shall be securely anchored to the supporting structure as detailed in the structural drawings or as directed by the specialty engineer.
16. Post-installed adhesive anchors for connecting cold-formed steel members to concrete or masonry shall use approved adhesive anchors listed in Post-Installed Anchor Notes. Threaded rods shall be ASTM A36 material. Submit request to Structural Engineer to use alternate adhesive for approval prior to installation.
17. Post-installed expansion/screw anchors for connecting cold-formed steel members to concrete or masonry shall be approved mechanical anchors listed in Post-Installed Anchor Notes. Submit request to Structural Engineer to use alternate expansion/screw anchor for approval prior to installation.
18. Screws for steel-to-steel and rigid material-to-steel (i.e. wood structural sheathing, gypsum board, etc.) shall be corrosion-resistant coated, self-drilling tapping screws conforming to ASTM C1513.
19. Attach exterior gypsum sheathing to exterior of each stud with #12-14 x 1" wafer or bugle head screws located 3/8" from ends and edges and spaced at 8" on center max.
20. Stud splices shall not occur in load bearing walls or between brace points in non-load bearing walls.
21. Jack or cripple studs same size, gauge and spacing as primary wall studs shall be installed below window sills, above window and door heads, at freestanding stair rails and elsewhere to furnish support and shall be securely attached to supporting members.
22. Provide at minimum one jamb and one king stud same size and gauge as primary walls studs at each side of window or door headers unless noted otherwise.
23. All welds shall be touched up with a zinc-rich paint.
24. Provisions for vertical structural displacement shall be provided at stud brace points for all non-load bearing walls and partitions.
25. All load bearing walls, lateral bracing, etc. shall be field reviewed by the Architect or Structural Engineer prior to being concealed.

POST-INSTALLED ANCHOR NOTES

1. Post-installed anchors shall be used only where specified on structural drawings.
2. The installation of post-installed anchors for missing or misplaced cast-in-place anchors shall be approved by the Structural Engineer.
3. Care shall be given to avoid conflicts with existing reinforcing when drilling holes. Existing reinforcing bars in the concrete structure shall not be cut unless approved by the Structural Engineer.
4. Submittal of all proposed products with technical data and current ICC-ES reports is required for review and approval by the Structural Engineer. Additional application calculations may be required by the Structural Engineer.
5. All anchors shall be installed in strict accordance with manufacturer's printed installation instructions (MPII) in conjunction with edge distance, spacing and embedment depth as indicated on the drawings.
6. The contractor shall arrange for a manufacturer's field representative to provide installation training for all products to be used prior to commencement of work. Only trained installers shall perform post-installed anchor installation. A record of training shall be kept on site and be made available to the Structural Engineer or inspector as requested.
7. Adhesive anchors installed in horizontal to vertically overhead orientation to support sustained tension loads shall be done by a certified adhesive anchor installer (AAI) as certified through ACI/CRSI. Proof of current certification shall be submitted to the EOR for approval prior to commencement of installation.
8. Adhesive anchors must be installed in concrete aged a minimum of 21 days.
9. Mechanical anchors into concrete shall have been tested and qualified for use in accordance with ACI 355.2 and ICC-ES AC193 for cracked, uncracked and seismic concrete recognition. Approved anchors include the following:
   a) Hilti KH-EZ
   b) Simpson Titen HD
   c) DeWalt Screw-Bolt+
10. Adhesive anchors into concrete shall have been tested and qualified for use in accordance with ACI 355.4 and ICC-ES AC308 for cracked, uncraced and seismic concrete recognition. Approved anchors include the following:
   a) Hilti RE-500 V3
   b) Simpson SET-XP
   c) DeWalt Pure 110+
11. Mechanical anchors into masonry shall have been tested and qualified for use in accordance with ICC-ES AC01 or AC106. Approved anchors include the following:
   a) Hilti KH-EZ
   b) Simpson Titen HD
   c) DeWalt Screw-Bolt+
12. Adhesive anchors into masonry shall have been tested and qualified for use in accordance with ICC-ES AC58. Approved anchors include the following:
   a) Hilti HY-70
   b) Simpson AT-XP
   c) DeWalt AC100+ Gold
13. Provide Special Inspection for all mechanical and adhesive anchors per the applicable building code and per the current ICC-ES report. Adhesive anchors installed in horizontal of upwardly inclined orientations to resist sustained tension loads shall be continuously inspected during installation by an inspector specially approved for that purpose by the building official.

MBI

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CONSULTANT

SEAL

ALABAMA LICENSED No. 29356 ENGINEER M. EDWARD JETT

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ZJB
DRAWN BY:	JCP
REVIEWED BY:	RMG

SHEET TITLE:

STRUCTURAL NOTES

SHEET NO.:

S001

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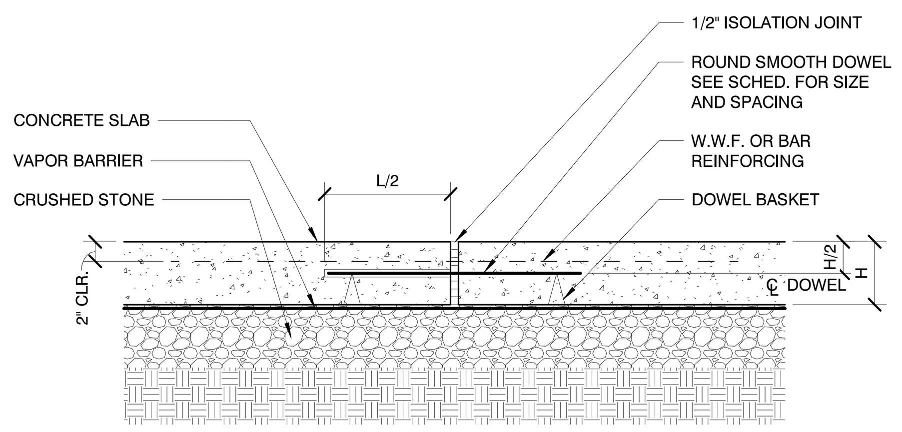
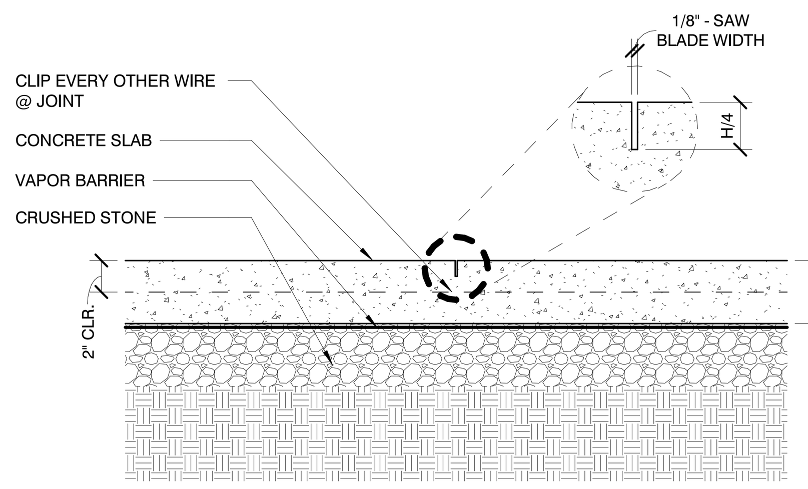


DOWEL SCHEDULE			
SLAB THICKNESS	DIAMETER	LENGTH (L)	SPACING
H ≤ 6"	3/4" Ø	14"	12" O.C.
6" < H ≤ 8"	1" Ø	16"	12" O.C.
8" < H ≤ 12"	1-1/4" Ø	18"	12" O.C.

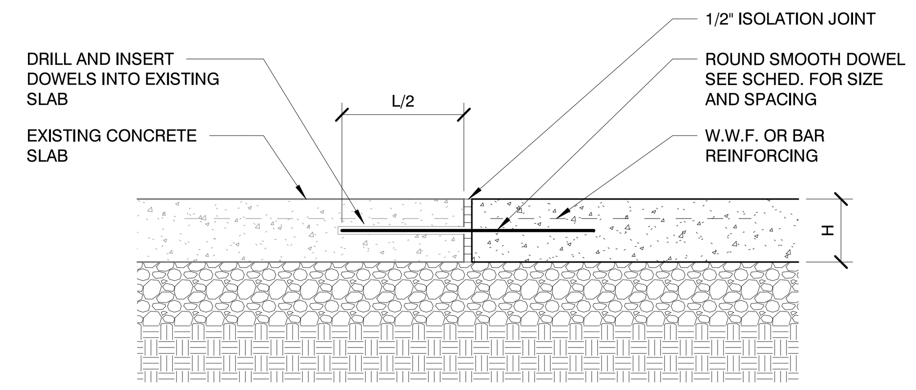
CONSTRUCTION JOINT DETAIL 1

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



CONTRACTION JOINT DETAIL 2

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

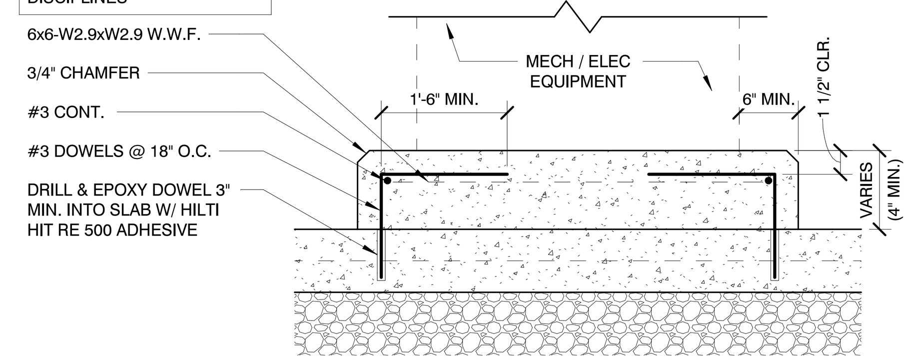


DOWEL SCHEDULE			
SLAB THICKNESS	DIAMETER	LENGTH (L)	SPACING
H ≤ 6"	3/4" Ø	14"	12" O.C.
6" < H ≤ 8"	1" Ø	16"	12" O.C.
8" < H ≤ 12"	1-1/4" Ø	18"	12" O.C.

SLAB TO EXISTING SLAB DETAIL 3

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

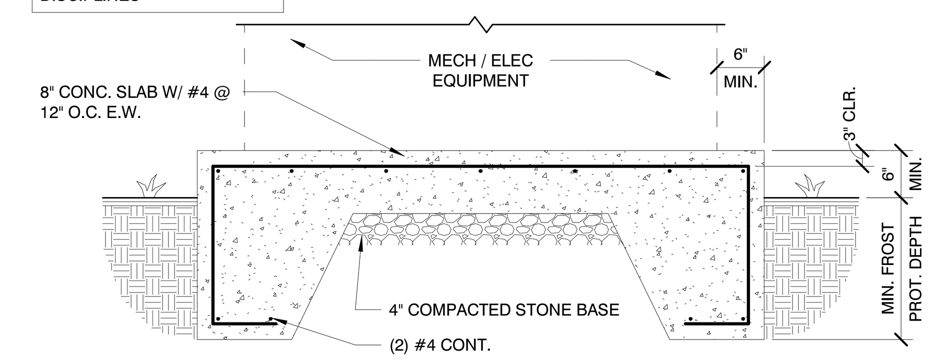
NOTE:
EQUIP. PAD TO BE UTILIZED AS INDICATED IN CONTRACT DOCUMENTS - REVIEW ALL DISCIPLINES



INTERIOR EQUIP. PAD DETAIL 4

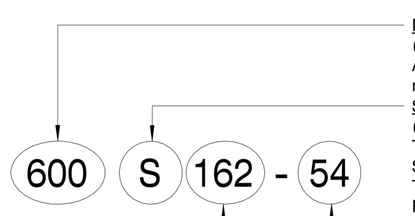
SCALE : 1 1/2" = 1'-0"

NOTE:
EQUIP. PAD TO BE UTILIZED AS INDICATED IN CONTRACT DOCUMENTS - REVIEW ALL DISCIPLINES



EXTERIOR EQUIP. PAD DETAIL 5

SCALE : 3/4" = 1'-0"



Member Depth:
(Example: 6" = 600 x 1/100 inches)
All member depths are taken in 1/100 inches. For all "T" sections member depth is the inside to inside dimension.
Style:
(Example: Stud or joist section = S)
The four alpha characters utilized by the designating system are:
S = Stud or Joist Section
T = Track Section
F = Furring Channel Section
U = Channel Section
Material Thickness:
(Example: 0.054" = 54 mils.; 1 mil. = 1/1000 inches)
Material thickness is the minimum base metal thickness in mils.
Minimum base metal thickness represents 95% of the design thickness.
Flange Width:
(Example: 1 5/8" = 1.625" ~ 162 x 1/100 inches)
All flange widths are taken in 1/100 inches.

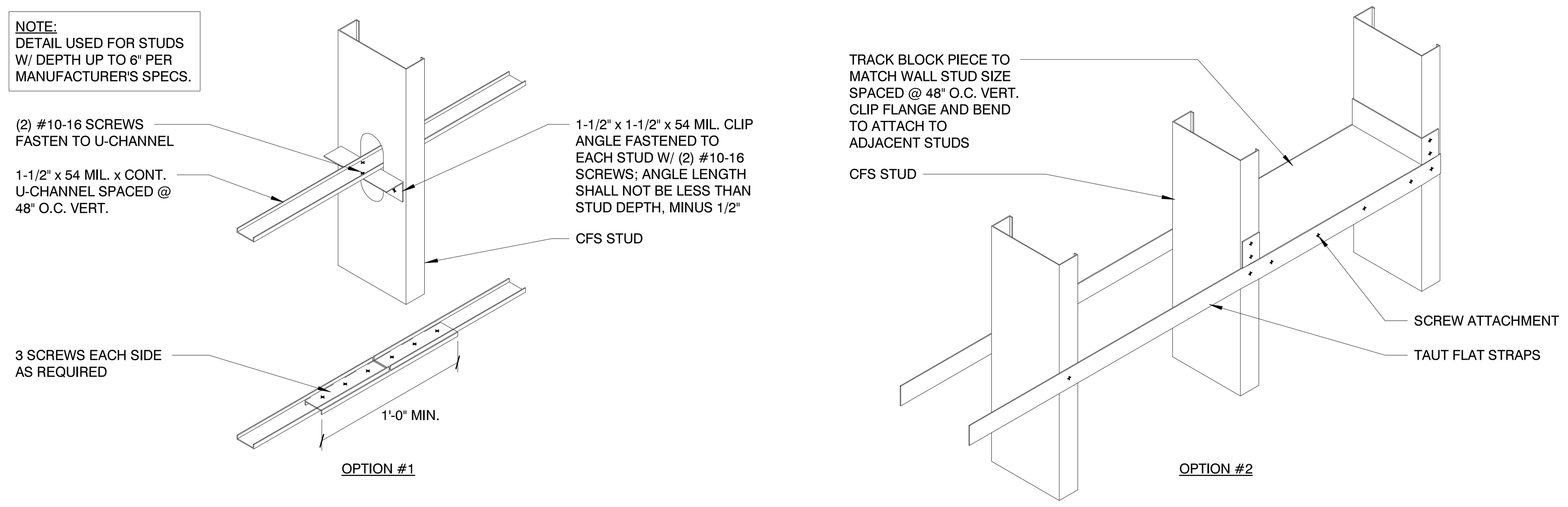
Thickness - Steel Components		
Minimum Thickness (mils)	Design Thickness (in)	Reference Only Gauge No.
18	0.0188	25
27	0.0283	22
30	0.0312	20 - Drywall
33	0.0346	20 - Structural
43	0.0451	18
54	0.0566	16
68	0.0713	14
97	0.1017	12

Thickness - Steel Components		
Section	Flange Width (in)	Design Stiffening Lip Length (in)
S125	1.25	0.188
S137	1.375	0.375
S162	1.625	0.500
S200	2	0.625
S250	2.5	0.625

COLD-FORMED DESIGNATION 6

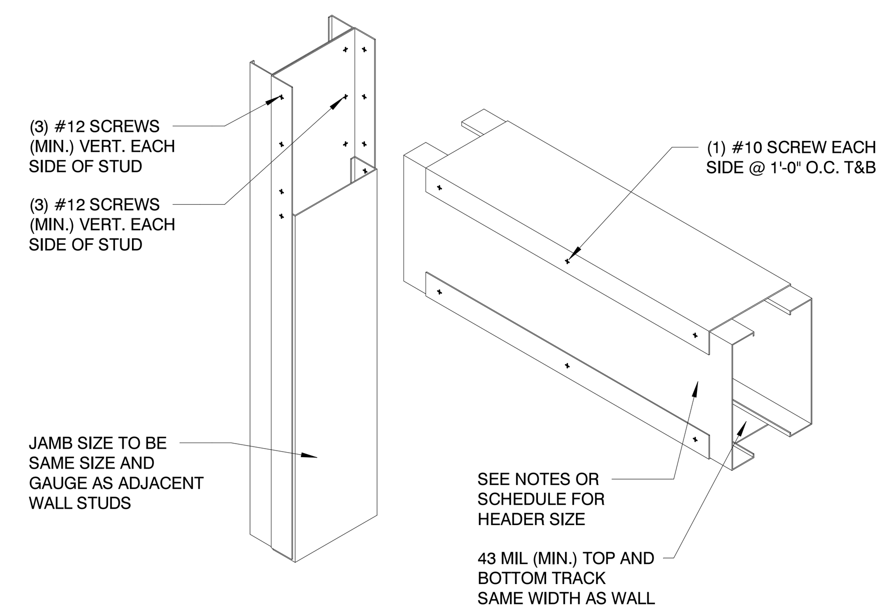
SCALE :N.T.S.

NOTE:
DETAIL USED FOR STUDS W/ DEPTH UP TO 6" PER MANUFACTURER'S SPECS.



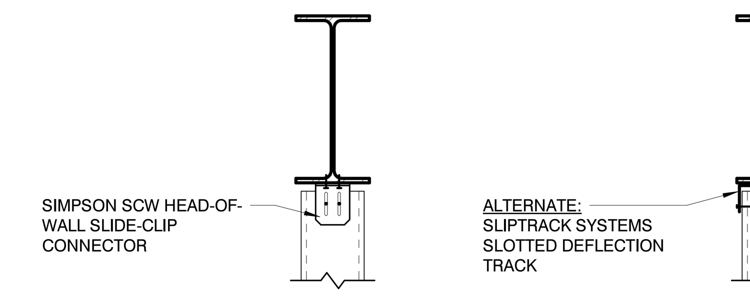
HORIZONTAL BRACING DETAIL 7

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



HEADER DETAIL 8

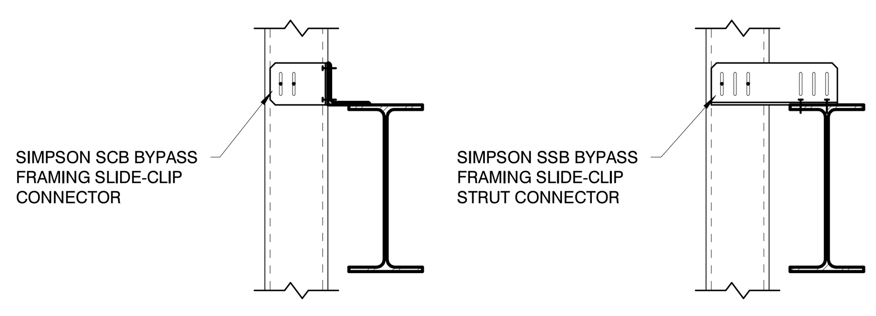
SCALE : 1 1/2" = 1'-0"



NOTES:
1. CONNECTORS SHALL BE SIMPSON STRONG-TIE CONNECTORS FOR COLD-FORMED STEEL CURTAIN-WALL CONSTRUCTION OR SLIPTRACK SYSTEMS SLOTTED DEFLECTION TRACK OR OTHER APPROVED EQUAL.
2. CONNECTORS SHALL BE PROVIDED AS REQUIRED TO MEET THE VARIOUS GEOMETRIC AND LOADING CONDITIONS GIVEN. CONNECTORS SPECIFIED VARY IN LENGTH TO ALLOW FOR VARIOUS APPLICATIONS.
3. CONNECTOR ATTACHMENT TO STUD AND SUPPORTING FRAMING SHALL BE SELECTED AND/OR DESIGNED BY A SPECIALTY ENGINEER EMPLOYED BY THE FRAMING SUB-CONTRACTOR USING THE MANUFACTURER'S ALLOWABLE LOAD CHARTS OR OTHER ENGINEERING METHODS.
4. CONNECTOR ATTACHMENT TO STUD SHALL USE (2) #14 SHOULDERED SCREWS AT MINIMUM. SPECIALTY ENGINEER TO MAKE FINAL SELECTION DEPENDING UPON LOAD CONDITIONS.
5. CONNECTOR ATTACHMENT TO SUPPORTING FRAMING SHALL USE #12-14 SELF-DRILLING SCREWS, 0.145" POWDER-ACTUATED FASTENERS (PAF), OR WELDS. SPECIALTY ENGINEER TO MAKE SELECTION DEPENDING UPON LOAD CONDITIONS.

SLIP TRACK DETAIL 9

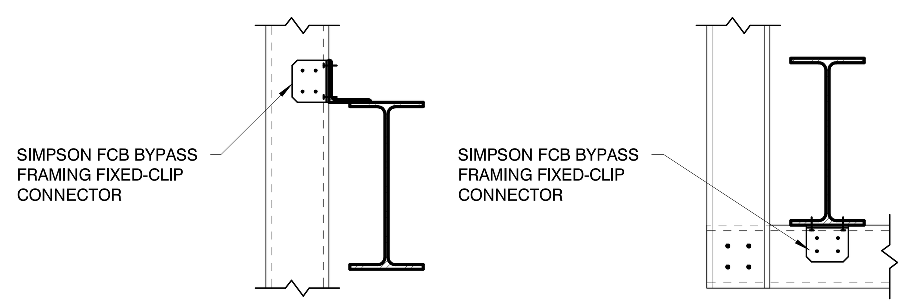
SCALE : 1" = 1'-0"



NOTES:
1. CONNECTORS SHALL BE SIMPSON STRONG-TIE CONNECTORS FOR COLD-FORMED STEEL CURTAIN-WALL CONSTRUCTION OR APPROVED EQUAL.
2. CONNECTORS SHALL BE PROVIDED AS REQUIRED TO MEET THE VARIOUS GEOMETRIC AND LOADING CONDITIONS GIVEN. CONNECTORS SPECIFIED VARY IN LENGTH TO ALLOW FOR VARIOUS APPLICATIONS.
3. CONNECTOR ATTACHMENT TO STUD AND SUPPORTING FRAMING SHALL BE SELECTED AND/OR DESIGNED BY A SPECIALTY ENGINEER EMPLOYED BY THE FRAMING SUB-CONTRACTOR USING THE MANUFACTURER'S ALLOWABLE LOAD CHARTS OR OTHER ENGINEERING METHODS.
4. CONNECTOR ATTACHMENT TO STUD SHALL USE (2) #14 SHOULDERED SCREWS AT MINIMUM. SPECIALTY ENGINEER TO MAKE FINAL SELECTION DEPENDING UPON LOAD CONDITIONS.
5. CONNECTOR ATTACHMENT TO SUPPORTING FRAMING SHALL USE #12-14 SELF-DRILLING SCREWS, 0.145" POWDER-ACTUATED FASTENERS (PAF), OR WELDS. SPECIALTY ENGINEER TO MAKE SELECTION DEPENDING UPON LOAD CONDITIONS.

SLIDE-CLIP CONNECTOR DETAIL 10

SCALE : 1" = 1'-0"



NOTES:
1. CONNECTORS SHALL BE SIMPSON STRONG-TIE CONNECTORS FOR COLD-FORMED STEEL CURTAIN-WALL CONSTRUCTION OR APPROVED EQUAL.
2. CONNECTORS SHALL BE PROVIDED AS REQUIRED TO MEET THE VARIOUS GEOMETRIC AND LOADING CONDITIONS GIVEN. CONNECTORS SPECIFIED VARY IN LENGTH TO ALLOW FOR VARIOUS APPLICATIONS.
3. CONNECTOR ATTACHMENT TO STUD AND SUPPORTING FRAMING SHALL BE SELECTED AND/OR DESIGNED BY A SPECIALTY ENGINEER EMPLOYED BY THE FRAMING SUB-CONTRACTOR USING THE MANUFACTURER'S ALLOWABLE LOAD CHARTS OR OTHER ENGINEERING METHODS.
4. CONNECTOR ATTACHMENT TO STUD SHALL USE (4) #12-14 SELF-DRILLING SCREWS AT MINIMUM. SPECIALTY ENGINEER TO MAKE FINAL SELECTION DEPENDING UPON LOAD CONDITIONS.
5. CONNECTOR ATTACHMENT TO SUPPORTING FRAMING SHALL USE #12-14 SELF-DRILLING SCREWS, 0.145" POWDER-ACTUATED FASTENERS (PAF), OR WELDS. SPECIALTY ENGINEER TO MAKE SELECTION DEPENDING UPON LOAD CONDITIONS.

FIXED-CLIP CONNECTOR DETAIL 11

SCALE : 1" = 1'-0"

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SEAL

ALABAMA LICENSED No. 29356 PROFESSIONAL ENGINEER M. EDWARD JETT
9/4/19

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PROJECT INFORMATION
PROJECT:
CLAYTON ADDISON MANUFACTURING FACILITY (943)
PROJECT ADDRESS:
18025 COUNTY ROAD 41
ADDISON, AL 35540
PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE
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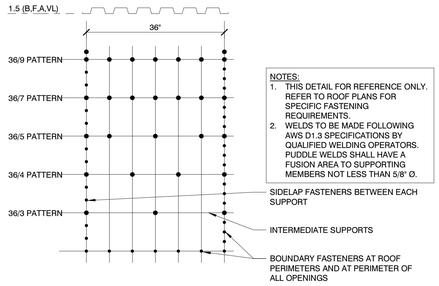
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION BIDDING
■ CONSTRUCTION DOCUMENTS
☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

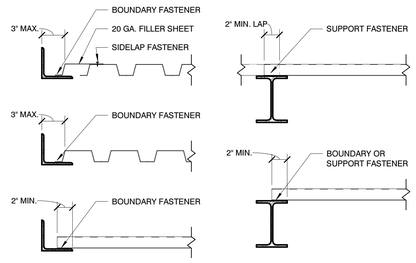
SHEET INFORMATION
SHEET ISSUED: 08/16/19
DESIGNED BY: ZJB
DRAWN BY: JCP
REVIEWED BY: RMG
SHEET TITLE:
TYPICAL FOUNDATION, SLAB ON GRADE AND CFS DETAILS
SHEET NO.:
S002



NOTES:
1. THIS DETAIL FOR REFERENCE ONLY. REFER TO ROOF PLANS FOR SPECIFIC FASTENING REQUIREMENTS.
2. WELDS TO BE MADE FOLLOWING AWS D1.3 SPECIFICATIONS BY QUALIFIED WELDING OPERATORS. PUDDLE WELDS SHALL HAVE A FUSION AREA TO SUPPORTING MEMBERS NOT LESS THAN 5/8" Ø.

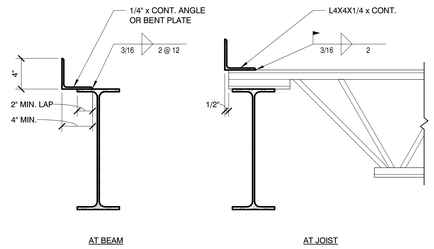
ROOF DECK FASTENING LAYOUT (1)

SCALE : 3/4" = 1'-0"



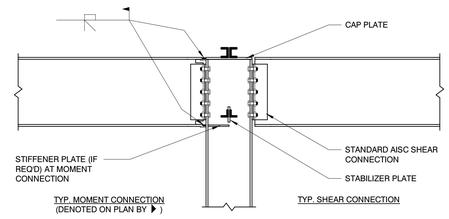
ROOF EDGE ANGLE DETAIL (2)

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



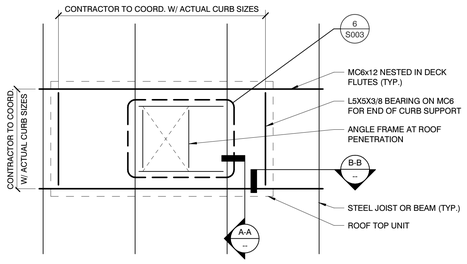
ROOF EDGE ANGLE DETAIL (3)

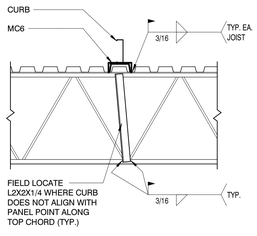
SCALE : 1 1/2" = 1'-0"



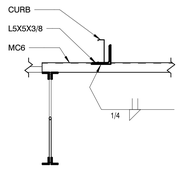
CONNECTION DETAIL (4)

SCALE : 3/4" = 1'-0"





SECTION A-A



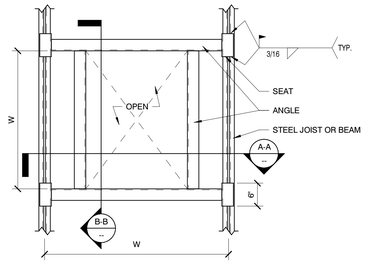
SECTION B-B

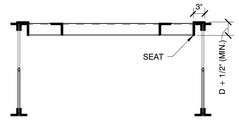
RTU CURB DETAIL (5)

SCALE : 3/4" = 1'-0"

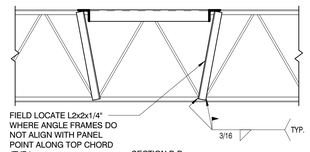
ANGLE FRAME SCHEDULE	
ANGLE SPAN (W)	ANGLE SIZE
2'-0" OR LESS	L2X2X1/4
OVER 2'-0" TO 4'-0"	L3X3X1/4
OVER 4'-0" TO 6'-0"	L4X4X5/16
OVER 6'-0" TO 8'-0"	L6X4X3/8 LLV

NOTES:
1. PROVIDE ANGLE FRAME AS SHOWN FOR OPENINGS 8"x8" OR 8" DIAMETER AND LARGER, INCLUDING ROOF DRAINS AND SUMPS.
2. USE LARGEST "W" DIMENSION FOR SELECTING ANGLE SIZE.
3. SEAT TO BE THE SAME DEPTH AS SUPPORTED ANGLE + 1/2" x 3" WIDE x 3/8" THICK x 6" LONG.
4. COORDINATE EXACT SIZE AND LOCATIONS OF OPENINGS WITH OTHER DISCIPLINES.
5. SHOP WELD ALL CONNECTIONS WITH 3/16" FILLET WELDS ALL AROUND.





SECTION A-A



SECTION B-B

ROOF OPENING DETAIL (6)

SCALE : 3/4" = 1'-0"

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KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ZJB
DRAWN BY:	JCP
REVIEWED BY:	RMG

SHEET TITLE:

TYPICAL STEEL DETAILS

SHEET NO.:

S003

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ARCH E1

GENERAL NOTES - FOUNDATION PLAN

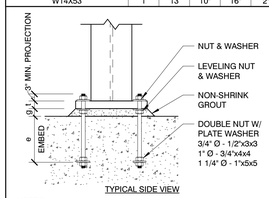
1. ELEVATIONS ARE REFERENCED FROM THE FIRST LEVEL TOP OF SLAB (T/SLAB) DATUM ELEVATION OF 0'-0". SEE CIVIL DRAWINGS FOR EQUIVALENT MEAN SEA LEVEL ELEVATION.
2. CONTRACTOR TO COORDINATE LOCATION AND SIZE OF FOOTING STEPS AND SHOULD ADJUST AS REQUIRED TO MAINTAIN 1'-0" MINIMUM COVER OVER TOP OF FOOTING AND MEET LOCAL FROST DEPTH CRITERIA. COORDINATE WITH SITE GRADING PLAN. SEE FOUNDATION NOTES ON S0.0 FOR MORE INFORMATION.
3. TOP OF FOOTING (T/FTNG) ELEVATIONS ARE -1'-4" UNLESS NOTED OTHERWISE. ELEVATIONS ARE REFERENCED FROM THE DATUM LISTED IN NOTE #1.
4. COORDINATE FOUNDATION LAYOUT WITH PLUMBING AND OTHER UNDERGROUND UTILITIES. STEP AND/OR LOWER FOUNDATIONS AS NECESSARY TO PREVENT CONFLICTS.
5. COORDINATE PLACEMENT OF NEW FOOTINGS WITH EXISTING FOOTINGS AS REQUIRED. WHEN NEW FOOTINGS COME INTO CONTACT WITH EXISTING FOOTINGS, NEW FOOTINGS SHALL BE FOUNDED AT THE SAME DEPTH AS THE EXISTING FOOTINGS UNLESS NOTED OTHERWISE.
6. DEMOLISH EXISTING SLABS, FOUNDATION WALLS AND FOOTINGS AS REQUIRED FOR NEW CONSTRUCTION. REPAIR AND/OR REBUILD AREAS AS NEEDED TO MATCH EXISTING CONDITIONS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF SOIL EXCAVATION AND SHALL PROVIDE SHORING OR OTHER PRECAUTIONS AS NECESSARY DUE TO THE CLOSE PROXIMITY OF THE EXISTING STRUCTURE. THE GEOTECHNICAL ENGINEER SHOULD BE CONSULTED TO DEVELOP A SUITABLE EXCAVATION PLAN.
8. SEE S0 SHEETS FOR ADDITIONAL NOTES AND TYPICAL DETAILS NOT SPECIFICALLY REFERENCED ON STRUCTURAL DRAWINGS.

KEYED NOTES - FOUNDATION PLAN

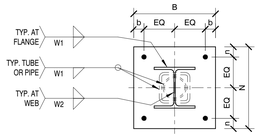
1 NEW 4" THICK 3,000 PSI CONC. SLAB REINF. WITH WWF6x6-W2.1xW2.1 OVER 20 MIL POLY VAPOR BARRIER OVER 4" CRUSHED STONE.
2 EXISTING SLAB IN SHADED AREAS TO REMAIN
3 TURNDOWN, TD1 FOUNDATION PER 1/S501
4 #5 REBAR DOWELED INTO EXISTING FOOTING (6" MIN.) @ 12" O.C.
5 SCREEN WALL PER ARCH.
6 WALLS TO BE 600S162-54 @ 16" O.C. SHEARWALLS W/ 5/8" GYPSUM BOARD SHEATHING W/ #10 COUNTERSUNK SCREW @ 4" O.C. EDGE SCREWS AND 12" O.C. FIELD SCREWS
7 EXISTING COLUMN TO BE REPLACED WITH NEW W10X30 COLUMN.
8 NEW 6" THICK 3,000 PSI CONC. SLAB REINF. WITH WWF6x6-W3.5xW3.5 OVER 20 MIL POLY VAPOR BARRIER OVER 6" CRUSHED STONE.
9 HOLDOWNS TO BE S/HDB8 SIMPSON STRONG-TIE HOLDOWN AS SHOWN PER PLAN. WALLS TO BE FASTENED TO CONCRETE USING 5/8" DIA. HILTI KWIK-HUS EZ ANCHORS W/ 3 1/4" MIN. EMBEDMENT @ 32" O.C.

BASE PLATE SCHEDULE

	BASE PLATE PARAMETERS								ANCHOR PARAMETERS				WELD SIZE	
COLUMN / BASE PLATE MARK	TYPE	QTY	B	N	b	n	t	g	QTY	D	e	TYPE / MATERIAL	W1	W2
HSS4X4X5/16	1	2	10"	10"	1 1/2"	1 1/2"	3/4"	1 1/2"	4	3/4"	9"	CIP F1554 GRADE 36	3/16"	
HSS6X6X5/16	1	19	12"	12"	1 1/2"	1 1/2"	1"	1 1/2"	4	3/4"	9"	CIP F1554 GRADE 36	3/16"	
W10X30	1	3	12"	12"	3"	3"	1"	1 1/2"	4	3/4"	9"	CIP F1554 GRADE 36	7/16"	3/16"
W12X35	1	10	8"	14"	2"	4"	1 1/2"	1 1/2"	4	3/4"	9"	CIP F1554 GRADE 36	7/16"	3/16"
W14X38	1	4	8"	16"	2"	3 1/2"	1 1/2"	1 1/2"	4	1"	12"	CIP F1554 GRADE 36	7/16"	3/16"
W14X53	1	13	10"	16"	2"	3 1/2"	1 1/2"	1 1/2"	4	1"	12"	CIP F1554 GRADE 36	9/16"	1/4"



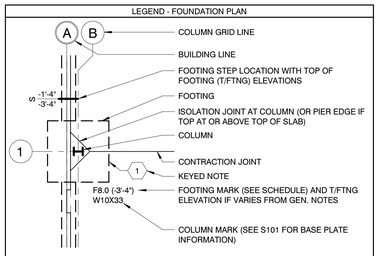
TYPICAL SIDE VIEW



TYPE 1

NOTES:
1. WHEN COLUMN IS SUPPORTED BY A PIER, INCREASE ANCHOR BOLT EMBED DEPTH (e) TO 18" FOR 3/4" Ø, 24" FOR 1" Ø AND 30" FOR 1-1/4" Ø ANCHOR BOLTS.
2. PROVIDE GUSSET PLATES WHERE VERTICAL BRACING CONNECTS AT COLUMN BASE PLATE. SEE PLANS AND/OR FRAMING ELEVATIONS FOR MORE INFORMATION.

LEGEND - FOUNDATION PLAN

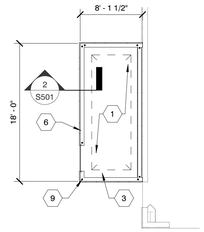


SLAB SYMBOLS

STEP DOWN / UP · SLOPE UP · CURB
STEP DOWN W/ SLOPE · SLOPE DOWN · TRENCH
STEP UP W/ SLOPE · RIDGE · VALLEY

FOUNDATION SCHEDULE

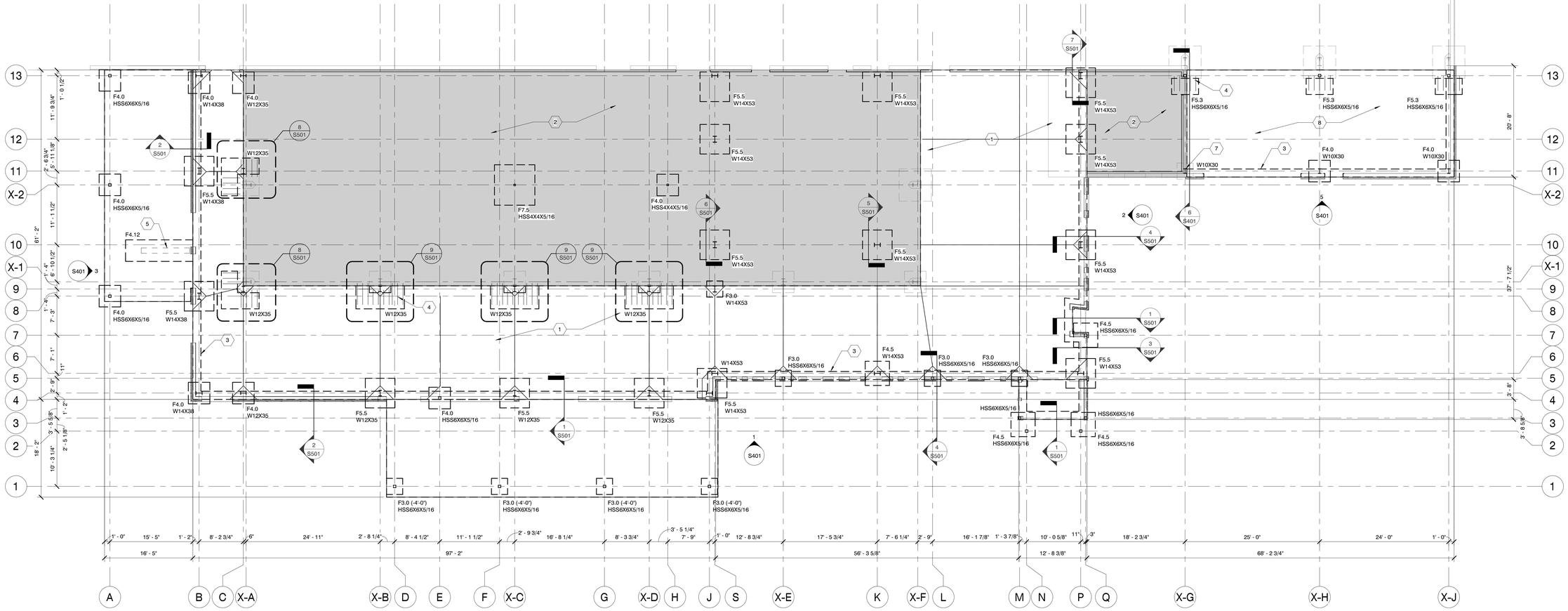
MARK	WIDTH	LENGTH	THICKNESS	REINFORCING	COMMENTS
F3.0	3' - 0"	3' - 0"	1' - 0"	(3) #5 E.W. BOT.	
F4.0	4' - 0"	4' - 0"	1' - 0"	(4) #5 E.W. BOT.	
F4.5	4' - 6"	4' - 6"	1' - 0"	(5) #5 E.W. BOT.	
F4.12	12' - 6"	4' - 0"	1' - 8"	(4) #5 SHORT WAY T&B & (14) #5 LONG WAY T&B	
F5.3	3' - 0"	5' - 0"	1' - 4"	(5) #5 E.W. T&B	
F5.5	5' - 6"	5' - 6"	1' - 0"	(6) #5 E.W. BOT.	
F7.5	7' - 6"	7' - 6"	1' - 6"	(8) #6 E.W. T&B	



RISER ROOM FDN PLAN

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

2



FOUNDATION PLAN

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

1

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SHEET ISSUED:	08/16/19
DESIGNED BY:	ZJB
DRAWN BY:	JCP
REVIEWED BY:	RMG
SHEET TITLE:	

FOUNDATION PLAN

SHEET NO.:

S101

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ARCH E1

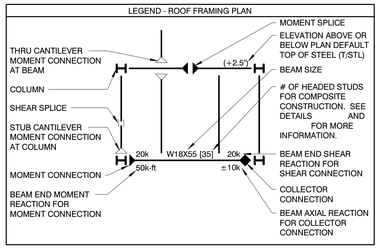
GENERAL NOTES - ROOF FRAMING PLAN

1. ELEVATIONS ARE REFERENCED FROM THE FIRST LEVEL TOP OF SLAB (T/SLAB) DATUM ELEVATION OF 0'-0". SEE CIVIL DRAWINGS FOR EQUIVALENT MEAN SEA LEVEL ELEVATION.
2. CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH OTHER DISCIPLINES.
3. TOP OF STEEL (T/STL) LOCATED AT UNDERSIDE OF ROOF DECK UNLESS NOTED OTHERWISE.
4. REFER TO ARCHITECTURAL DRAWINGS FOR STRUCTURAL MEMBERS THAT RECEIVE FIRE PROOFING. VERIFY WHETHER OR NOT THESE MEMBERS SHALL BE PAINTED WITH FIRE PROOFING MANUFACTURERS RECOMMENDATIONS.
5. GENERAL SIZE AND LOCATION OF ROOF TOP EQUIPMENT IS INDICATED ON THE PLAN. EXACT SIZE OF OPENINGS AND LOCATIONS OF FRAMING MUST BE DETERMINED UPON FINAL SELECTION OF EQUIPMENT. COORDINATE WITH MECHANICAL DRAWINGS.
6. COORDINATE JOIST AND TRUSS LAYOUT WITH MECHANICAL AND PLUMBING RUNS AND PENETRATIONS. REFER TO MECHANICAL PLANS FOR DUCT CHASES IF REQUIRED.
7. SEE SO SHEETS FOR ADDITIONAL NOTES AND TYPICAL DETAILS NOT SPECIFICALLY REFERENCED ON STRUCTURAL DRAWINGS.

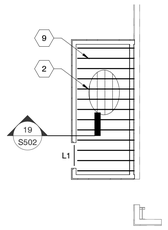
KEYED NOTES - ROOF FRAMING PLAN

1. EXISTING ROOF UNDER NEW STRUCTURE TO REMAIN
2. ROOF DECK TO BE 1-1/2" 22 GA. TYPE B METAL DECK. FASTEN W/ 36/6 PATTERN USING #12 TEK SCREWS AND (4) #10 SIDELAP FASTENERS.
3. ROOF DECK TO BE 1-1/2" 20 GA. TYPE B METAL DECK. FASTEN W/ 36/11 PATTERN USING #12 TEK SCREWS AND (5) #10 SIDELAP FASTENERS.
4. HSS10X6X5/16 B/STL = 9'-1 1/2"
5. HSS8X4X1/4 B/STL = 8'-9"
6. HSS8X6X5/16 B/STL = 9'-11 1/2"
7. L202X3/16 WHERE INDICATED
8. ROOF JOIST TO BE DESIGNED FOR 200 PLF TO ACCOUNT FOR HANGING TOILET PARTITIONS. PARTITION SUPPORT AND SUPPLEMENTAL FRAMING TO BE DESIGNED & PROVIDED BY PARTITION SUPPLIER.
9. 600S162-54 @ 16" O.C.
10. TOP OF STEEL TO MATCH EXISTING
11. 5/8" Ø A36 BAR STOCK CROSS BRACING W/HILLSIDE WASHERS @ EACH END
12. ROOF EAVE PURLIN TO BE 800S250-68 C.F.S.
13. WALL PURLIN TO BE 8ZS 2.75 X 0.105. SPACED TO MATCH EXISTING W/ 6'-3" O.C. MAXIMUM (U.N.O.).

LEGEND - ROOF FRAMING PLAN

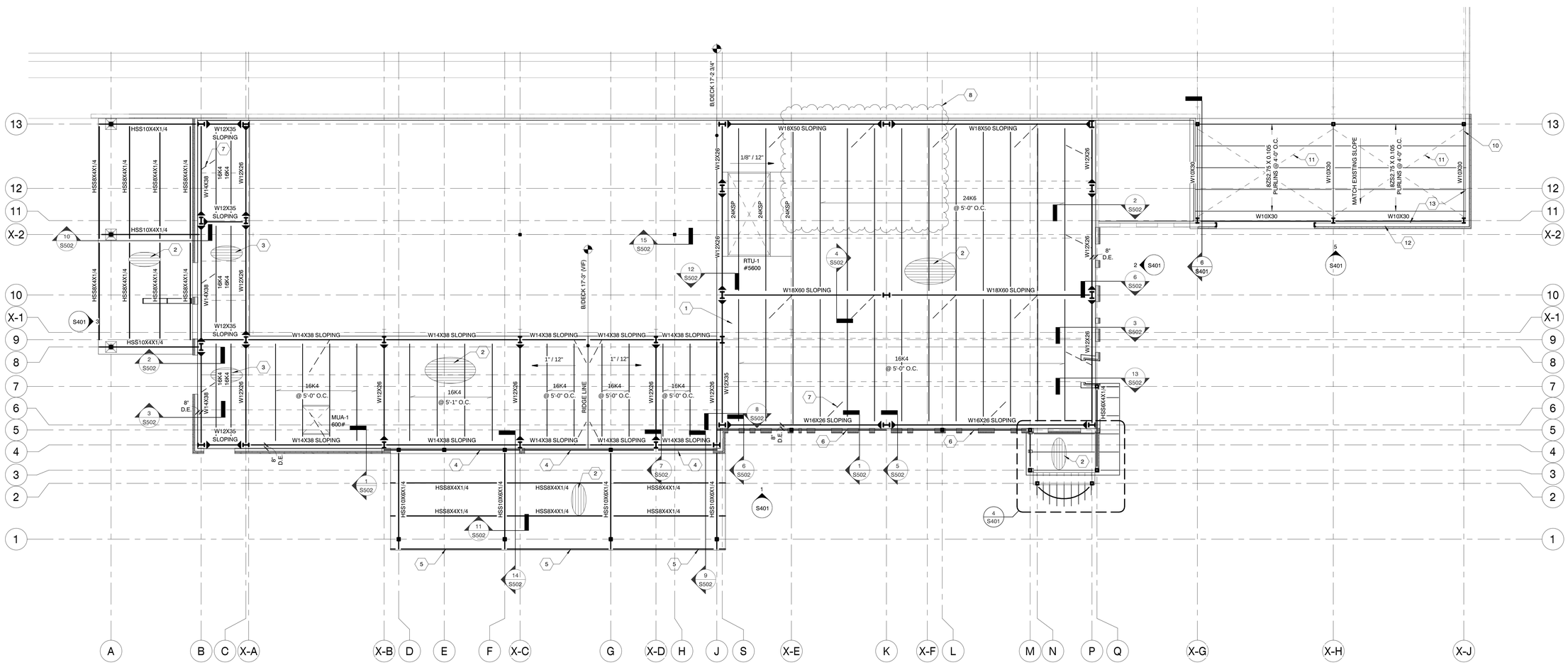


LINTEL SCHEDULE		
MARK	SIZE	COMMENTS
L1	(2) 600S162-54 W/ 54 MIL TRACK T&B	(1) JAMB STUD (1) KING STUD



RISER ROOM ROOF FRAMING PLAN 2

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



ROOF FRAMING PLAN 1

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

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DESIGNED BY:	ZJB
DRAWN BY:	JCP
REVIEWED BY:	RMG
SHEET TITLE:	

ROOF FRAMING PLAN

SHEET NO.:

S301

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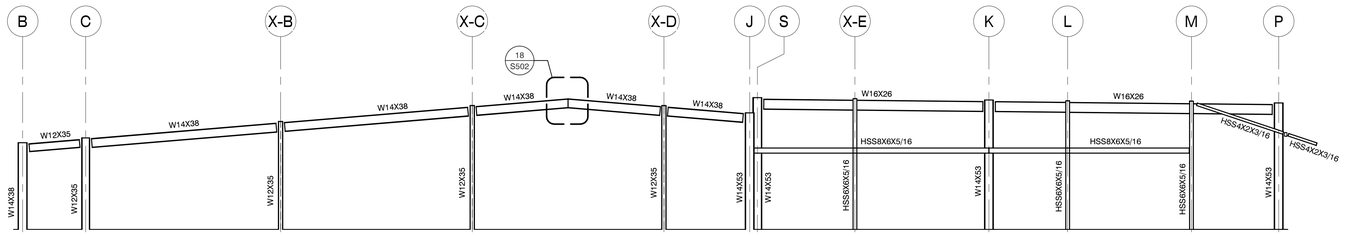
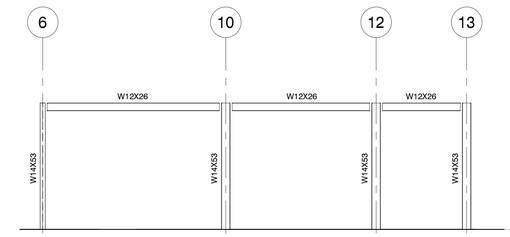


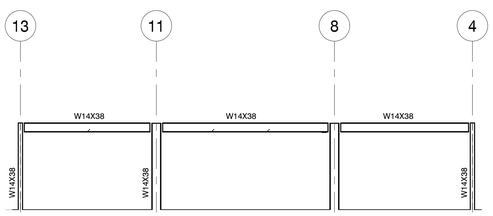
FRAMING ELEVATION 1

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



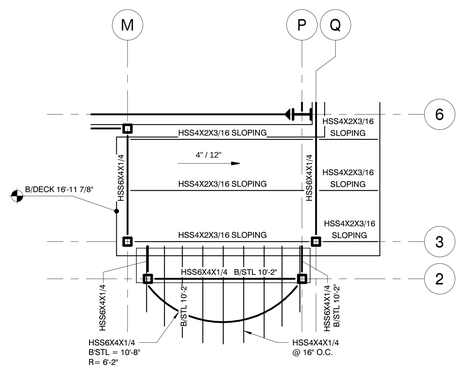
FRAMING ELEVATION 2

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



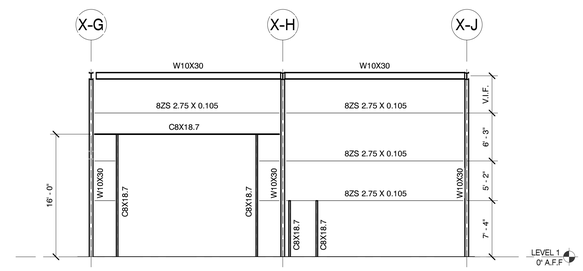
FRAMING ELEVATION 3

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



ENLARGED FRAMIG PLAN 4

SCALE : 1/4" = 1'-0"



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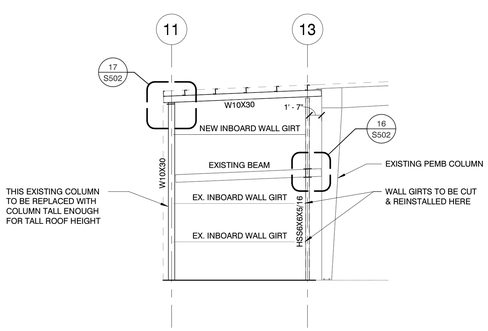
SCALE : 1/8" = 1'-0"



FRAMING ELEVATION 6

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

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

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SHEET INFORMATION

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DRAWN BY:	JCP
REVIEWED BY:	RMG

SHEET TITLE:

FRAMING ELEVATIONS

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S401

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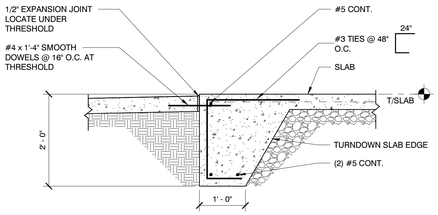
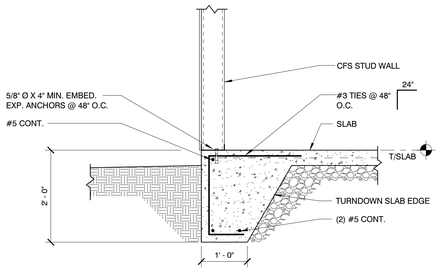


TURNDOWN SLAB DETAIL 1

SCALE : 3/4" = 1'-0"



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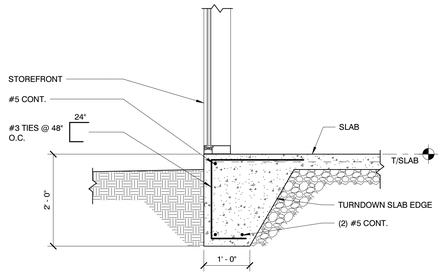

TURNDOWN SLAB DETAIL 3

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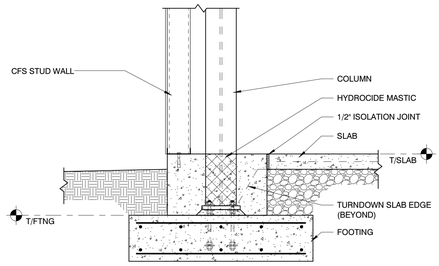

FOUNDATION DETAIL 4

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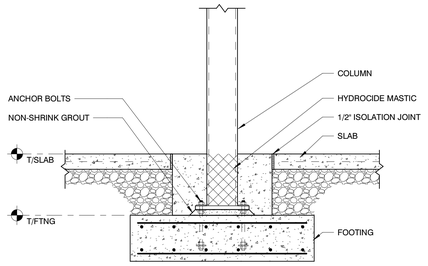

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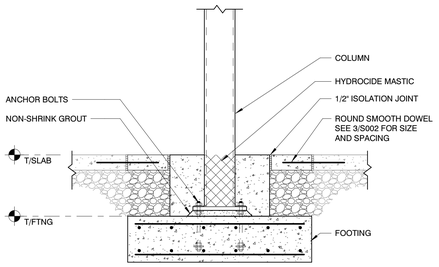

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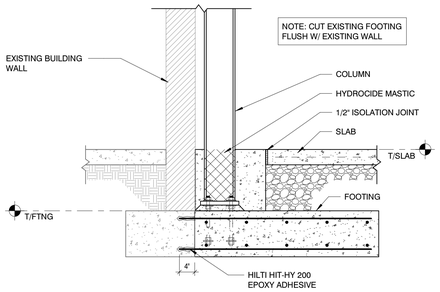

FOOTING DETAIL 7

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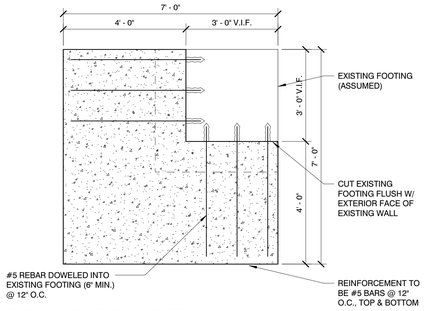

FOUNDATION DETAIL 8

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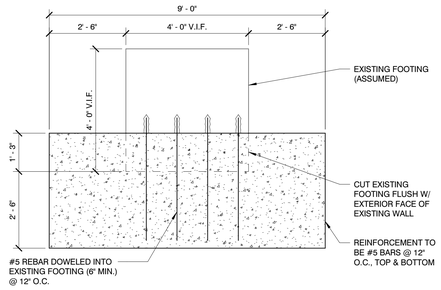

FOUNDATION DETAIL 9

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

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DRAWN BY:	JCP
REVIEWED BY:	RMG

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STRUCTURAL DETAILS

SHEET NO.:

S501

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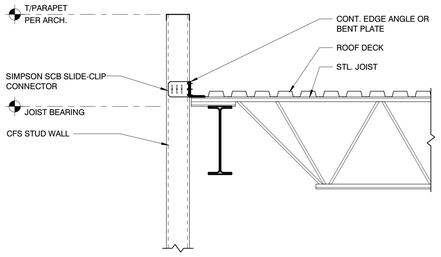

CONNECTION DETAIL 1
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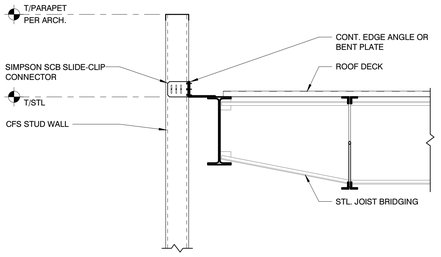

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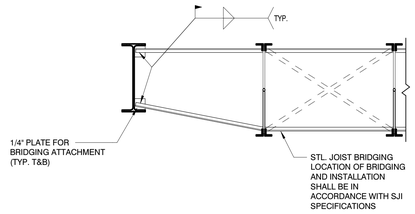

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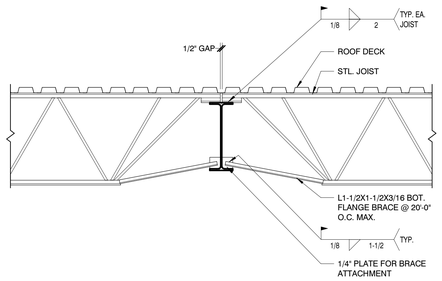

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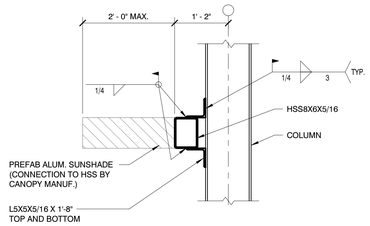

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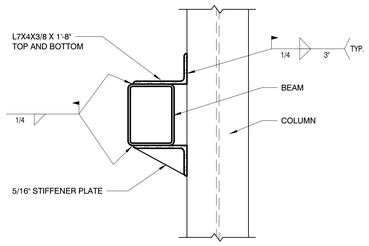

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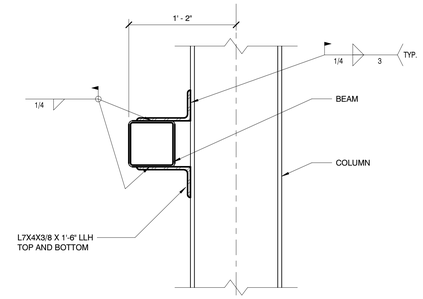

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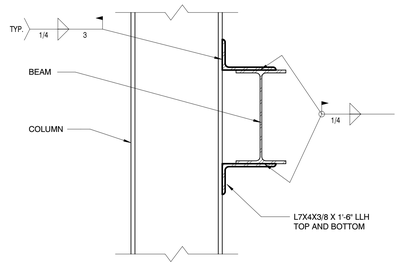

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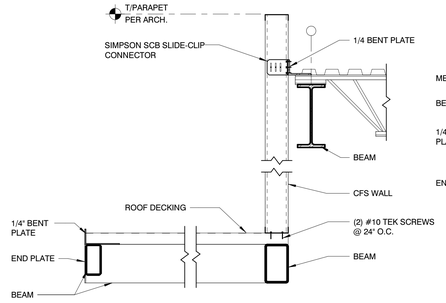

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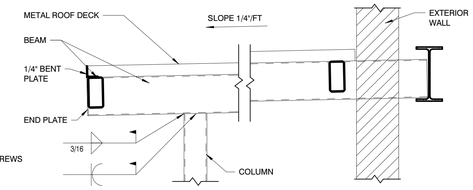

CONNECTION DETAIL 10
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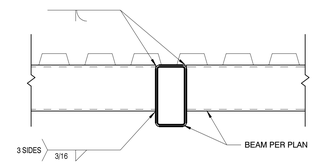

CONNECTION DETAIL 11
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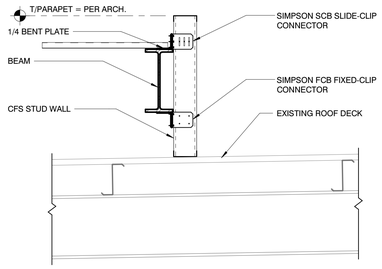

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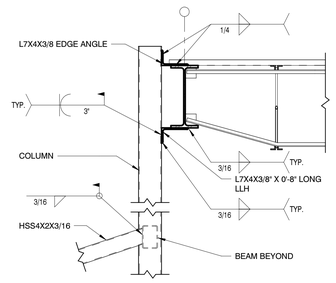

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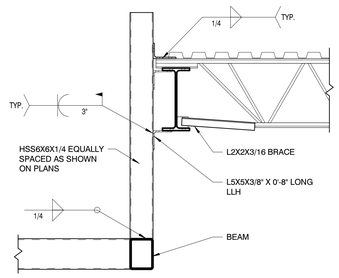

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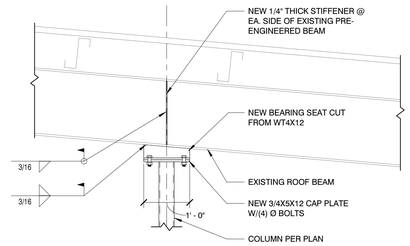

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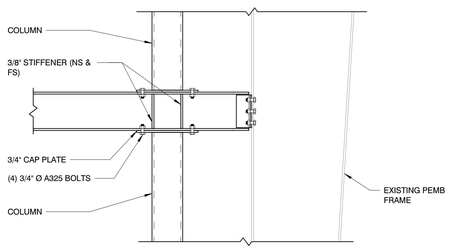

CONNECTION DETAIL 16
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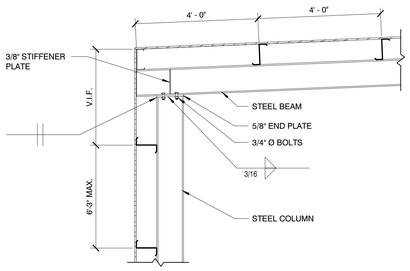
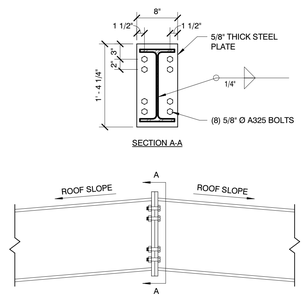
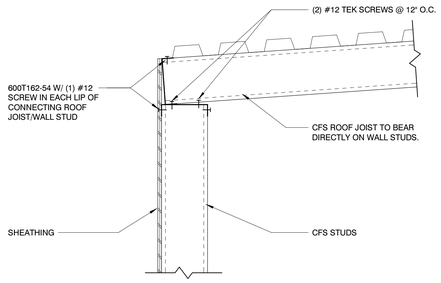


CONNECTION DETAIL 17
SCALE : 1/2" = 1'-0"



CONNECTION DETAIL 18
SCALE : 1" = 1'-0"



CONNECTION DETAIL 19
SCALE : 1 1/2" = 1'-0"

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STRUCTURAL DETAILS

SHEET NO.:

S502

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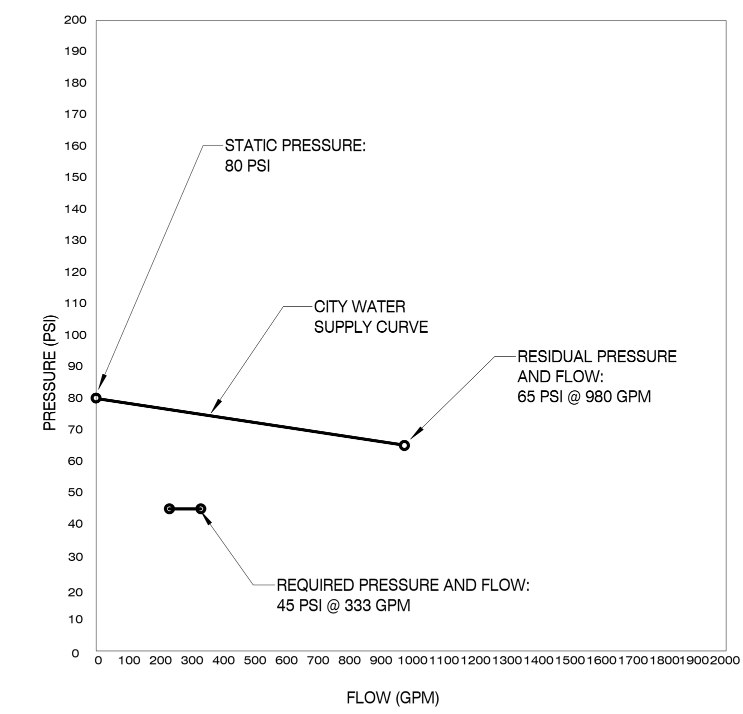
FIRE PROTECTION SPECIFICATIONS

SECTION 15300 - FIRE PROTECTION
PART I GENERAL
1.01 DESCRIPTION OF WORK:
A. EXTENT OF FIRE PROTECTION WORK IS INDICATED ON DRAWINGS AND SCHEDULES, AND BY REQUIREMENTS OF THIS SECTION.
B. THE SYSTEM SHALL BE WET PIPE SYSTEM
1.02 QUALITY ASSURANCE:
A. CODES AND STANDARDS:
1. NFPA COMPLIANCE: INSTALL FIRE PROTECTION SYSTEM IN ACCORDANCE WITH NFPA 13 "STANDARDS FOR THE INSTALLATION OF SPRINKLER SYSTEMS". NFPA 14, "STANDARDS FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS" AND NFPA 24 "STANDARD FOR OUTSIDE PROTECTION."
2. UL COMPLIANCE: PROVIDE FIRE PROTECTION PRODUCTS IN ACCORDANCE WITH UL STANDARDS; PROVIDE UL LABEL ON EACH PRODUCT.
3. FIRE DEPARTMENT/MARSHAL COMPLIANCE: INSTALL FIRE PROTECTION SYSTEMS IN ACCORDANCE WITH LOCAL REGULATIONS OF FIRE DEPARTMENT OR FIRE MARSHAL.
4. QUALIFICATIONS: HYDRAULIC CALCULATIONS AND PREPARATION OF SHOP DRAWINGS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A RESPONSIBLE MANAGING EMPLOYEE WHO HOLDS A NCET LEVEL III CERTIFICATION. INSTALLATION SHALL BE PERFORMED BY A LICENSED SPRINKLER CONTRACTOR.
1.03 SUBMITTALS:
A. PRODUCT DATA: SUBMIT MANUFACTURER`S TECHNICAL PRODUCT DATA AND INSTALLATION INSTRUCTIONS FOR FIRE PROTECTION MATERIALS AND PRODUCTS WITH A TABLE OF CONTENTS. IDENTIFY MATERIAL, SIZE , AND MODEL NUMBER OF EACH PRODUCT.
B. SHOP DRAWINGS: SUBMIT SCALED LAYOUT DRAWINGS FOR FIRE PROTECTION PIPE AND FITTINGS INCLUDING, BUT NOT LIMITED TO, PIPE AND TUBE SIZES, LOCATIONS, ELEVATIONS, AND SLOPES OF HORIZONTAL RUNS, WALL AND FLOOR PENETRATIONS, AND CONNECTIONS. INDICATE INTERFACE AND SPATIAL RELATIONSHIPS BETWEEN PIPING AND APPROXIMATE EQUIPMENT.
C. APPROVAL DRAWINGS: PREPARE APPROVAL DRAWINGS OF FIRE PROTECTION SYSTEMS INDICATING PIPE SIZES, PIPE LOCATIONS, FITTINGS, SHUTOFFS, EQUIPMENT, ETC. SUBMIT TO AGENCY HAVING JURISDICTION FOR APPROVAL. SUBMIT ONE APPROVED COPY, BEARING STAMP AND/OR SIGNATURE OF AGENCY HAVING JURISDICTION, BEFORE PROCEEDING WITH INSTALLATION.
D. APPROVAL CALCULATIONS: PREPARE HYDRAULIC CALCULATIONS OF FIRE PROTECTION SYSTEM USING A FIRE HYDRANT FLOW TEST THAT IS NO MORE THAN 6 MONTHS OLD. SUBMIT TO AGENCY HAVING JURISDICTION FOR APPROVAL. SUBMIT TO ARCHITECT, ONE APPROVED COPY, BEARING STAMP AND/OR SIGNATURE OF AGENCY HAVING JURISDICTION, BEFORE PROCEEDING WITH INSTALLATION.
E. RECORD DRAWINGS: AT PROJECT CLOSEOUT, SUBMIT RECORD DRAWINGS OF INSTALLED FIRE PROTECTION PIPING AND PRODUCTS.
PART II PRODUCTS
2.01 MATERIALS AND PRODUCTS:
A. GENERAL: PROVIDE PIPING MATERIALS AND FACTORY-FABRICATED PIPING PRODUCTS OF SIZES, TYPES, PRESSURE RATINGS, TEMPERATURE RATINGS, AND CAPACITIES AS INDICATED. WHERE NOT INDICATED, PROVIDE PROPER SELECTION AS DETERMINED BY INSTALLER TO COMPLY WITH INSTALLATION REQUIREMENTS. PROVIDE SIZES AND TYPES MATCHING PIPING AND EQUIPMENT CONNECTIONS; PROVIDE FITTINGS OF MATERIALS WHICH MATCH PIPE MATERIALS USED IN FIRE PROTECTION SYSTEM.
2.02 BASIC IDENTIFICATION:
A. GENERAL: PROVIDE IDENTIFICATION AS FOLLOWS;
1. FIRE PROTECTION PIPING: PLASTIC PIPE MARKERS
2. FIRE PROTECTION VALVES: PLASTIC VALVE TAGS.
2.03 BASIC PIPES AND PIPE FITTINGS:
A. GENERAL: PROVIDE PIPES AND PIPE FITTINGS AS FOLLOWS:
B. BLACK STEEL PIPE: SCHEDULE 40 FOR ABOVE 6"; BLACK STEEL PIPE: SCHEDULE 10 FOR 6" AND SMALLER; MECHANICAL GROOVED PIPE COUPLINGS AND FITTINGS; ROLL-GROOVE AND MECHANICAL LOCKING TYPE.
C. DUCTILE IRON PRESSURE PIPE: AWWA C-106 WITH FITTINGS COMPLYING WITH AWWA C-110 AND RUBBER GASKETS COMPLYING WITH AWWA C-111.
D. BRAIDED FLEXIBLE, SPRINKLER HOSE FITTINGS: BRAIDED, FLEXIBLE HOSE FOR CONNECTION TO SPRINKLER WITH BRACKET FOR CONNECTION TO CEILING GRID.
1. APPROVED MANUFACTURERS: FLEXHEAD AND VICTAULIC [AH2, AH2CC OR VS1].
E. BRANCH OUTLET FITTINGS:
1. BODY MATERIAL: DUCTILE-IRON HOUSING WITH EPDM SEALS AND BOLTS AND NUTS.
2. TYPE: MECHANICAL-T AND -CROSS FITTINGS.
3. BRANCH OUTLETS: GROOVED, PLAIN-END PIPE, OR THREADED.
4. APPROVED MANUFACTURERS: ANVIL, TYCO, AND VICTAULIC.
2.04 BASIC PIPING SPECIALTIES:
A. GENERAL: PROVIDE PIPING SPECIALTIE:
1. PIPE ESCUTCHEONS
2. DIELECTRIC UNIONS
3. DRIP PANS
4. PIPE SLEEVES
5. SLEEVE SEALS
6. FIRE BARRIER PENETRATION SEALS
2.05 BASIC SUPPORTS AND ANCHORS:
A. GENERAL: PROVIDE SUPPORTS AND ANCHORS AS FOLLOWS:
1. ADJUSTABLE STEEL CLEVIS HANGERS, ADJUSTABLE STEEL BAND HANGERS, OR ADJUSTABLE BAND HANGERS, FOR HORIZONTAL PIPING HANGERS AND SUPPORTS.
2. TWO-BOLT RISER CLAMPS FOR VERTICAL PIPING SUPPORTS.
3. STEEL TURNBUCKLES AND MALLEABLE IRON SOCKETS FOR HANGER-ROD ATTACHMENTS.
4. CONCRETE INSERTS, TOP-BEAM C-CLAMPS, SIDE BEAM OR CHANNEL CLAMPS OR CENTER BEAM CLAMPS FOR BUILDING ATTACHMENTS.
B. ANCHORS:
1. GENERAL: PROVIDE ANCHORAGES FOR TEES, PLUGS, CAPS, BENDS, AND HYDRANTS IN ACCORDANCE WITH NFPA 24.
2. CLAMPS, STRAPS AND WASHERS: STEEL, ANSI/ASTM A-506
3. RODS: STEEL, ANSI/ASTM A-575
4. OD COUPLINGS: MALLEABLE IRON, ANSI/ASTM A-197
5. BOLTS: STEEL, ANSI/ASTM A-307
6. CAST-IRON WASHERS: ANSI/ASTM A-126, CLASS A
7. THRUST BLOCKS: 2500 PSI CONCRETE
2.06 BASIC VALVES:
A. GENERAL: PROVIDE VALVES AS FOLLOWS:
B. INTERIOR VALVES:
1. SECTIONAL: GATE VALVES OR BUTTERFLY VALVES; UL LISTED.
2. CHECK: SWING CHECK VALVES; UL LISTED.
C. EXTERIOR VALVES:
1. GATE VALVES: STANDARD SHUT-OFF VALVES CAST INTO BODY, OUTSIDE-SCREW-AND-YOKE TYPE COMPLYING WITH AWWA C-500. SIZES 2" AND SMALLER SHALL BE BRONZE, 175 PSI WG, RISING STEM, SCREWED BONNET. SIZES 2 1/2" AND LARGER SHALL BE IRON BODY BRONZE MOUNTED, 175 PSI WG, SOLID WEDGE, REPLACEABLE SEAT (VICTAULIC SERIES 771, OR EQUAL).
2. CHECK VALVES: GRAVITY-OPERATED, REGULAR TYPE, IRON-BODIED, BRONZE FITTED WITH METAL-TO-METAL OR RUBBER FACED CHECKS, COMPLYING WITH ASTM A-12 (VICTAULIC SERIES 717, OR EQUAL).
3. BUTTERFLY VALVES: RUBBER SEATED, EQUIPPED WITH GEAR OR TRAVELLING NUT ACTUATOR TO MINIMIZE WATER HAMMER, COMPLYING WITH AWWA C-50 (VICTAULIC SERIES 705 FIRELOCK, OR EQUAL).
4. INDICATOR POSTS: TELESCOPIC BARREL TYPE FOR USE WITH UNDERGROUND GATE VALVES.
2.07 SPECIAL VALVES:
A. GENERAL: PROVIDE VALVES, UL LISTED, IN ACCORDANCE WITH THE FOLLOWING LISTING. PROVIDE SIZES AND TYPES WHICH MATE AND MATCH PIPING AND EQUIPMENT CONNECTIONS.
B. ALARM CHECK VALVE: PROVIDE CAST-IRON WATER FLOW ALARM CHECK VALVE, 175 PSI WORKING PRESSURE. PROVIDE TRIM FOR BYPASS, DRAIN, ALARM, PRESSURE GAUGES AND FILL LINE.
1. APPPROVED ALARM CHECK VALVE MANUFACTURERS: BERMAD, RELIABLE, TYCO, VICTAULIC, VIKING
C. FIRE DEPARTMENT CONNECTION VALVE: PROVIDE FIRE DEPARTMENT CONNECTION IRON SWING CHECK VALVE, 175 PSI RATED WORKING PRESSURE, OF SIZE AND END TYPE INDICATED.
D. DETECTOR CHECK VALVES: PROVIDE CAST-IRON BODY DETECTOR CHECK VALVE, BRONZE FITTED, WITH TAPPED BOSSES ON EACH SIDE FOR BY-PASS METER, AIR VENT, AND COVER-MOUNTED EYEBOLT.
1. APPPROVED DETECTOR CHECK VALVE MANUFACTURERS: AMES, WATTS, WILKINS
E. BACKFLOW PREVENTION VALVES
1. PROVIDE APPROVED DOUBLE VALVE ASSEMBLIES TO SEPARATE AUTOMATIC FIRE SPRINKLER SYSTEM FROM POTABLE WATER SYSTEM.
2. APPPROVED DOUBLE CHECK VALVE MANUFACTURERS: AMES, WATTS, WILKINS
2.08 HYDRANTS:
A. GENERAL: PROVIDE CAST-IRON SIDEWALK FIRE HYDRANTS WITH THREADED MALE NOZZLE CONFORMING TO "AMERICAN NATIONAL STANDARD FIRE HOSE CONNECTION SCREW THREADS" UNLESS OTHER HOSE CONNECTION REQUIRED BY LOCAL FIRE AUTHORITIES.
B. PROVIDE DRY-BARREL FIRE HYDRANTS (BASE VALVE TYPE) COMPLYING WITH AWWA C-502 AND AS FOLLOWS:
1. WORKING PRESSURE, L50 PSI UNLESS OTHERWISE INDICATED.
2. VALVE OPENING DIRECTION, CLOCKWISE, INDICATED BY ARROW AND THE WORD "OPEN" CAST ON DOME.
3. NOZZLES, TWO 2-1/2" HOSE CONNECTIONS AND ONE 4-1/2" PUMPER CONNECTION WITH CAPS AND CHAINS. NOZZLE CAP NUTS TO MATCH OPERATING STEM NUTS. PROVIDE NATIONAL STANDARD HOSE THREADS ON 2-1/2". HOSE THREADS ON 4-1/2" PUMPER CONNECTION SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: O.D.-4.875", P.D.-4.777", ROOT DIAMETER 4,653", 6 THREADS PER INCH, GAUGE 2C.
2.09 AUTOMATIC SPRINKLERS:
A. GENERAL: PROVIDE AUTOMATIC SPRINKLERS OF TYPE INDICATED ON DRAWINGS, AND IN ACCORDANCE WITH THE FOLLOWING LISTING. PROVIDE FUSIBLE LINKS FOR 165ºF (74ºC) AND SPRINKLERS WITH NOMINAL 1/2" DISCHARGE ORIFICE UNLESS OTHERWISE INDICATED.
1. UPRIGHT
2. PENDENT
3. FLUSH PENDENT
4. CONCEALED PENDENT
5. HORIZONTAL SIDEWALL
6. FINISH: CHROME PLATE FOR OCCUPIED AREAS, CAST BRASS FOR UNOCCUPIED AREAS, WAX COATED WHERE EXPOSED TO ACIDS, CHEMICALS, OR OTHER CORROSIVE FUMES.
B. APPPROVED SPRINKLER HEAD MANUFACTURERS: RELIABLE, VICTAULIC, VIKING, TYCO
C. SPRINKLER CABINET AND WRENCH: FURNISH STEEL, BAKED RED ENAMELED, SPRINKLER BOX WITH CAPACITY TO STORE 12 SPRINKLERS AND WRENCH SIZED TO SPRINKLERS.
D. IN AREAS SUBJECT TO PHYSICAL ABUSE SUCH AS GYMNASIUMS AND MECHANICAL ROOMS, PROVIDE STEEL WIRE GUARDS OVER SPRINKLERS.
2.10 WALL TYPE SIAMESE CONNECTIONS:
A. GENERAL: PROVIDE WALL TYPE CAST BRASS SIAMESE CONNECTIONS AND ESCUTCHEON PLATE ASSEMBLY, WITH 2, 2-1/2" FIRE DEPARTMENT INLETS WITH FEMALE HOSE CONNECTIONS, AMERICAN NATIONAL FIRE HOSE CONNECTION SCREW THREAD, EQUIPPED WITH INDIVIDUAL DROP CLAPPER VALVES, EQUIPPED WITH PLUGS AND CHAINS, CONSTRUCTION FEATURES AS INDICATED, AND CONSTRUCTED WITH THE FOLLOWING ADDITIONAL CONSTRUCTION FEATURES:
1. FINISH: POLISHED BRASS
2. INLET PIPE: 4" PIPE.
3. CAST LETTERING: "AUTO. SPKR."
4. ESCUTCHEON: 12" DIAMETER OF 7" X 14" RECTANGLE
5. SIAMESE CONNECTION: FLUSH, STACKED INLETS; FLUSH, ADJACENT INLETS; Y-TYPE, INLETS STRAIGHT, PROJECTING CONFIGURATION; OR Y-TYPE, INLETS 45º, PROJECTING CONFIGURATION.
6. PROVIDE KNOX BOX.
7. APPROVED MANUFACTURERS: CROKER, GUARDIAN FIRE, POTTER ROEMER, AND VIKING
PART III EXECUTION
3.01 INSPECTION:
A. GENERAL: EXAMINE AREAS AND CONDITIONS UNDER WHICH FIRE PROTECTION MATERIALS AND PRODUCTS ARE TO BE INSTALLED. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN MANNER ACCEPTABLE TO INSTALLER.
3.02 INSTALLATION OF BASIC IDENTIFICATION:
A. GENERAL: INSTALL MECHANICAL IDENTIFICATION SUCH THAT ALL FIRE PROTECTION PIPING AND EQUIPMENT CAN BE IDENTIFIED.
B. INSTALL FIRE PROTECTION SIGNS ON PIPING IN ACCORDANCE WITH NFPA 13 AND NFPA 14 REQUIREMENTS.
3.03 INSTALLATION OF OUTSIDE PIPING:
A. GENERAL: INSTALL EXTERIOR FIRE WATER SYSTEM IN COMPLIANCE WITH APPLICABLE PROVISIONS OF NFPA 24 AND AS HEREIN SPECIFIED. ARRANGE AND PAY FOR TAPS AND SERVICE BY LOCAL WATER UTILITY. FOR SLIP-JOINT PIPE, PROVIDE 3000 PSI CONCRETE THRUST BLOCKS AGAINST UNDISTURBED SOIL.
B. DUCTILE-IRON PIPE: INSTALL IN ACCORDANCE WITH RECOMMENDED PROCEDURES OF THE CAST-IRON PIPE RESEARCH ASSOCIATION.
C. HYDRANTS: INSTALL IN ACCORDANCE WITH AWWA M-17.
D. CONTROL VALVES: INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
E. JOINT ADAPTERS: MAKE JOINTS BETWEEN CAST-IRON PIPE AND OTHER TYPES OF PIPE WITH STANDARD MANUFACTURED CAST-IRON ADAPTERS AND FITTINGS.
F. INTERIOR INSPECTION: INSPECT CONDUIT TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED.
1. IF THE INSPECTION INDICATES POOR ALIGNMENT, DEBRIS, DISPLACED PIPE, INFILTRATION, OR OTHER DEFECTS, CORRECT SUCH DEFECTS TO SATISFACTION OF ARCHITECT/ENGINEER.
G. CLEANING CONDUIT: CLEAR INTERIOR OF CONDUIT OF DIRT AND OTHER SUPERFLUOUS MATERIALS AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED. PLACE PLUGS IN END OF UNCOMPLETED CONDUIT AT END OF DAY OR WHENEVER WORK STOPS. FLUSH LINES TO REMOVE COLLECTED DEBRIS BEFORE CONNECTING TO OTHER FIRE PROTECTION SYSTEMS. FLUSH CONDUIT AT RATES OF FLOW RECOMMENDED BY NFPA 24 UNLESS HIGHER RATES REQUIRED BY LOCAL AUTHORITIES.
3.04 INSTALLATION OF PIPES AND PIPE FITTINGS:
A. GENERAL: INSTALL PIPES AND PIPE FITTINGS IN ACCORDANCE WITH DRAWING AND REQUIREMENT OF AUTHORITY HAVING JURISDICTION. NOTE THAT ALL WORK INCLUDING UNDERGROUND LINES MUST BE INSTALLED BY A LICENSED SPRINKLER CONTRACTOR.
B. COMPLY WITH REQUIREMENTS OF NFPA 13 AND NFPA 14 FOR INSTALLATION OF FIRE PROTECTION PIPING MATERIALS. INSTALL PIPING PRODUCTS WHERE INDICATED, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PIPING SYSTEMS COMPLY WITH REQUIREMENTS AND SERVE INTENDED PURPOSES.
C. COORDINATE WITH OTHER WORK, INCLUDING PLUMBING PIPING, AS NECESSARY, TO INTERFACE COMPONENTS OF FIRE PROTECTION PIPING PROPERLY WITH OTHER WORK.
D. INSTALL DRAIN PIPING AT LOW POINTS OF PIPING SYSTEMS. PROVIDE DRY DRUM DRIPS WHERE INDICATED.
E. INSTALL SECTIONAL VALVES IN INLET PIPING, AT BOTTOM OF EACH RISER, AND IN LOOPS.
F. INSTALL FIRE DEPARTMENT CONNECTION VALVES IN PIPING WHERE FIRE DEPARTMENT CONNECTIONS ARE INDICATED.
G. INSTALL WATER FLOW INDICATORS WHERE INDICATED.
1. APPROVED MANUFACTURERS: POTTER, VIKING, AND WATTS.
H. MOUNT SUPERVISORY SWITCHES ON EACH SECTIONAL VALVE.
I. INSTALL PRESSURE GAGES ON RISER OR MAIN FEED, AT EACH SPRINKLER TEST CONNECTION, AND AT TOP OF EACH STANDPIPE.
J. INSTALL MANUAL SHUTOFF AT EACH AUDIBLE ALARM STATION.
K. INSTALL INSPECTOR'S TEST CONNECTIONS WHERE INDICATED, OR AT MOST REMOTE POINT FROM RISER.
L. INSTALL ELECTRICALLY OPERATED ALARM BELL NEAR FIRE DEPARTMENT CONNECTION.
1. FINISH: RED-ENAMEL FACTORY FINISH, SUITABLE FOR OUTDOOR USE.
2. APPROVED MANUFACTURERS: FIRE-LITE ALARMS, NOTIFIER, AND POTTER.
3.05 INSTALLATION OF VALVES:
A. INSTALL VALVES IN PER MANUFACTURES WRITTEN RECOMMENDATIONS.
B. DETECTOR CHECK VALVES: INSTALL IN HORIZONTAL POSITION AS INDICATED, ORIENTED FOR PROPER FLOW DIRECTION. INSTALL BY-PASS METER WITH GLOBE VALVE AND CHECK VALVE, IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION DIRECTIONS.
C. INSTALL BACKFLOW PREVENTION VALVE TO SEPARATE SPRINKLER SYSTEM FROM POTABLE WATER SYSTEM.
3.06 INSTALLATION OF FIRE PROTECTION SPECIALTIES:
A. GENERAL: INSTALL FIRE PROTECTION SPECIALTIES AS INDICATED, AND IN ACCORDANCE WITH NFPA 13 AND 14. FURNISH WIRING REQUIREMENTS TO ELECTRICAL INSTALLER FOR ELECTRICAL WIRING OF SUPERVISORY SWITCHES.
3.07 FIELD QUALITY CONTROL:
A. SPRINKLER PIPING FLUSHING: PRIOR TO CONNECTING SPRINKLER RISERS FOR FLUSHING, FLUSH WATER FEED MAINS, LEAD-IN CONNECTIONS AND CONTROL PORTIONS OF SPRINKLER PIPING. AFTER FIRE SPRINKLER PIPING INSTALLATION HAS BEEN COMPLETED AND BEFORE PIPING IS PLACED IN SERVICE, FLUSH ENTIRE SPRINKLER SYSTEM, AS REQUIRED TO REMOVE FOREIGN SUBSTANCES, UNDER PRESSURE AS SPECIFIED IN NFPA 13. CONTINUE FLUSHING UNTIL WATER IS CLEAR, AND CHECK TO ENSURE THAT DEBRIS HAS NOT CLOGGED SPRINKLERS.
B. PERFORM HYDROSTATIC TESTING OF COMPLETED OUTSIDE LINES IN ACCORDANCE WITH NFPA 24 UNLESS MORE STRINGENT TEST REQUIRED BY LOCAL AUTHORITIES HAVING JURISDICTION.
C. HYDROSTATIC TESTING: AFTER FLUSHING SYSTEM, TEST FIRE SPRINKLER PIPING HYDROSTATICALLY, FOR PERIOD OF 2 HOURS, AT NOT LESS THAN 200 PSI OR AT 50 PSI IN EXCESS OF MAXIMUM STATIC PRESSURE WHEN MAXIMUM STATIC PRESSURE IS IN EXCESS OF 150 PSI. CHECK SYSTEM FOR LEAKAGE OF JOINTS. MEASURE HYDROSTATIC PRESSURE AT LOW POINT OF EACH SYSTEM OR ZONE BEING TESTED.
D. REPAIR OR REPLACE PIPING SYSTEM AS REQUIRED TO ELIMINATE LEAKAGE IN ACCORDANCE WITH NFPA STANDARDS FOR "LITTLE OR NO LEAKAGE" AND RETEST AS SPECIFIED TO DEMONSTRATE COMPLIANCE.
3.08 ADJUSTING AND CLEANING:
A. CLEANING AND INSPECTING: CLEAN AND INSPECT FIRE PROTECTION SYSTEMS TO BE WIP-DOWN CLEAN AND FREE FROM LEAKS AND DEFECTS. INSPECT PIPE HANGERS TO INSURE SECURE STRUCTURAL CONNECTION AND THE HANGER IS TIGHT AND CARRYING THE WEIGHT OF THE PIPE.
3.09 EXTRA STOCK:
A. HEADS: FOR EACH STYLE AND TEMPERATURE RANGE REQUIRED, FURNISH ADDITIONAL SPRINKLER HEADS, AMOUNTING TO ONE UNIT FOR EVERY 100 INSTALLED UNITS, BUT NOT LESS THAN 5 UNITS OF EACH.
B. WRENCHES: FURNISH 2 SPANNER WRENCHES FOR EACH TYPE AND SIZE OF VALVE CONNECTION AND FIRE HOSE COUPLING.

SPRINKLER LEGEND

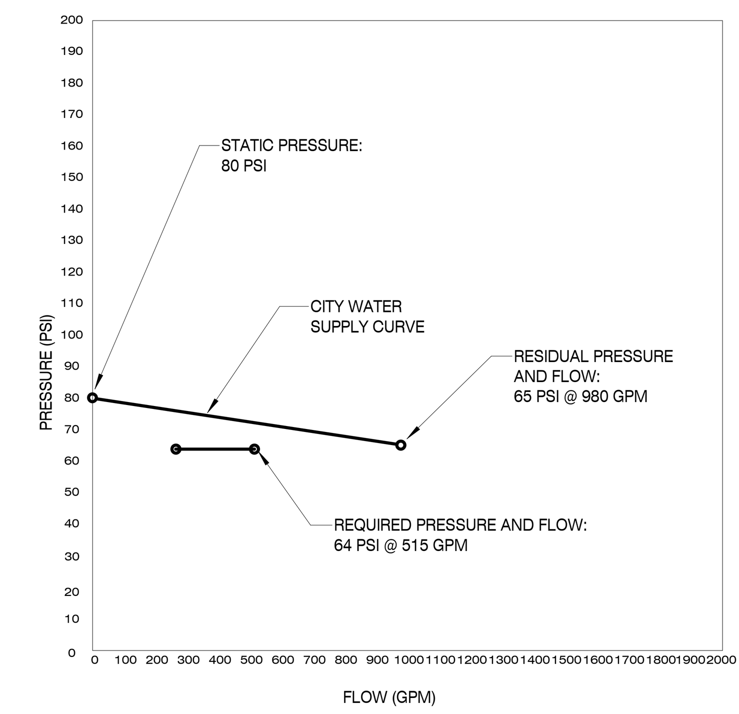
SYM	DESCRIPTION	SPRAY	TYPE	TEMP.	ORIFICE	K	MODEL #	FINISH
●	PENDENT	15' X 15'	QUICK RESPONSE	165°	1/2"	5.6	V2708	SEMI-RECESSED WHITE
○	UPRIGHT	15' X 15'	STANDARD	212°	1/2"	5.6	V2703	BRASS



PRELIMINARY SPRINKLER CALCULATION

DESIGN AREA 1 - LIGHT HAZARD

Flow test Data		
Static Pressure:	80	
Residual Pressure:	65	
Flow (GPM) :	980	
Date taken:	FEBRUARY 5, 2019	
Time:	NA	
Test taken by:	TOTAL FIRE PROTECTION	
Elevation of Hydrant:	0	
GPM Demand of BLDG.		
Most remote area or highest demand (Room Name)	VISITOR WAITING	
Design Density (NFPA 13 or supplied by Insurance Co.)	0.1	
Design Area (Square footage)	1500	
Overage Factor (1.20 typ.)	1.55	
Remote area GPM demand(Density x Area x Overage)	232.5	
Standpipe GPM demand (If required)(500 gpm for the first, 250 after)	0	
Hose GPM demand (100 Light, 250 ordinary, 500 extra hazard)	100	
Total GPM (Remote Area + Standpipe + Hose)	332.5	
Available Pressure		
Density	0.1	
Max Sprinkler Head coverage (As per NPFA 13 table 4-2.2)	145	
Square footage spacing x Density = GPM sprinkler head (Q)	14.5	
K-Factor of Sprinkler head (K)	5.6	
Equation: Pressure required at head=(Q / K)2	7	
Elevation difference from test hydrant to base of riser x .433	10	4.33
Elevation difference from base of riser to remote area x .433	12	5.196
Backflow Preventer pressure drop	5	
Safety Factor (5 psi min.) (SF)	5	
Fixed Pressure drop =	26	
Estimated Friction Drop Thru Fire Line		
Length of run from test hydrant to riser (HR)	2000	
Pipe C Factor (Ductile Iron C-100)	100	
Nominal Pipe Inside Diameter (10", 8", 6", 4", 3")	12	
Friction loss in pipe (psi/ft) (Based on Hazen William Equation) (HW1)	0.000232	
HR x 1.30 x HW1 =	1	
Length of run from riser to last sprinkler head (estimated.) (RS)		
Base of Riser to farthest sprinkler	400	
Pipe C Factor (Black Steel C-120)	120	
Nominal Pipe Inside Diameter (6", 4", 3", 2-1/2", 2")	4	
Friction loss in pipe (psi/ft) (Based on Hazen William Equation) (HW2)	0.034829	
RS x 1.30 x HW2 =	18	
Estimated Required Flow Data for Building		
Required GPM	332.5	
Required PSI	45	



PRELIMINARY SPRINKLER CALCULATION

DESIGN AREA 2 - ORDINARY HAZARD GROUP 1

Flow test Data		
Static Pressure:	80	
Residual Pressure:	65	
Flow (GPM) :	980	
Date taken:	FEBRUARY 5, 2019	
Time:	NA	
Test taken by:	TOTAL FIRE PROTECTION	
Elevation of Hydrant:	0	
GPM Demand of BLDG.		
Most remote area or highest demand (Room Name)	WARMING KITCHEN	
Design Density (NFPA 13 or supplied by Insurance Co.)	0.15	
Design Area (Square footage)	1500	
Overage Factor (1.20 typ.)	1.176	
Remote area GPM demand(Density x Area x Overage)	264.6	
Standpipe GPM demand (If required)(500 gpm for the first, 250 after)	0	
Hose GPM demand (100 Light, 250 ordinary, 500 extra hazard)	250	
Total GPM (Remote Area + Standpipe + Hose)	514.6	
Available Pressure		
Density	0.15	
Max Sprinkler Head coverage (As per NPFA 13 table 4-2.2)	126	
Square footage spacing x Density = GPM sprinkler head (Q)	18.9	
K-Factor of Sprinkler head (K)	5.6	
Equation: Pressure required at head=(Q / K)2	11	
Elevation difference from test hydrant to base of riser x .433	10	4.33
Elevation difference from base of riser to remote area x .433	12	5.196
Backflow Preventer pressure drop	5	
Safety Factor (5 psi min.) (SF)	5	
Fixed Pressure drop =	31	
Estimated Friction Drop Thru Fire Line		
Length of run from test hydrant to riser (HR)	2000	
Pipe C Factor (Ductile Iron C-100)	100	
Nominal Pipe Inside Diameter (10", 8", 6", 4", 3")	12	
Friction loss in pipe (psi/ft) (Based on Hazen William Equation) (HW1)	0.00052	
HR x 1.30 x HW1 =	1	
Length of run from riser to last sprinkler head (estimated.) (RS)		
Base of Riser to farthest sprinkler	310	
Pipe C Factor (Black Steel C-120)	120	
Nominal Pipe Inside Diameter (6", 4", 3", 2-1/2", 2")	4	
Friction loss in pipe (psi/ft) (Based on Hazen William Equation) (HW2)	0.078134	
RS x 1.30 x HW2 =	31	
Estimated Required Flow Data for Building		
Required GPM	514.6	
Required PSI	64	

FIRE PROTECTION GENERAL NOTES:

1. THE SPRINKLER HEADS SHOWN ARE GENERAL IN NUMBER AND LOCATION. THE EXACT NUMBERS AND LOCATIONS SHALL BE DETERMINED BY THE SUCCESSFUL SPRINKLER INSTALLER AND SHALL BE SHOWN ON HIS SHOP DRAWINGS. THE SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH SPECIFICATIONS AND NFPA 13 & 24.
2. PROVIDE A HYDRAULICALLY DESIGNED FULL COVERAGE SPRINKLER SYSTEM.
3. PROVIDE DRY PENDANT TYPE HEADS IN COOLER, FREEZER AND/OR OTHER AREAS THAT ARE SUBJECT TO FREEZING FOR FREEZE PROTECTION.
4. THE SPRINKLER CONTRACTOR SHALL COORDINATE LOCATIONS OF SPRINKLER HEADS AND ASSOCIATED PIPING WITH ALL OTHER TRADES.
5. ALL SPRINKLER HEADS LOCATED IN 2'x2' TILES SHALL BE CENTERED.
6. SPRINKLER SYSTEM SHALL BE ALL AREAS TO BE LIGHT HAZARD, EXCEPT ORDINARY HAZARD GROUP I FOR THE KITCHEN AND ELECTRICAL ROOMS AND ORDINARY HAZARD GROUP II FOR MECHANICAL AND STORAGE ROOMS.
7. CONTRACTOR SHALL VERIFY LOCATION AND INSTALLATION REQUIREMENTS OF BACKFLOW PREVENTER WITH THE LOCAL AUTHORITY HAVING JURISDICTION, AND LOCAL WATER UTILITY BEFORE CONSTRUCTION OR SITE EXCAVATION HAS BEGUN.
8. SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR FULL REPLACEMENT COST OF SURFACES DAMAGED BY DRAINAGE FROM THE SPRINKLER SYSTEM.
9. THE CONTRACTOR MUST PROVIDE A CERTIFIED CALCULATION DEMONSTRATING THE CHARACTERISTICS OF THE PROPOSED SYSTEM AND SHOWING PIPE SIZE AND SYSTEM FLOW.
10. THE MINIMUM PIPE SIZE FOR THE UNDERGROUND SPRINKLER MAIN IS 12", CONTRACTOR TO VERIFY WITH A CERTIFIED CALCULATION. THE MINIMUM BURY DEPTH FOR THE FIRE MAIN IS 36" BELOW FINISHED GRADE.
11. PROVIDE A "PUMPER" HYDRANT WITHIN 100' OF THE FIRE DEPARTMENT CONNECTION AS REQUIRED BY THE AHJ.
12. THE NEW SPRINKLER SYSTEM IS AN NFPA 13-4.1 WET PIPE SYSTEM.
13. ALL FIRE PROTECTION PIPING STARTING FROM POINT OF SERVICE ON MUST BE INSTALLED BY A LICENSED FIRE PROTECTION CONTRACTOR. SEE THE SITE UTILITY DRAWING FOR UNDERGROUND PIPING AND VALVES REQUIRED.
14. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
15. THE VELOCITY OF WATER FOR SPRINKLER PIPING SHALL NOT EXCEED 21 FPS (FEET PER SECOND).
16. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR CONNECTIONS TO ALL UTILITY LINES AND PAY ALL FEES AND COSTS FOR CONNECTIONS TO THOSE SERVICES.
17. SEE ELECTRICAL LIGHTING PLANS FOR LOCATION OF LIGHTS.
18. SEE MECHANICAL FLOOR PLANS FOR LOCATIONS OF DIFFUSERS.

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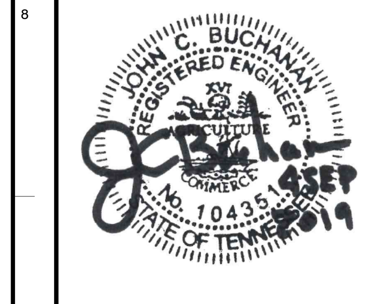
SEAL



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PROJECT INFORMATION
PROJECT:
CLAYTON ADDISON MANUFACTURING FACILITY (943)
PROJECT ADDRESS:
18025 COUNTY ROAD 41
ADDISON, AL 35540
PROJECT NO.: 180789.04
NOTES

ACTIVE DESIGN PHASE
- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:
FIRE PROTECTION LEGENDS, SPECIFICATIONS, AND NOTES
SHEET NO.:
FP001

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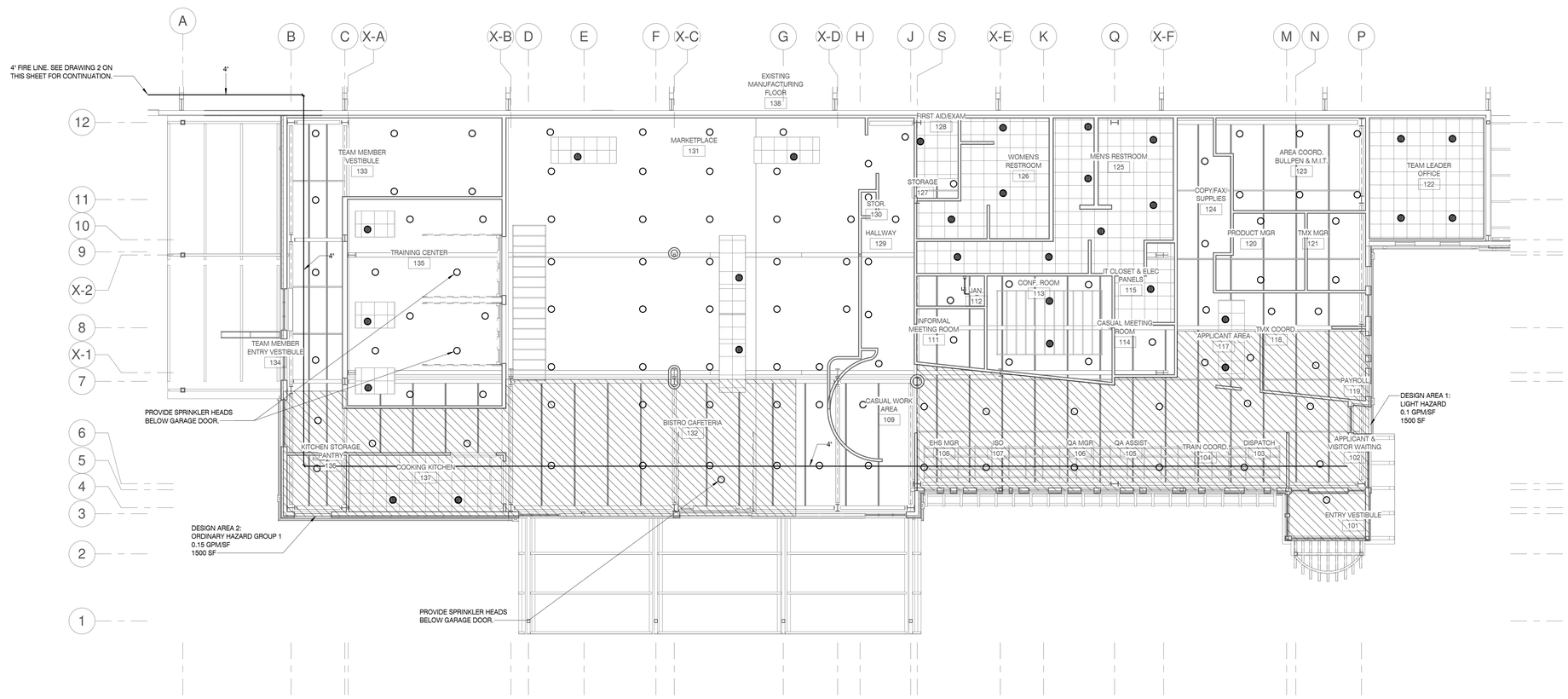
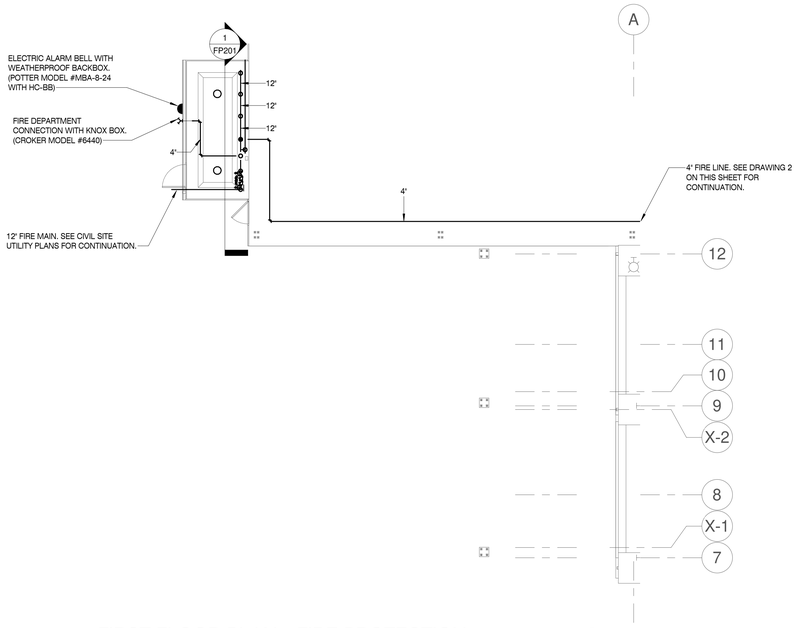


FIRST FLOOR PLAN - FIRE PROTECTION 2

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



FIRST FLOOR PLAN - FIRE PROTECTION 1

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

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:

FLOOR PLAN - FIRE PROTECTION

SHEET NO.:

FP101

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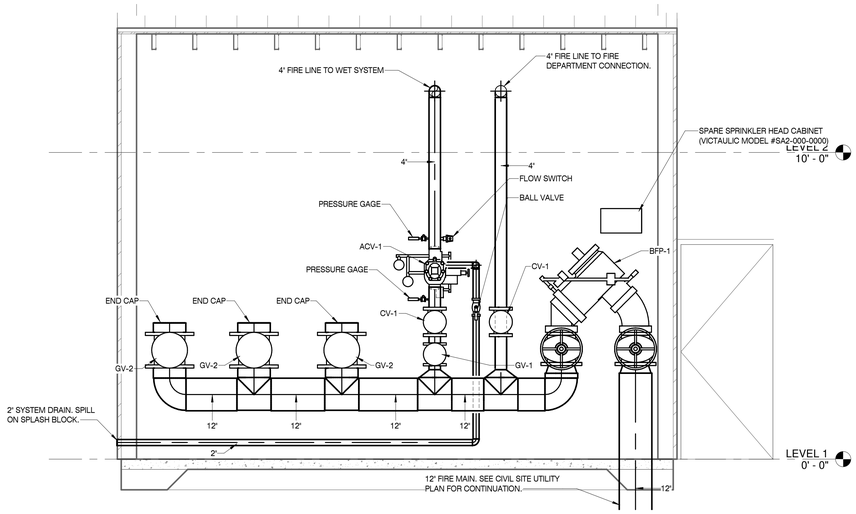
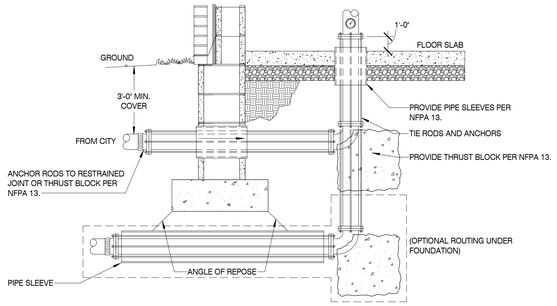


FIRE RISER

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

1



FIRE LINE LEAD-IN DETAIL

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

2

FIRE PROTECTION VALVE SCHEDULE

ID	DESCRIPTION	PIPE SIZE	MANUFACTURER & MODEL #
BFP-1	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	10"	WILKINS 450DA
ACV-1	ALARM CHECK VALVE	4"	VICTAULIC SERIES 751 FIRELOCK
CV-1	CHECK VALVE	4"	VICTAULIC SERIES 717
GV-1	GATE VALVE	4"	VICTAULIC SERIES 771H
GV-2	GATE VALVE	12"	VICTAULIC SERIES 771H

NOTES:
- SEE FIRE PROTECTION SPECIFICATIONS ON SHEET FP0.1 FOR MORE INFORMATION.
- PROVIDE TAMPER SWITCH AT ALL GATE VALVES.

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NO.	DATE	DESCRIPTION

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SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:

FIRE PROTECTION DETAILS

SHEET NO.:

FP201

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HVAC SPECIFICATIONS

I. GENERAL

A. SCOPE: FURNISH ALL LABOR, MATERIALS, EQUIPMENT, CONTROL SYSTEMS, DEVICES, ACCESS PANELS, PERMITS, AND SERVICES NECESSARY TO INSTALL THE COMPLETE AND OPERABLE AIR CONDITIONING, HEATING, AND VENTILATING SYSTEM INDICATED ON THE DRAWINGS, AS SPECIFIED HEREIN, AND IN ACCORDANCE WITH ALL CITY, STATE, AND NATIONAL CODES, IF THERE IS A CONFLICT BETWEEN CODES AND OR THE CONTRACT DOCUMENTS, THE CONTRACTOR IS TO FOLLOW THE MORE STRINGENT OF THE REQUIREMENTS. ALL MATERIALS SHALL BE NEW AND ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, PRODUCT APPROVAL, RULES AND ORDINANCES. ANY DAMAGED EQUIPMENT SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION. ALL MECHANICAL EQUIPMENT SHALL BE ARI & U.L. LISTED WHERE APPLICABLE AND RATED FOR THE REQUIRED SERVICE, PRESSURES, TEMPERATURES AND SHALL BE PROVIDED WITH ALL NECESSARY TRANSFORMERS, SEALS, VALVES, CONNECTIONS, ETC. TO FUNCTION PROPERLY.

B. ELECTRICAL WORK: ALL CONDUIT, ROUGH IN ELECTRICAL BOXES AND WIRING, EXCLUDING LOW VOLTAGE CONTROL WIRING, SHALL BE INCLUDED UNDER THE ELECTRICAL SECTION OF THE CONTRACT DOCUMENTS, COORDINATE REQUIREMENTS AND ROUGH IN LOCATIONS FOR ALL EQUIPMENT. CONTROL WIRING SHALL BE PROVIDED AND INSTALLED UNDER THE MECHANICAL SECTION OF THE CONTRACT DOCUMENTS.

C. SUBMITTAL DATA: PRIOR TO ORDERING EQUIPMENT THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A MINIMUM OF THREE (3) COPIES OF THE EQUIPMENT BROCHURES, TECHNICAL DATA AND/OR SHOP DRAWINGS. AS AN ALTERNATIVE, AN ELECTRONIC SUBMITTAL IS ACCEPTABLE. CONTRACTOR IS INSTRUCTED CONSOLIDATE INFORMATION WHEN SUBMITTING ELECTRONICALLY AND AVOID MULTIPLE COMMUNICATIONS.

D. NOISE AND VIBRATION: EQUIPMENT SHALL OPERATE QUIETLY. THE OPERATION OF THE EQUIPMENT SHALL CAUSE NO PERCEPTIVE VIBRATION OR OBJECTIONABLE NOISE IN ANY PORTION OF THE BUILDING OR STRUCTURE.

E. MAINTENANCE MANUALS AND INSTRUCTIONS: FURNISH (3) THREE SETS OF OPERATING INSTRUCTIONS COVERING HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM AND EQUIPMENT,WARRANTIES, CONTROL SEQUENCE AND DIAGRAMS, BOUND AND COVERED AND DELIVERED TO THE ARCHITECT. INCLUDE A COMPLETE DESCRIPTION OF THE OPERATION OF THE CONTROL SYSTEM. THE CONTRACTOR SHALL INSTRUCT THE OWNER'S REPRESENTATIVE IN THE PROPER OPERATION OF ALL EQUIPMENT.

F. WARRANTIES:
1. FURNISH A FIVE (5) YEAR WARRANTY ON ALL COMPRESSORS AND REFRIGERATION CIRCUIT AND A ONE (1) YEAR WARRANTY ON ALL CONTROLS AND OTHER EQUIPMENT.
2. THE MC WILL WARRANTY ALL MECHANICAL SYSTEMS, DUCTWORK, THERMOSTATS, AND ALL OTHER EQUIPMENT, PARTS, AND LABOR SHOWN ON THE MECHANICAL DRAWINGS AND IN THE SPECIFICATIONS FOR A PERIOD OF ONE (1) YEAR AFTER ISSUANCE OF THE CERTIFICATE OF OCCUPANCY. SEE HVAC GENERAL NOTE 17.
3. ANY REPAIRS REQUIRING SYSTEM SHUT DOWN WILL BE DONE DURING NON-OPERATIONAL PERIODS.
4. THE MC SHALL COORDINATE WITH ALL OTHER TRADES PRIOR TO BIDDING AND PURCHASING ANY EQUIPMENT.
5. AN INDEPENDENT CONTRACTOR SHALL TEST AND BALANCE ALL MECHANICAL EQUIPMENT AIR DEVICES, EXTRACTORS, DAMPERS, AHU'S AND FANS, ETC. TO PROVIDE THE DESIGN QUANTITIES (+/- 5%) AS SHOWN ON THE PLANS OR SCHEDULES. PROVIDE T & B REPORT IN ACCORDANCE WITH THE AIR BALANCE COUNCIL (ABC) STANDARDS, SIGNED AND SEALED BY A REGISTERED ENGINEER. PROVIDE FINAL BALANCING FOR ALL SYSTEMS TO SATISFACTION OF OWNER AND ENGINEER. T & B CONTRACTOR SHALL VISIT THE JOB SITE DURING CONSTRUCTION TO ENSURE THAT ALL DUCTS, DAMPERS, AND OTHER AIR CONTROL DEVICES ARE INSTALLED FOR PROPER AND QUIET AIR DELIVERY.
6. EQUIPMENT ANCHORAGE: PROVIDE ALL MATERIALS AND LABOR REQUIRED FOR EQUIPMENT ANCHORAGE TO BUILDING STRUCTURE.

H. PERMITS, ORDINANCES, AND INSPECTIONS:
1. OBTAIN AND PAY FOR ALL PERMITS AND INSPECTION FEES REQUIRED. DELIVER TO THE ARCHITECT, ALL CERTIFICATES AND INSPECTION REPORTS.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE, OR NATIONAL ORDINANCES AND CODES. EFFORT HAS BEEN MADE TO MEET OR EXCEED REQUIREMENTS. THE CONTRACTOR SHALL MAKE ANY MINOR ADJUSTMENTS TO MEET THESE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER.

II. PRODUCTS

A. DUCTWORK

1. GENERAL
   a. SEE HVAC GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
   b. DIMENSIONS INDICATED ON THE DRAWINGS ARE INSIDE AREAS. WHERE DUCTS ARE TO BE INTERNALLY INSULATED OR LINED INCREASE SHEET METAL OVERALL DIMENSIONS TO ACCOMMODATE INSULATION THICKNESS.
   c. PROVIDE FLEXIBLE WOVEN DUCT CONNECTIONS IN DUCTS AS INDICATED. SECURE CONNECTIONS WITH GALVANIZED CHANNELS.

2. FLEXIBLE DUCTWORK. THE CONTRACTOR MAY INSTALL SUPPLY DIFFUSERS WITH A MAXIMUM OF A 5 FOOT RUN OF INSULATED FLEXIBLE DUCTWORK EQUAL TO FLEXMASTER TYPE 1M, MINIMUM R=8. ALL FLEXIBLE DUCTWORK SHALL BE INSTALLED AND ENDS TERMINATED IN COMPLIANCE WITH THE METHODS SHOWN IN THE ADC INSTALLATION MANUAL AND USE METAL STRAPS NOT LESS THAN 1-1/2" WIDE AT A MAXIMUM OF 5 FEET ON CENTER. DUCTS SHALL NOT DEFLECT MORE THAN 1/2" IN 5 FEET NOR HAVE ANY KINKS OR RESTRICTIONS TO FLOW. ELBOWS SHALL HAVE A MINIMUM RADIUS OF ONE DUCT DIAMETER WITH INTERIOR LINER FULLY EXTENDED. FLEXIBLE DUCTWORK SHALL NOT BE USED IN RETURN NOR EXHAUST SYSTEMS.

3. LOW PRESSURE DUCTWORK
   a. CONCEALED SYSTEMS. (DEFINED AS ANY DUCTWORK NOT VISIBLE TO OCCUPANTS OF A SPACE) PROVIDE MINIMUM 26 GAUGE RECTANGULAR AND/OR ROUND GALVANIZED STEEL SHEET METAL DUCTWORK CONSTRUCTED AND INSTALLED IN THE VENTILATION SYSTEMS IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS. SEE HVAC GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
   b. EXPOSED SYSTEMS. (DEFINED AS ANY DUCTWORK VISIBLE TO OCCUPANTS OF A SPACE) FOR ALL DUCTWORK SYSTEMS PROVIDE GALVANEALED STEEL (ASTM A875) SPIRAL ROUND AND/OR SPIRAL FLAT OVAL CONSTRUCTED SHEET METAL DUCTWORK AND FITTINGS (SIZED AS INDICATED ON PLANS) AS MANUFACTURED BY EASTERN SHEET METAL OR APPROVED EQUAL. ALL DUCTWORK IS TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
      i. PROVIDE 2" WG LEAKAGE CLASS FOR ALL SYSTEMS
      ii. FOR SUPPLY AND OUTSIDE AIR INTAKE DUCTWORK PROVIDE DUAL WALL CONSTRUCTION WITH 2" FIBERGLASS INSULATION (MIN. K=0.27). INNER WALL SHALL BE SOLID, PERFORATED INNER WALLS ARE NOT ACCEPTABLE.
      iii. FOR RETURN AND EXHAUST DUCTWORK PROVIDE SINGLE WALL CONSTRUCTION.
      iv. ALL DUCTWORK IS TO BE CLEANED OF GREASE, OIL, AND DIRT THEN PRIMED PRIOR TO APPLICATION OF A TOP COAT. CLEANING AND PRIMING ARE TO BE PERFORMED BY PAINTING CONTRACTOR PER THE PAINT MANUFACTURER'S RECOMMENDATION. PAINT COLOR SELECTION IS TO BE APPROVED BY THE ARCHITECT.

4. MEDIUM PRESSURE DUCTWORK. (DEFINED AS SUPPLY DUCTWORK DOWNSTREAM OF AIR HANDLER AND UPSTREAM OF VAV BOX) PROVIDE GALVANEALED STEEL (ASTM A875) SPIRAL ROUND AND/OR SPIRAL FLAT OVAL CONSTRUCTED SHEET METAL DUCTWORK AND FITTINGS (SIZED AS INDICATED ON PLANS) AS MANUFACTURED BY EASTERN SHEET METAL OR APPROVED EQUAL. ALL DUCTWORK IS TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
   a. CONCEALED SYSTEMS. (DEFINED AS ANY DUCTWORK NOT VISIBLE TO OCCUPANTS OF A SPACE) FOR ALL DUCTWORK SYSTEMS PROVIDE GALVANIZED (ASTM A653) OR GALVANEALED (ASTM A875) STEEL SPIRAL ROUND AND/OR SPIRAL FLAT OVAL CONSTRUCTED SHEET METAL DUCTWORK AND FITTINGS (SIZED AS INDICATED ON PLANS) AS MANUFACTURED BY EASTERN SHEET METAL OR APPROVED EQUAL. ALL DUCTWORK IS TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
      i. PROVIDE 4" WG LEAKAGE CLASS FOR ALL SYSTEMS
      ii. PROVIDE DUAL WALL CONSTRUCTION WITH 2" FIBERGLASS INSULATION (MIN. K=0.27). INNER WALL SHALL BE SOLID, PERFORATED INNER WALLS ARE NOT ACCEPTABLE.
      iii. CONNECTIONS BETWEEN ALL DUCT SECTIONS AND FITTINGS TO BE GASKET SEALED.
   b. EXPOSED SYSTEMS. (DEFINED AS ANY DUCTWORK VISIBLE TO OCCUPANTS OF A SPACE) FOR ALL DUCTWORK SYSTEMS PROVIDE GALVANEALED STEEL (ASTM A875) SPIRAL ROUND AND/OR SPIRAL FLAT OVAL CONSTRUCTED SHEET METAL DUCTWORK AND FITTINGS (SIZED AS INDICATED ON PLANS) AS MANUFACTURED BY EASTERN SHEET METAL OR APPROVED EQUAL. ALL DUCTWORK IS TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
      i. PROVIDE 4" WG LEAKAGE CLASS FOR ALL SYSTEMS
      ii. PROVIDE DUAL WALL CONSTRUCTION WITH 2" FIBERGLASS INSULATION (MIN. K=0.27). INNER WALL SHALL BE SOLID, PERFORATED INNER WALLS ARE NOT ACCEPTABLE.
      iii. ALL DUCTWORK IS TO BE CLEANED OF GREASE, OIL, AND DIRT THEN PRIMED PRIOR TO APPLICATION OF A TOP COAT. CLEANING AND PRIMING ARE TO BE PERFORMED BY PAINTING CONTRACTOR PER THE PAINT MANUFACTURER'S RECOMMENDATION. PAINT COLOR SELECTION IS TO BE APPROVED BY THE ARCHITECT.
      iv. CONNECTIONS BETWEEN ALL DUCT SECTIONS AND FITTINGS TO BE GASKET SEALED.

B. DAMPERS:
1. PROVIDE APPROVED MANUAL BALANCE DAMPERS WHERE SHOWN ON THE PLANS FOR THE PROPER REGULATION OF THE AIR HANDLING SYSTEM AND SO LOCATE AS TO BE ACCESSIBLE.
2. INSTALL NFPA APPROVED, FUSIBLE LINK OPERATED TYPE "B" FIRE DAMPERS OF SUITABLE RATING IN ALL DUCTWORK PENETRATIONS OF RATED WALLS AND FLOORS IN LOCATIONS REQUIRED BY LOCAL AND STATE ORDINANCES. PROVIDE ACCESS IN BOTH CEILING CONSTRUCTION AND DUCTWORK FOR MAINTENANCE OF FIRE DAMPERS.

C. GRILLES, REGISTERS, AND DIFFUSERS:
1. FURNISH AND INSTALL WHERE INDICATED RETURN AND SUPPLY GRILLES, COMPLETE WITH BAKED ENAMEL FINISH AND OPPOSED BLADE DAMPERS.
2. ALL DUCTWORK AND DIFFUSERS SHALL BE RATED FOR THE USE, PRESSURE AND TEMPERATURE SPECIFIED AND AS REQUIRED BY THE CEILING OR WALL SYSTEM RATING. IF THE CEILING ASSEMBLY IS RATED PROVIDE RADIATION DAMPERS AT THE PENETRATION WHEN THE AREA OF ALL PENETRATIONS, INCLUDING DUCT AND DIFFUSERS, IN THE MEMBRANE EXCEED AN AGGREGATE AREA OF 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF CEILING AREA.
3. DUCT INSULATION: INSULATE ALL SUPPLY, RETURN AND OUTDOOR AIR DUCTWORK WITH A MINIMUM OF 2" THICK 3/4# DENSITY DUCTWRAP INSULATION. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50. ALL EXTERIOR DUCTWORK SHALL BE WEATHER-PROOFED WITH A COVERING OF "ALUMIGUARD" WRAP.

D. CONTROLS:
1. CONTROLS SHALL BE ELECTRIC/ELECTRONIC TYPE, PROVIDE ALL WIRING, ACTUATORS, AND CONTROL DEVICES.
2. FURNISH ALL THERMOSTATS AND SENSORS WITH INSULATED SUB-BASE.

HVAC GENERAL NOTES

1. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATE THE APPROXIMATE ROUTING OF PIPING AND DUCTWORK. THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS AND DELAYS MINOR OFFSETS AND ADJUSTMENTS SHALL BE PROVIDED WHERE REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
2. COORDINATE CEILING DIFFUSERS AND REGISTER LOCATIONS WITH THE ARCHITECTURAL REFLECTED CEILING. COORDINATE SIDE WALL GRILLES AND REGISTERS WITH STRUCTURAL AND ARCHITECTURAL ELEMENTS.
3. DUCT DIMENSIONS INDICATED ON THE DRAWINGS ARE NET AIR SIDE DIMENSIONS.
4. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS. SEAL ALL DUCTS, JOINTS, AND SEAMS IN DUCTWORK TO INSURE AGAINST LEAKAGE. MITERED ELBOWS SHALL BE PROVIDED WITH SINGLE THICKNESS TURNING VANES. SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK SHALL BE GALVANIZED STEEL WITH INSULATION AS NOTED. EXHAUST DUCTWORK SHALL BE GALVANIZED STEEL.
5. INSULATE SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK WITH A MINIMUM OF 2" THICK 3/4 PCF BLANKET INSULATION WITH FOIL VAPOR BARRIER. SEAL ALL JOINTS AND SEAMS IN THE VAPOR BARRIER.
6. THE CONTRACTOR MAY INSTALL DIFFUSERS WITH A MAXIMUM OF A 5 FOOT RUN OF INSULATED FLEXIBLE DUCTWORK EQUAL TO FLEXMASTER TYPE 8. ALL FLEXIBLE DUCTWORK SHALL BE INSTALLED AND ENDS TERMINATED IN COMPLIANCE WITH THE METHODS SHOWN IN THE ADC INSTALLATION MANUAL AND USE METAL STRAPS NOT LESS THAN 1-1/2" WIDE AT A MAXIMUM OF 5 FEET ON CENTER. DUCTS SHALL NOT DEFLECT MORE THAN 1/2" IN 5 FEET NOR HAVE ANY KINKS OR RESTRICTIONS TO FLOW. ELBOWS SHALL HAVE A MINIMUM RADIUS OF ONE DUCT DIAMETER WITH INTERIOR LINER FULLY EXTENDED.
7. RECTANGULAR SUPPLY AND RETURN BRANCH TAKE-OFFS SHALL BE 45° THROAT TAKE-OFFS WITH BALANCING DAMPERS IN THE BRANCH DOWN STREAM OF THE TAKE-OFF. ROUND SUPPLY AND RETURN TAKE-OFFS SHALL BE "BELLMOUTH" OR SPIN-IN FITTINGS WITH DAMPERS IN THE BRANCH DOWNSTREAM. PROVIDE BACKDRAFT DAMPERS ON ALL EXHAUST FANS AND/OR INLINE FANS.
8. ALL LOUVERS, ALL GRILLES, EXPOSED PIPING, EXPOSED EQUIPMENT, AND EXPOSED DUCTWORK SHALL BE PAINTED TO MATCH ADJACENT SURFACE COLOR AND TEXTURE OR AS DIRECTED BY THE ARCHITECT. VERIFY COLOR AND TEXTURE WITH THE ARCHITECT PRIOR TO PAINTING. PAINT ALL EXPOSED MECHANICAL EQUIPMENT WITH BENJAMIN MOORE EPOXY ENAMEL 182 OR AS DIRECTED BY THE ARCHITECT.
9. THERMOSTATS AND SENSORS SHALL BE LOCATED 48" AFF UNLESS OTHERWISE NOTED. ALL CONDUIT, ROUGH IN ELECTRICAL BOXES AND WIRING, EXCLUDING LOW VOLTAGE CONTROL WIRING, SHALL BE INCLUDED UNDER THE ELECTRICAL SECTION OF THE CONTRACT DOCUMENTS, COORDINATE REQUIREMENTS AND ROUGH IN LOCATIONS FOR ALL CONTROL DEVICES, ELECTRICAL CONNECTIONS TO EQUIPMENT, AND SWITCH LOCATION. CONTROL WIRING SHALL BE PROVIDED AND INSTALLED UNDER THE MECHANICAL SECTION OF THE CONTRACT DOCUMENTS.
10. PROVIDE A 12/12 (MINIMUM) ACCESS DOOR FOR ACCESS TO ALL DAMPERS, CONTROL DAMPERS, EXTRACTORS, PLENUMS, OR ANY OTHER DEVICE MOUNTED IN THE DUCT SYSTEM.
11. INSTALL ALL EQUIPMENT ACCORDING TO THE MANUFACTURERS' INSTRUCTIONS.
12. REFRIGERANT PIPING SHALL BE PRECHARGED TUBING PACKAGES OR TYPE ACR COPPER TUBING IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
13. PROVIDE A MINIMUM OF 10' CLEARANCE BETWEEN FRESH AIR INTAKES AND EXHAUST OUTLETS, RELIEF OUTLETS, PLUMBING VENTS, ETC.
14. PROVIDE CONDENSATE DRAINS WITH A VENTED P-TRAP FOR ALL COOLING COILS. P-TRAPS TO BE PVC ON INTERIOR INSTALLED EQUIPMENT AND TYPE M COPPER ON EXTERIOR INSTALLED EQUIPMENT.
15. THE OUTSIDE AIR QUANTITIES ARE CALCULATED ACCORDING TO TABLE 6-1 "MINIMUM VENTILATION RATES IN BREATHING ZONE" OF ASHRAE STANDARD 62.1. CHAPTER 6 "DESIGN FOR VARYING OPERATING CONDITIONS" HAS BEEN UTILIZED AS ALLOWED TO REDUCE AIRFLOW RATES FOR INTERMITTENT USE.
16. AFTER THE CONSTRUCTION OF THE BUILDING HAS REACHED A POINT WHERE THE PERMANENT HEATING AND COOLING SYSTEMS ARE OPERABLE, THE CONTRACTOR MAY, AT HIS OPTION, USE THE PERMANENT HEATING AND COOLING EQUIPMENT FOR TEMPORARY ENVIRONMENTAL CONTROL. THE CONTRACTOR MUST SUBMIT A REQUEST FOR USE TO THE ARCHITECT OUTLINING THE INTENDED USE. THE HEATING SYSTEM SHALL NOT BE USED FOR TEMPORARY HEAT UNTIL THE BUILDING IS BROOM CLEAN AND SHALL NOT BE USED WITHOUT ALL FILTERS IN PLACE. FILTERS MUST BE CHECKED WEEKLY AND REPLACED AS REQUIRED TO PROTECT THE EQUIPMENT AND DUCT SYSTEMS. UPON THE COMPLETION OF THE WORK, AND PRIOR TO SUBSTANTIAL COMPLETION. ALL DUCTWORK AND EQUIPMENT SHALL BE INTERNALLY CLEANED AND ALL FILTERS SHALL BE REPLACED WITH NEW FILTERS.
17. ALL WARRANTIES SHALL BEGIN UPON FINAL ACCEPTANCE BY THE OWNER, NOT BENEFICIAL USE BY THE CONTRACTOR.
18. ALL OF THE COSTS ASSOCIATED WITH PROVIDING TEMPORARY HEATING AND COOLING SHALL BE BORNE SOLELY BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED POWER CONSUMPTION, ADDITIONAL ACCESS DOORS FOR CLEANING, FILTERS, DUCT AND EQUIPMENT CLEANING, ENGINEER'S TIME, TEST AND BALANCE AGENT TIME TO SUPPORT THE ENGINEER'S INSPECTION, ETC.
19. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL EQUIPMENT WITH THE ELECTRICAL SERVICE AND THE EC. THE SCOPE OF THIS COORDINATION INCLUDES BUT IS NOT LIMITED TO, REQUIRED VOLTAGE, PHASE, AMP CAPACITY, WIRE SIZE, CONDUIT SIZE AND LOCATION, DISCONNECT SIZE AND LOCATION, FUSE SIZE, ETC. IN THE EVENT OF A CONFLICT, THE MC IS TO NOTIFY THE ENGINEER PRIOR TO MECHANICAL AND ELECTRICAL EQUIPMENT BEING ORDERED.
20. ALL CUTTING, PATCHING, STRUCTURAL STEEL, WEATHER PROOFING, PAINTING, AND WALL OPENINGS REQUIRED FOR THE INSTALLATION OF MECHANICAL WORK SHALL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE OWNER. COORDINATE WITH OTHER TRADES.
21. PROVIDE VIBRATION ISOLATORS ON ALL MECHANICAL EQUIPMENT. IF NOT SPECIFICALLY CALLED OUT, PROVIDE AS RECOMMENDED BY MANUFACTURER FOR QUIET OPERATION.
22. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT.
23. DUCT SEALING: PRESSURE SENSITIVE TAPE USED AS THE PRIMARY SEALANT IS TO BE CERTIFIED AND SHALL COMPLY WITH UL-181A OR UL-181B. PROVIDE LONGITUDINAL SEAMS ON RIGID DUCT AND TRANSVERSE SEAMS ON ALL DUCTS. MECHANICAL FASTENERS AND SEALANTS SHALL BE USED TO CONNECT DUCTS AND AIR DISTRIBUTION DEVICES.
24. SUBMITTALS AND ACCEPTANCE: THE CONTRACTOR SHALL SUBMIT A MINIMUM OF THREE (3) SETS OF HVAC SHOP DRAWINGS TO THE PROJECT MANAGER WHO SHALL THEN RELAY THEM TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OF EQUIPMENT. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUBMIT OPERATION AND MAINTENANCE MANUALS FOR ALL MECHANICAL EQUIPMENT INCLUDED IN THE PROJECT. THE MANUALS SHALL BE COMPILED INTO A THREE RING BINDER AND TURNED OVER TO BUILDING OWNER.

HVAC SYMBOLS AND ABBREVIATIONS

Symbol	Description
12"Ø	ROUND DUCTWORK. DIAMETER INDICATED IN INCHES
20x12	RECTANGULAR SUPPLY AND RETURN DUCTWORK. SIZE INDICATED IN INCHES, FIRST NUMBER IS SIDE SHOWN
	FLEXIBLE DUCT
	SUPPLY OR OUTSIDE AIR DUCT UP
	SUPPLY OR OUTSIDE AIR DUCT DOWN
	RETURN AIR DUCT UP
	RETURN AIR DUCT DOWN
20X12	EXISTING DUCTWORK TO REMAIN
X 20X12 X	EXISTING DUCTWORK TO BE REMOVED
	90 DEGREE DUCTWORK ELBOW.
	RADIUS DUCTWORK ELBOW - ROUND OR RECTANGULAR
	FLARED SPIN-IN WITH DAMPER AND FLEX DUCT (DIFFUSER CONNECTION)
	ROUND AND RECTANGULAR DUCT BRANCH TAKE-OFF FROM RECTANGULAR MAIN WITH CONICAL TAP
	DUCTWORK SIZE TRANSITION
	DUCTWORK SQUARE TO ROUND TRANSITION
	POINT OF CONNECTION TO EXISTING
(T) EQUIP-#	THERMOSTAT
(S) EQUIP-#	SENSOR
($) EQUIP-#	SWITCH
(M)	MOTOR OPERATED DAMPER
(SD)	SMOKE DETECTOR - FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR
◆	FIRE DAMPER
●	SECURITY BAR
(C)	PROVIDE AND INSTALL A U.L. LISTED FIRE RATED CEILING DAMPER IN ACCORDANCE WITH FIRE RATING. DAMPER SHALL BE RUSKIN CFD TYPE OR APPROVED SUBSTITUTE
CD-1 TYPE / 100 AIRFLOW (CFM)	DIFFUSER/GRILLE LABEL
	VOLUME CONTROL DAMPER
CWS	CHILLED WATER SUPPLY PIPE
CWR	CHILLED WATER RETURN PIPE
HWS	HOT WATER SUPPLY PIPE
HWR	HOT WATER RETURN PIPE
E(NAME)	EXISTING PIPING TO REMAIN
X E) (NAME X	EXISTING TO BE REMOVED
RHG	REFRIG. HOT GAS LINE
RL	REFRIG. LIQUID LINE
RS	REFRIG SUCTION LINE
	STRAINER
	GAS COCK
	BALANCING VALVE
	PLUG VALVE
	GATE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	CHECK VALVE
	TRIPLE DUTY VALVE
	PRESSURE RELIEF VALVE
	PIPE TURNING DOWN
	PIPE TURNING UP
TW	THERMOMETER
	GAUGE
	PIPE SLEEVE OR GUIDE
X	PIPE ANCHOR
GC	GAUGE COCK

Abbreviation	Meaning
AC	AIR CONDITIONER (ING)
ACCU	AIR COOLED CONDENSING UNIT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
BALV	BALANCING VALVE
BF	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNIT
BTUH	BTU/HOUR
BV	BALL VALVE
CAD	COMPUTER AIDED DRAFTING
CCC	CLOSED CIRCUIT COOLER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
COP	COEFFICIENT OF PERFORMANCE
CP	CONTROL PANEL
CR	CEILING RETURN OR CONDENSATE RETURN
CS	CIRCUIT SETTER
CT	COOLING TOWER
CU	CONDENSING UNIT
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
DB	DRY BULB (TEMPERATURE)
DG	DOOR GRILLE
DMS	DUCTLESS MINI-SPLIT SYSTEM
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EER	ENERGY EFFICIENCY RATING
EF	EXHAUST FAN
ELEV	ELEVATION
ERV	ENERGY RECOVERY VENTILATOR
EVAP	EVAPORATION OR EVAPORATIVE
EWT	ENTERING WATER TEMPERATURE
FC	FAN COIL
FD	FLOOR DRAIN
FP	FIRE PROTECTION
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FS	FLOOR SINK
FZ	FREEZE
GC	GENERAL CONTRACTOR
GV	GATE VALVE
HD	HUB DRAIN
HEPA	HIGH EFFICIENCY PARTICULATE ARRESTANCE
HP	HEAT PUMP OR HORSEPOWER
HVAC	HEATING, VENTILATING, AND AC
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
MBH	1,000 BTU/HOUR
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LEED	LEADERSHIP IN ENERGY EFFICIENT DESIGN
LWT	LEAVING WATER TEMPERATURE
M	MOTOR
MAT	MIXED AIR TEMPERATURE
MAU	MAKE UP AIR UNIT
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPERES
MOCP	MAXIMUM OVER CURRENT PROTECTION (AMPERES)
MOD	MOTOR OPERATED DAMPER
MVD	MANUAL VOLUME DAMPER
OA	OUTSIDE AIR
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
PA	PRESSURIZATION AIR
PC	PLUMBING CONTRACTOR OR PERSONAL COMPUTER
PL	PRIMARY LOOP
PTAC	PACKAGED TERMINAL AC
PT	PRESSURE TRANSMITTER
PU	PACKAGED UNIT
PWR	PROCESS WATER RETURN
PWS	PROCESS WATER SUPPLY
RA	RETURN OR RELIEF AIR
RF	RETURN OR RELIEF FAN
RH	REHEAT OR RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SEER	SEASONAL ENERGY EFFICIENCY RATTING
SF	SUPPLY FAN
SL	SECONDARY LOOP
SS	STAINLESS STEEL
ST	STEAM
SWS	SIDE WALL SUPPLY (GRILLE)
SWR	SIDE WALL RETURN (GRILLE)
TDV	TRIPLE DUTY VALVE
TG	TRANSFER GRILLE
TOD	TOP OF DUCT
TT	TEMPERATURE TRANSMITTER
UV	ULTRAVIOLET LIGHT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VVT	VARIABLE (VOLUME) VARIABLE (TEMPERATURE)
WB	WET BULB (TEMPERATURE)
WSHP	WATER SOURCE HEAT PUMP
XWS	CONDENSER WATER SUPPLY
XWR	CONDENSER WATER RETURN
#	POUNDS

AIR DISTRIBUTION EQUIPMENT SCHEDULE

DESIGNATION		SERVICE	DESCRIPTION	MATERIAL/FINISH	MANUFACTURER MODEL NUMBER	SIZING CFM	NECK
⊠	CD1	SQUARE, 3-CONE, CEILING SUPPLY DIFFUSER	24"x24" FACE T-BAR LAY-IN ADJUSTABLE PATTERN W/ O.B.D.	ALUMINUM WHITE ENAMEL	PRICE ASCDA	0-110 111-240 241-420 421-615 616-840	6"Ø 8"Ø 10"Ø 12"Ø 14"Ø
	SWS-1	SIDEWALL SUPPLY GRILLE	DOUBLE DEFLECTION	ALUMINUM WHITE ENAMEL	PRICE 620D	0-200 200-300 >300	8"x4" 10"x4" 10"x8"
⧄	CR1	EGGCRATE FACE CEILING RETURN GRILLE	1/2"x1/2"x1/2" CORE, PANEL MTD, T-BAR LAY-IN, BORDER TYPE 3, WITH ALUMINUM O.B.D.	ALUMINUM CORE ALUMINUM FRAME WHITE ENAMEL	PRICE 80DAL-F	0-415 416-815 816-1300 1301-1680	10x10 14x14 18x18 22x22
⧄	CR2		1/2"x1/2"x1/2" CORE, PANEL MTD, SURFACE MOUNT, BORDER TPE 1, WITH ALUMINUM O.B.D.	ALUMINUM CORE ALUMNIUM FRAME WHITE ENAMEL			
	SWR-1	SIDEWALL RETURN GRILLE	O DEG. FIXED HORZONTAL FACE BARS	ALUMINUM WHITE ENAMEL	PRICE 510ZD	0-200 200-300 >300	8"x4" 10"x4" 10"x8"
⊠	CE-1	EGGCRATE FACE CEILING EXHAUST GRILLE	1/2"x1/2"x1/2" CORE, PANEL MTD,SURFACE MOUNT, BODER TYPE 1 WITH ALUMINUM O.B.D.	ALUMINUM CORE ALUMNIUM FRAME WHITE ENAMEL	PRICE 80DAL-F	0-415 416-815 816-1300 1301-1680	10x10 14x14 18x18 22x22

NOTES AND ACCESSORIES:
- SIZING COLUMN GOVERNS DEVICE NECK SIZE ONLY. RUN-OUT DUCT SIZES MAY VARY (SEE FLOOR PLAN DRAWINGS.) PROVIDE DUCT TRANSITIONS INCLUDING SQUARE TO ROUND AS REQUIRED.
- ALTERNATE MANUFACTURERS: KRUEGER, METALAIRE, PRICE
- MECHANICAL CONTRACTOR SHALL PROVIDE DIFFUSERS WITH APPROPRIATE AIR PATTERN AS SHOWN ON PLANS.
- PRIOR TO ORDERING DEVICES MECHANICAL CONTRACTOR SHALL PROVIDE TO ARCHITECT A COLOR/FINISH SELECTION CHART FOR EACH DEVICE SCHEDULED. SELECTIONS MAY DIFFER ON A SPACE BY SPACE BASIS PER ARCHITECTS' OPTION. IF COLOR/FINISH IS NOT COORDINATED WITH ARCHITECT PRIOR TO ORDERING MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND PAINTING TO MATCH INTERIOR.
- ORDER DIFFUSERS WITH VOLUME DAMPER.
- FOR SIDEWALL DIFFUSERS ADJUST VERTICAL BLADES FOR A 45 DEGREE HORIZONTAL SPREAD.
- FOR SIDEWALL DIFFUSER, GRILLES, AND REGISTERS SIZES ARE SHOWN ON FLOOR PLAN DRAWINGS.
- VERIFY EXACT FRAME TYPE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

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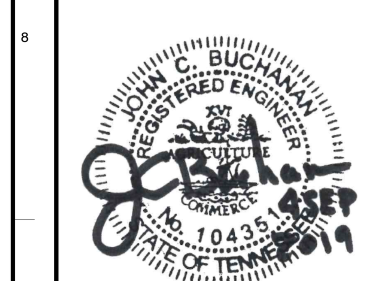

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE
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- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB

SHEET TITLE:

HVAC LEGENDS, SPECIFICATIONS, AND NOTES

SHEET NO.:

M001

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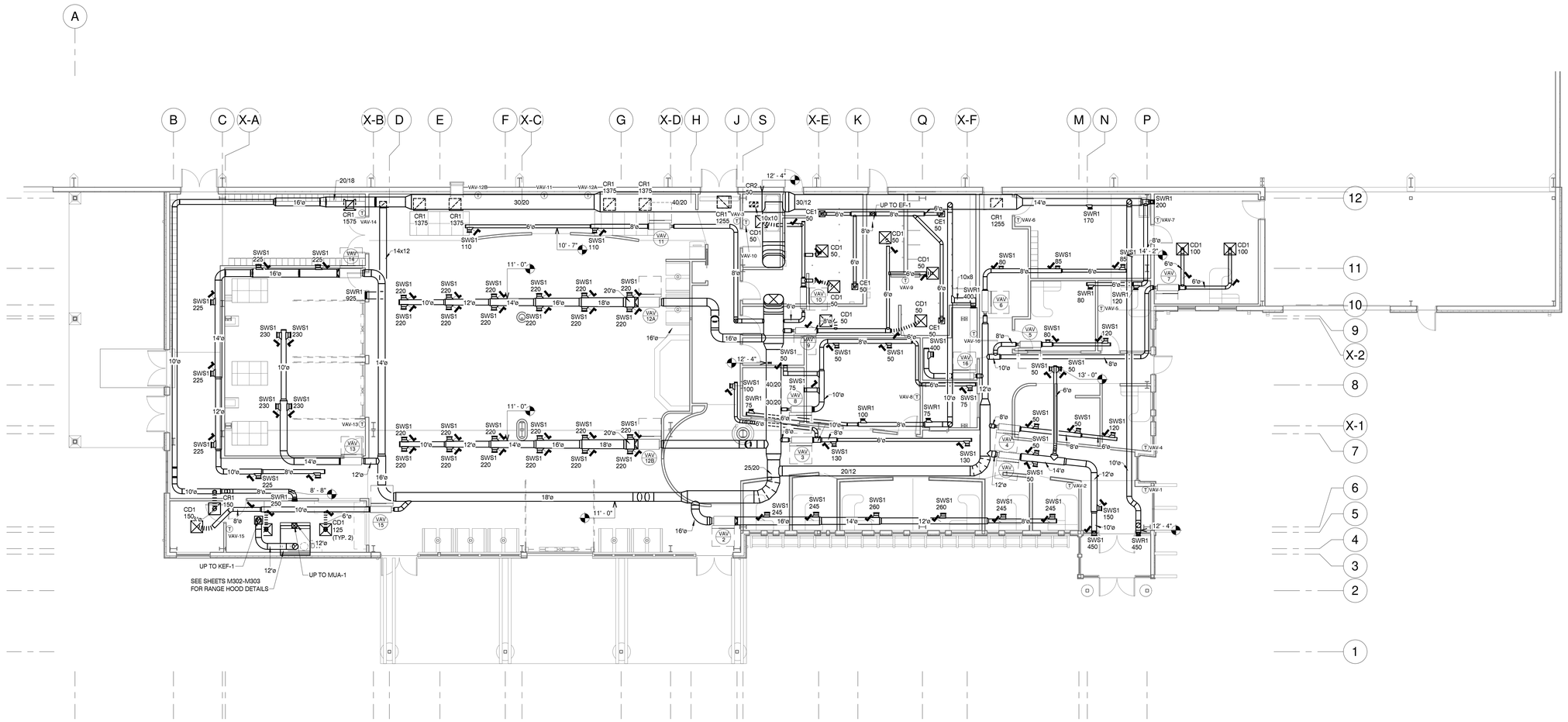
ARCH E1

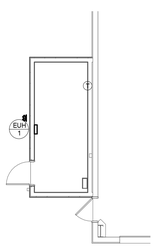
GENERAL NOTES

1. COORDINATE EXACT CEILING GRILLE LOCATION WITH REFLECTED CEILING PLAN AND LIGHTING PLAN.
2. UNLESS SPECIFICALLY NOTED OTHERWISE, ROUTE ALL DUCTWORK IN CEILING SPACE.



FIRST FLOOR PLAN - HVAC 1

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



FIRE RISER FLOOR PLAN - HVAC 2

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

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9 SEP 2019

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NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB

SHEET TITLE:

FLOOR PLAN - HVAC

SHEET NO.:

M101

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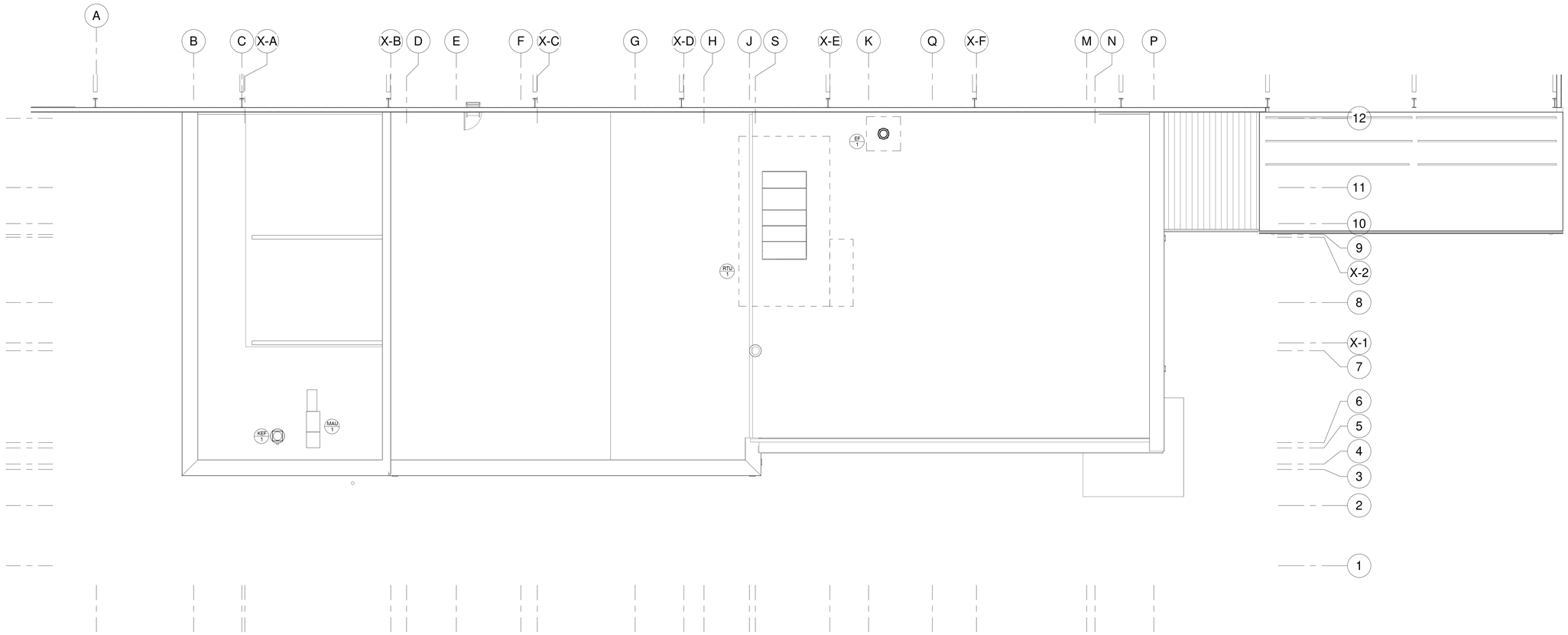

ROOF PLAN - HVAC

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

1

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NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

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DRAWN BY:	ALJ
REVIEWED BY:	JCB
SHEET TITLE:	

ROOF PLAN - HVAC

SHEET NO.:

M102

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ARCH E1

PACKAGED HEAT PUMP UNIT SCHEDULE

DRAWING SYMBOL	SUPPLY AIR TOTAL CFM	SUPPLY AIR EXT. SP (IN. WG)	SUPPLY AIR FAN HP	OUTSIDE AIR CFM	COOLING TEMPS (°F) @ 95°F AMBIENT UNIT ENT AIR	COOLING TEMPS (°F) @ 95°F AMBIENT COIL LVG AIR	COOLING CAPACITIES (MBH) TOTAL	COOLING CAPACITIES (MBH) SENSIBLE	HEATING CAPACITIES (MBH) @17°F	HEATING CAPACITIES (MBH) @47°F	AUXILARY ELEC. HEAT (KW)	SMOKE DETECTORS SUPPLY	SMOKE DETECTORS RETURN	EFFICIENCIES EER	EFFICIENCIES SEER	SINGLE POINT ELECTRICAL MCA	SINGLE POINT ELECTRICAL MOCP	SINGLE POINT ELECTRICAL VOLTAGE	WEIGHT (LBS.)	MANUFACTURER MODEL NUMBER
RTU 1	1,200	1.5	10	?	78.7 DB / 67.0 WB	60.4 DB / 58.2 WB	365.1	269.1	138.5	161.7	54	YES	YES	10.6	13.3	178.7	200.0	208/3	4,793	TRANE TED360

ACCESSORIES AND FEATURES:
- 5 YEAR COMPRESSOR WARRANTY & STANDARD THROW-AWAY FILTERS FURNISHED W/ UNIT.
- ACCESSORIES SHALL INCLUDE CONTROLS TO PREVENT SUPPLEMENTAL HEAT FROM COMING ON UNIT BALANCE POINT IS REACHED. SUBMIT BALANCE POINT CALCULATIONS AND GRAPHS WITH EQUIPMENT SUBMITTAL.
- FEATURES SHALL INCLUDE HIGH AND LOW PRESSURE CUTOUTS, ANTI-CYCLE TIMER, SUCTION LINE ACCUMULATOR, DEMAND INITIATION AND POSITIVE TERMINATION DEFROST CONTROL.
- ROOF CURB COMPATIBLE WITH ROOF SYSTEM INSTALLED.
- EQUIPMENT SHALL BE _____ OR EQUAL, APPROVED SUBSTITUTE.
- COOLING CAPACITIES ARE SCHEDULED AT 80/67 DEGREES INDOOR AND 95 DEGREES OUTDOOR TEMPERATURE.
- EQUIPMENT TO BE ARI CERTIFIED AND U.L. AND A.G.A. APPROVED.
- AUTOMATIC CHANGEOVER THERMOSTAT WITH EMERGENCY HEAT SUBBASE AND LOCKING PLASTIC THERMOSTAT COVER.
- PROVIDE DUCT SMOKE DETECTORS FOR SUPPLY AND RETURN DUCTWORK SYSTEMS ON ALL UNITS. INSTALL PER NFPA 90A & ALL LOCAL CODES.
- COOLING CAPACITIES DO NOT HAVE FAN MOTOR HEAT DEDUCTED.
- SUBMIT SHOP DRAWINGS SHOWING COOLING CAPACITIES WITH MOTOR HEAT AS NOTED.

EXHAUST FAN SCHEDULE

DRAWING SYMBOL	USE	CFM	S.P. IN. WG	RPM	HP	TYPE	ROOF OPENING	VOLTAGE	FLA	SONES	WEIGHT (LBS.)	MANUFACTURER MODEL NO.
EF 1	RESTROOM EXHAUST	300	0.5	1,683	0.07	ROOF MOUNTED DOWNBLAST	17"x17"	115/1ø	2.6	8.4	25	GREENHECK G-080-VG

ACCESSORIES AND FEATURES:
- ROUND LOW SILHOUETTE ALUMINUM HOUSING
- CENTRIFUGAL ALUMINUM WHEEL
- BIRDSCREEN & BACKDRAFT DAMPER
- SAFETY DISCONNECT @ FAN
- PREFAB CURB TO MATCH ROOF CONSTRUCTION AND SLOPE
- WALL SWITCH OR STARTER.

VAV BOX WITH ELECTRIC RE-HEAT SCHEDULE

DRAWING SYMBOL	COOLING CFM RANGE UPPER LIMIT	COOLING CFM RANGE LOWER LIMIT	NC LEVEL @ UPPER LIMIT CFM	MAX. S.P. THRU BOX (IN. WG)	INLET SIZE	RE-HEAT CFM	RE-HEAT MAX. MBH	RE-HEAT KW	RE-HEAT VOLTAGE	RE-HEAT MCA	RE-HEAT MOCP	MANUFACTURER MODEL NO.
VAV 1	800	280	30	0.75	8"	280	13.66	4.0	208/3	11.1	15.0	TRANE VCEF08
VAV 2	1,500	525	26	0.75	12"	525	22.20	6.5	208/3	18	20.0	TRANE VCEF12
VAV 3	365	128	21	0.75	6"	128	5.12	1.5	208/3	4.2	15.0	TRANE VCEF06
VAV 4	220	115	24	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 5	200	100	21	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 6	250	100	26	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 7	200	100	21	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 8	300	100	27	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 9	200	100	21	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 10	150	100	19	0.75	4"	85	3.41	1.0	208/3	2.8	15.0	TRANE VCEF04
VAV 11	220	111	24	0.75	5"	125	5.12	1.5	208/3	4.2	15.0	TRANE VCEF05
VAV 12A	2,220	1,552	29	0.75	14"	800	34.15	10.0	208/3	27.8	30.0	TRANE VCEF14
VAV 12B	2,220	1,552	29	0.75	14"	800	34.15	10.0	208/3	27.8	30.0	TRANE VCEF14
VAV 13	920	324	26	0.75	10"	324	13.66	4.0	208/3	11.1	15.0	TRANE VCEF10
VAV 14	1,575	550	26	0.75	12"	550	23.90	7.0	208/3	19.4	25.0	TRANE VCEF12
VAV 15	400	141	22	0.75	6"	166	6.83	2.0	208/3	5.6	15.0	TRANE VCEF06
VAV 16	400	200	20	0.75	6"	--	--	--	208/3	--	--	TRANE VCEF06

ACCESSORIES AND FEATURES:
- EACH BOX TO BE PROVIDED WITH FLOW SENSOR, DAMPER OPERATOR AND DIRECT CONTROL REGULATOR. EACH UNIT SHALL HAVE A MINIMUM CFM ADJUTMENT AS SHOWN ABOVE. EACH UNIT SHALL REQUIRE A DIRECT ACTING TEMPARATURE SENSOR. SEE CONTROL SEQUENCES OF OPERATION FOR MORE INFORMATION
- EACH BOX SHALL BE PRESSURE INDEPENDENT.
  UNIT TO BE FORMED OF 24 GUAGE (MIN.) GALVANIZED STEEL AND SHALL BE ACOUSTICALLY AND THERMALLY LINED WITH 1" FOIL FACED INSULATION. INSULATION SHALL BE UL LISTED AND MEET THE REQUIREMENTS OF NFPA 90A, UL 181, AND BACTERIOLOGICAL STANDARDS OF ASTM C 665.
- ALL TERMINALS TO BE RATED AT 1.5" INLET STATIC PRESSURE, MAX NCIS RADIATED AND DISCHARGE LEVELS WITHOUT ATTENUATION.
- DUCT RUN-OUT SIZES DO NOT EQUAL BOX INLET SIZES IN ALL CASES. A TRANSITION MAY BE REQUIRED. SEE PLANS.

ELECTRIC HEATER SCHEDULE

DRAWING SYMBOL	TYPE	MBH	KW	VOLTAGE	CONTROL	MANUFACTURER MODEL NO.
EUH 1	WALL RECESSED FAN FORCED	6.8	2.0	208 / 1Ø	INTEGRAL THERMOSTAT	MARKEL SERIES 3450

ACCESSORIES AND FEATURES:
- U.L. LISTING
- 24V TRANSFORMER WHERE REMOTE THERMOSTAT CALLED FOR
- WALL THERMOSTATS TO HAVE LOCKABLE METAL COVERS
- 16GA CONSTRUCTION FOR WALL HEATER FRONT PANELS
- FIRE RATED BACK ENCLOSURES WHERE WALL HEATERS ARE INSTALLED IN RATED WALLS
- BUILT-IN SAFETY DISCONNECT

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9-SEP-2019

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB
SHEET TITLE:	

HVAC SCHEDULES

SHEET NO.:

M201

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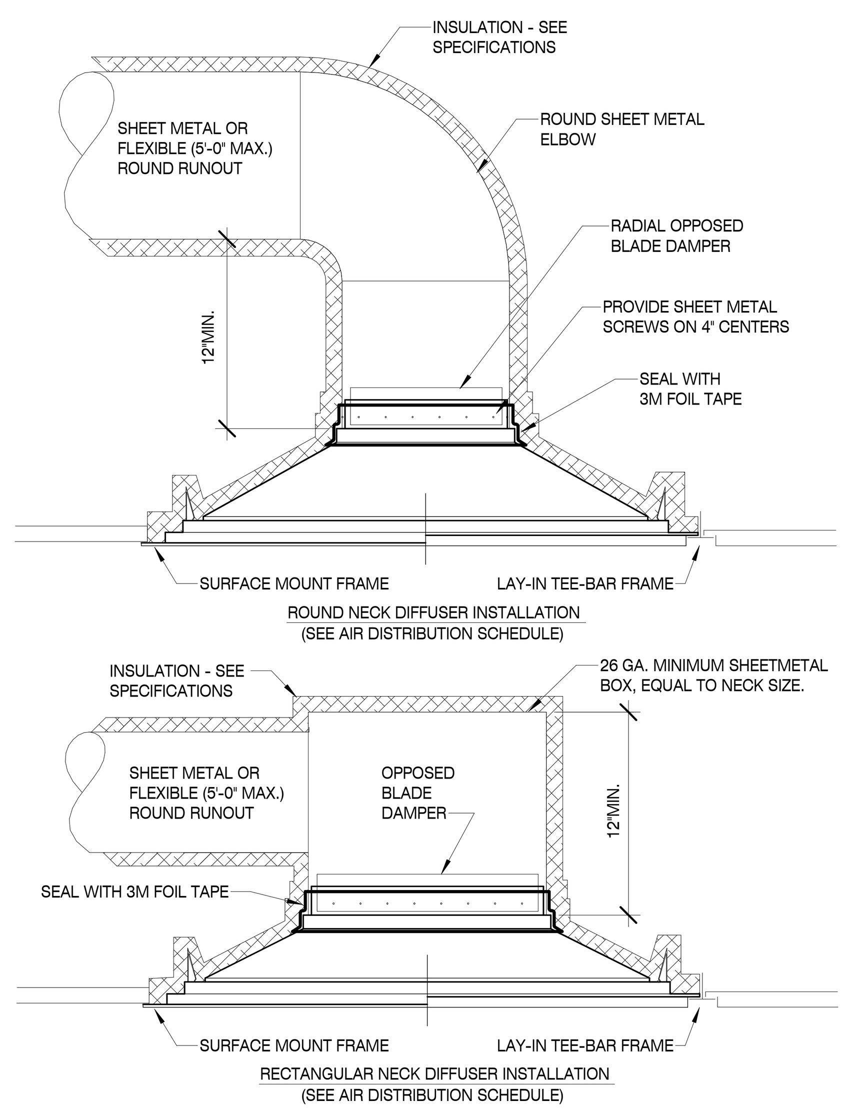
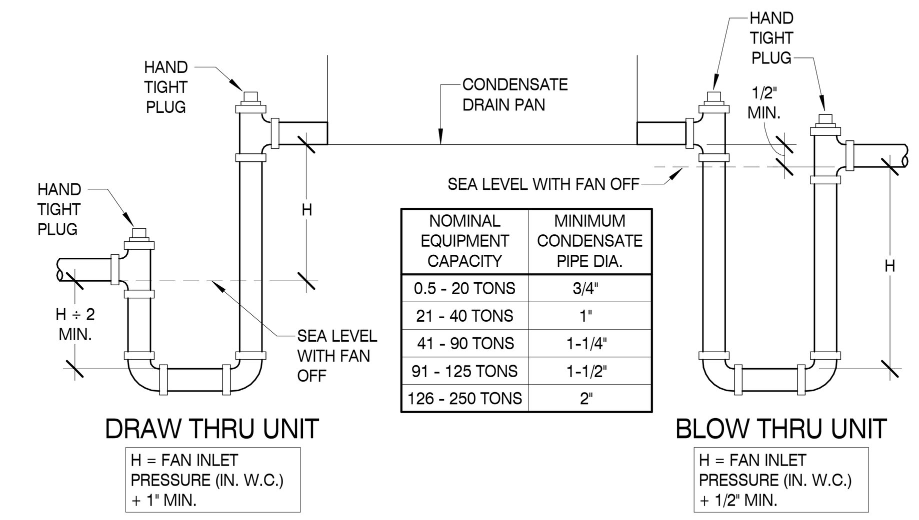
ARCH E1



NOTE:
WHERE SPACE LIMITATIONS DO NOT PERMIT THE ABOVE ROUND INSTALLATION, AN INSTALLATION SIMILAR TO THE SQUARE NECK MAY BE USED.

TYPICAL CEILING DIFFUSER DETAIL 9

SCALE: N.T.S.

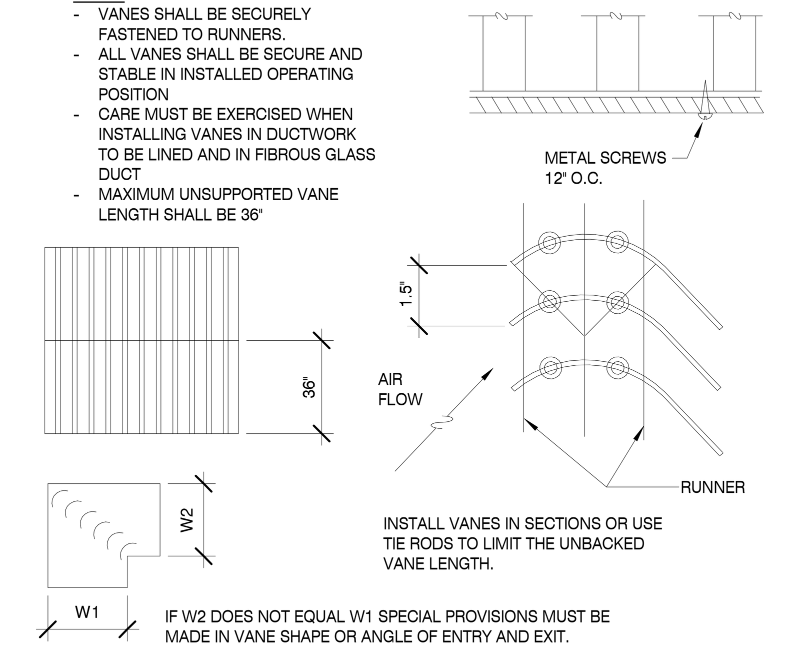


NOMINAL EQUIPMENT CAPACITY	MINIMUM CONDENSATE PIPE DIA.
0.5 - 20 TONS	3/4"
21 - 40 TONS	1"
41 - 90 TONS	1-1/4"
91 - 125 TONS	1-1/2"
126 - 250 TONS	2"

CONDENSATE TRAP DETAIL 5

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

NOTES:
- VANES SHALL BE SECURELY FASTENED TO RUNNERS.
- ALL VANES SHALL BE SECURE AND STABLE IN INSTALLED OPERATING POSITION
- CARE MUST BE EXERCISED WHEN INSTALLING VANES IN DUCTWORK TO BE LINED AND IN FIBROUS GLASS DUCT
- MAXIMUM UNSUPPORTED VANE LENGTH SHALL BE 36"

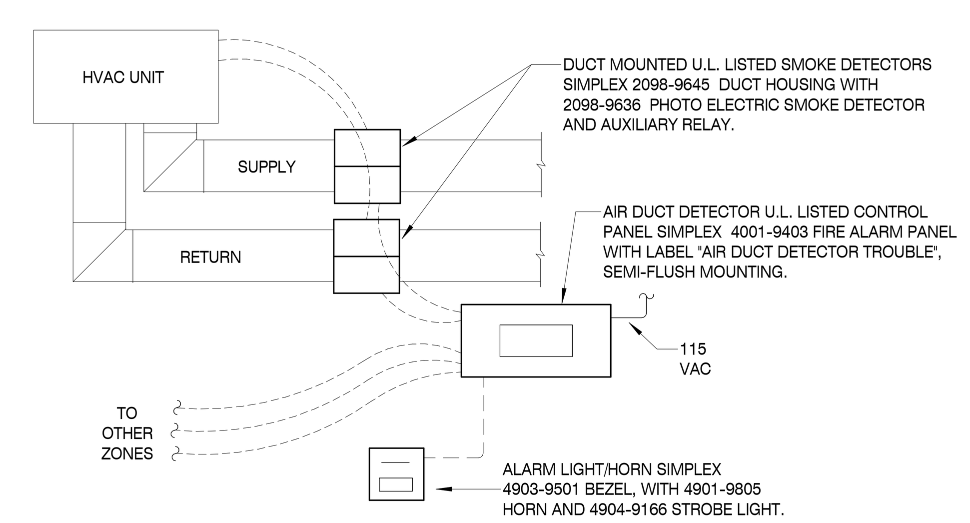


INSTALL VANES IN SECTIONS OR USE TIE RODS TO LIMIT THE UNBACKED VANE LENGTH.

IF W2 DOES NOT EQUAL W1 SPECIAL PROVISIONS MUST BE MADE IN VANE SHAPE OR ANGLE OF ENTRY AND EXIT.

TURNING VANES DETAIL 1

SCALE: N.T.S.



NOTES:
1. LOCATE FIRE ALARM CONTROL PANEL AND HORN / LIGHT AS INDICATED ON THE DRAWINGS.
2. INTERLOCK HVAC UNIT TO SHUT DOWN UPON AN ALARM CONDITION.
3. ALL HVAC UNITS SHALL SHUT DOWN UPON AN ALARM FROM ANY DEVICE.
4. ALL PANELS AND CONTROL WIRING TO EQUIPMENT SHALL BE BY THE MECHANICAL INSTALLER.
5. SMOKE DETECTORS AND WIRING TO BE SUPERVISED AND GIVE A TROUBLE ALARM AND LIGHT IF A PROBLEM IS DETECTED.

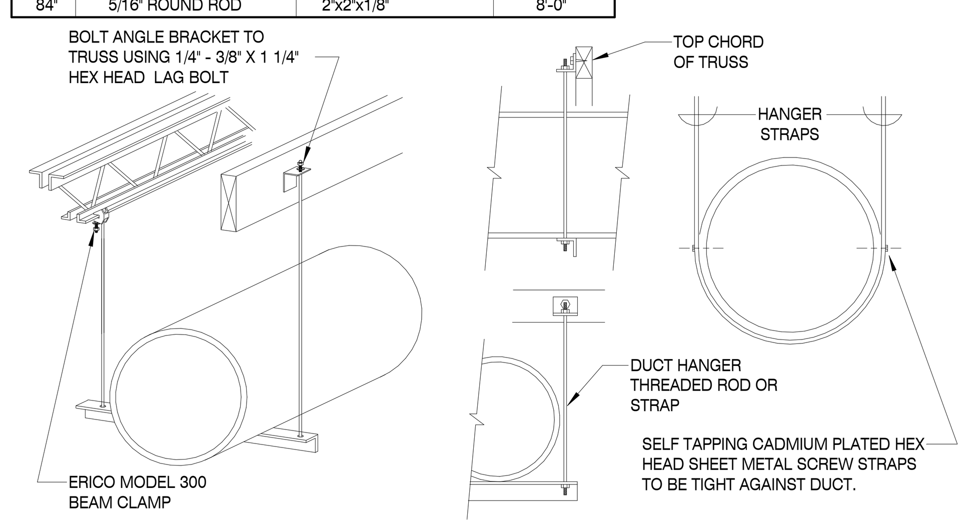
FIRE ALARM CONTROL DETAIL 11

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

HANGER SIZES FOR ROUND DUCT			
MAX SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING
30"	1"x 18-GAGE STRAP	1-1/2"x1/2"x1/8"	10'-0"
36"	1/4" ROUND ROD	1-1/2"x1/2"x1/8"	8'-0"
48"	1/4" ROUND ROD	2"x2"x1/8"	8'-0"
60"	5/16" ROUND ROD	2"x2"x1/8"	8'-0"
84"	5/16" ROUND ROD	2"x2"x1/8"	8'-0"

NOTE:
ALL SUPPLY AIR DUCTS SHALL BE WRAPPED EXTERNALLY AS PER SPECIFICATIONS.

NO POP RIVETS ALLOWED



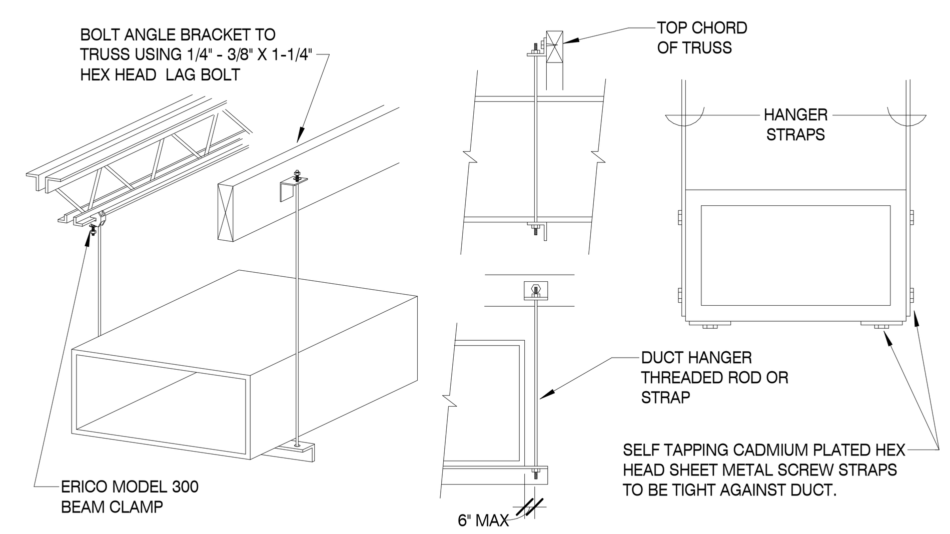
ROUND DUCT HANGER DETAIL 6

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

HANGER SIZES FOR ROUND DUCT			
MAX SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING
30"	1"x 18-GAGE STRAP	NONE REQUIRED	10'-0"
36"	1/4" ROUND ROD	1-1/2"x1/2"x1/8"	8'-0"
48"	1/4" ROUND ROD	1-1/2"x1/2"x1/8"	8'-0"
60"	5/16" ROUND ROD	2"x2"x1/8"	8'-0"

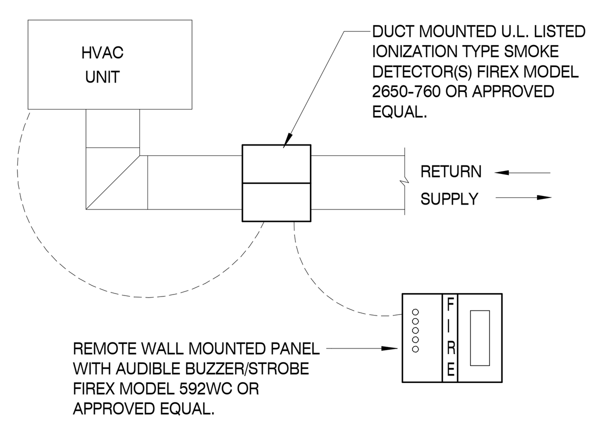
NOTE:
ALL SUPPLY AIR DUCTS SHALL BE WRAPPED EXTERNALLY AS PER SPECIFICATIONS.

NO POP RIVETS ALLOWED



RECTANGULAR DUCT HANGER DETAIL 2

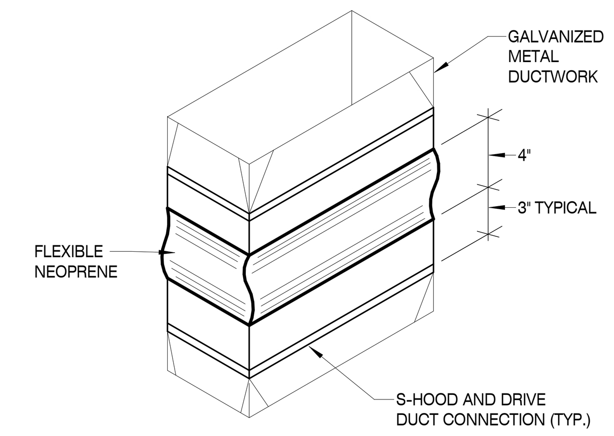
SCALE: N.T.S.



NOTES:
1. INSTALL DUCT SMOKE DETECTORS ON SUPPLY AND/OR RETURN ON UNITS AS INDICATED ON SCHEDULE, INSTALL PER APPLICABLE CODES.
2. INTERLOCK HVAC UNIT TO SHUT DOWN UPON AN ALARM CONDITION.
3. ALL INSTALLATION AND UNIT CONTROL WIRING TO EQUIPMENT AND TO REMOTE WALL MOUNTED PANEL WITH AUDIBLE BUZZER/STROBE SHALL BE BY MECHANICAL INSTALLER.

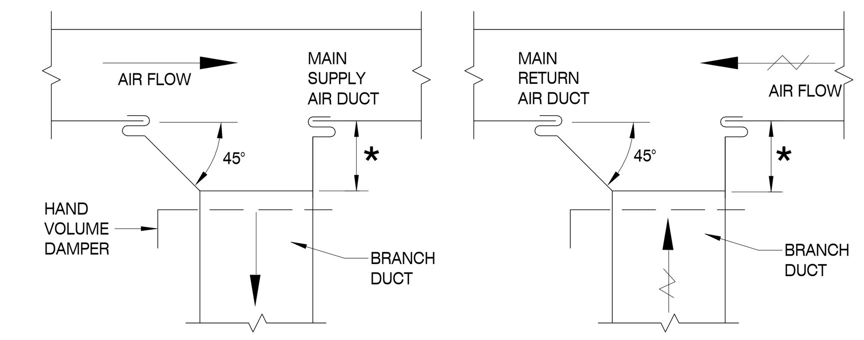
FIRE ALARM CONTROL DETAIL 12

SCALE: NTS



FLEXIBLE CONNECTOR DETAIL 7

SCALE: N.T.S.

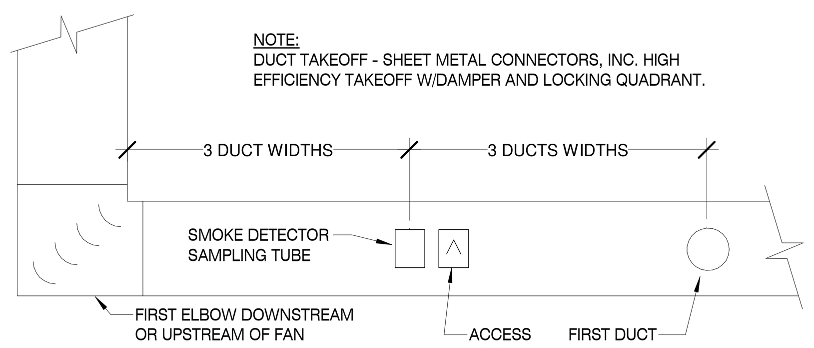


* EQUALS WIDTH OF BRANCH DUCT UP TO 12"
12" FOR ALL BRANCH DUCTS LARGER THAN 12".

BRANCH DUCT TAKE-OFF DETAIL 3

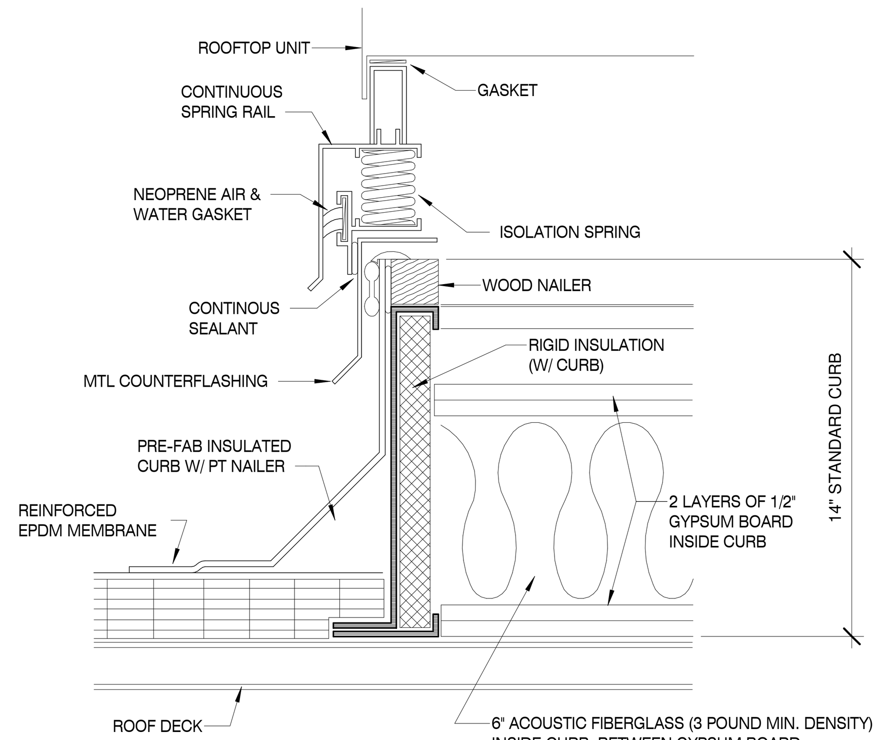
SCALE: N.T.S.

NOTE:
DUCT TAKEOFF - SHEET METAL CONNECTORS, INC. HIGH EFFICIENCY TAKEOFF W/DAMPER AND LOCKING QUADRANT.



DUCT DETECTOR DETAIL 13

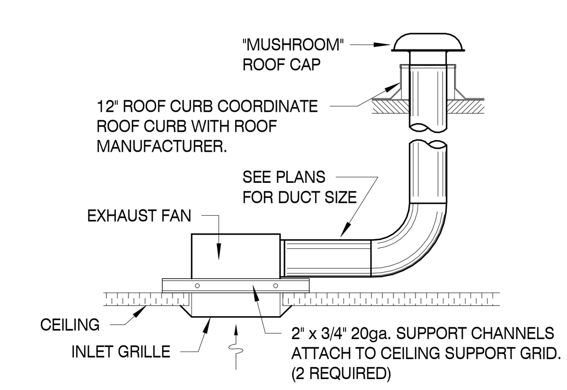
SCALE: N.T.S.



NOTES:
1. PROVIDE STRUCTURAL SUPPORTS AS REQUIRED TO MAKE INSTALLED UNIT LEVEL
2. VERIFY ROOF SLOPE AND CONSTRUCTION. PROVIDE CURB TO MATCH.

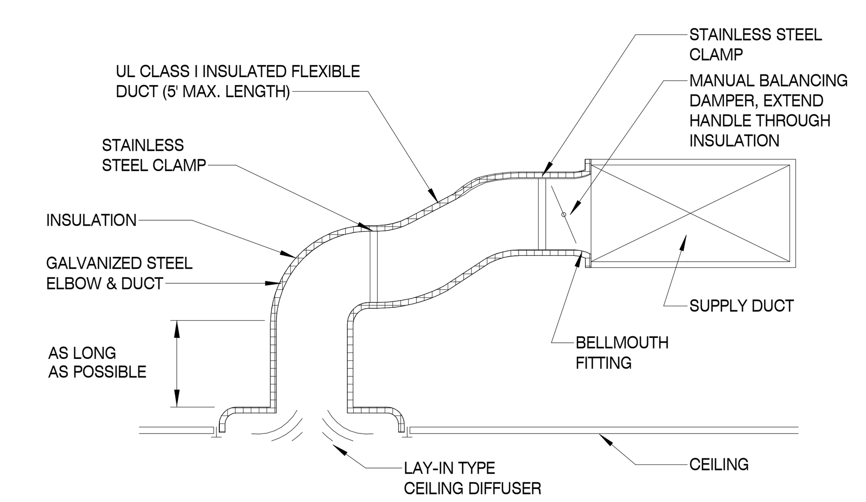
ROOF CURB DETAIL 10

SCALE: N.T.S.



CEILING EXHAUST FAN DETAIL 8

SCALE: N.T.S.



SUPPLY BRANCH TAKE-OFF DETAIL 4

SCALE: N.T.S.

MBI

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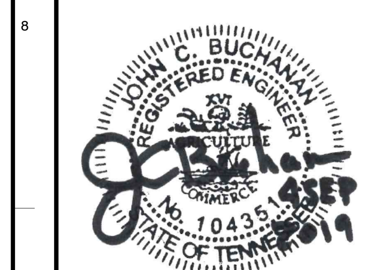
SEAL



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DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB
SHEET TITLE:	

HVAC DETAILS

SHEET NO.:

M301

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HOOD INFORMATION – Job#3471461

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S) TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	HOOD CONFIG. ROW
1		5424 ND-2-PSP-F	4' 0"	600 Deg.	800			4"	8"	800	2292	-0.662"	688	430 SS Where Exposed	ALONE	ALONE

PATENT NUMBERS

AC-PSP (United States) - US Patent 7963830 B2
AC-PSP Wall (Canada) - CA Patent 2820509
AC-PSP Island (Canada) - CA Patent 2520330

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S) TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY.	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1		Captrate Solo Filter	2	20"	20"	85% See Filter Spec.	2	L55 Series E26	NO	Right	12"x54"x24"	Ansul R102	3.0	DCV-1111	1 Light 1 Fan	YES	461 LBS

HOOD OPTIONS

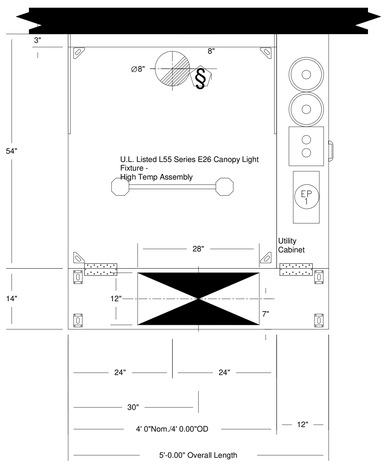
HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 18.00" High Front, Left, Right
		BACKSPLASH 80.00" High X 60.00" Long 430 SS Vertical
		LEFT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS
		RIGHT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS
		SENSOR-CV

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S) WIDTH	LENG.	DIA.	CFM	S.P.
1		Front	60"	14"	6"	MUA	12"	28"		688	0.154"

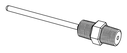
*** NOTE ***

ALL WALLS THAT COME WITHIN 18" OF HOOD MUST BE METAL STUDS AND SHEETROCK. WOOD STUDS NOT ALLOWED.



PLAN VIEW – Hood #1
4' 0.00" LONG
5424ND-2-PSP-F

DUCT TEMPERATURE SENSOR



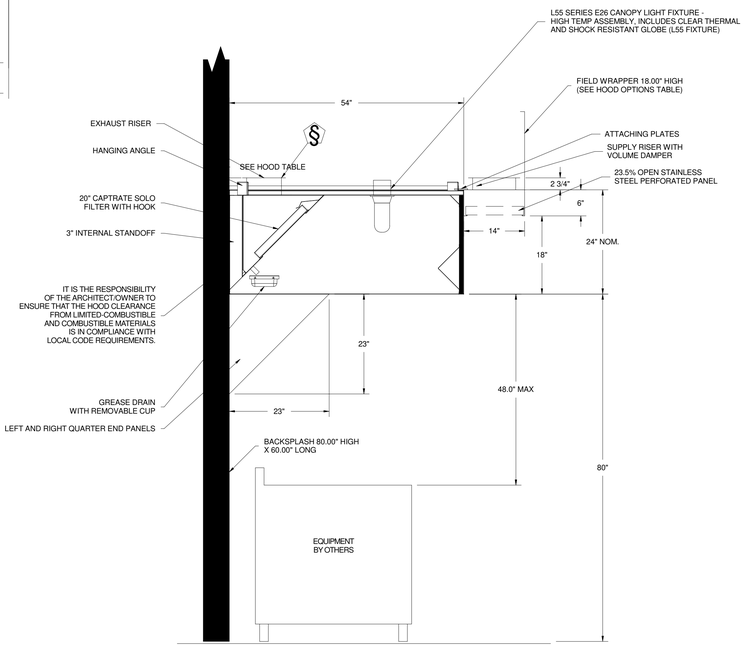
Provides exhaust air temperature for proper hood control operation. For all installations excluding a single hood with factory risers and a hood mounted panel, duct mounted temperature sensors will need to be field wired. 2-wire 18 AWG plenum rated thermistor cable must be used.

ROOM TEMPERATURE SENSOR

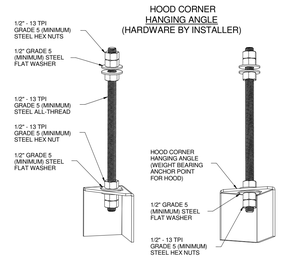
Provides room override based on temperature differential between the room and duct. Installed by electrician on a wall, 5'-6' off the finished floor, in the space but not directly under the hood or close to an appliance (including the electrical control box) so the reading is accurate for space.

HOOD CONTROL INTERFACE

The LCD interface provides user control and hood status. The faceplate is connected to the hood control panel through CAT-5 cable. A faceplate has 2 RJ-45 connectors. One connects to port J4 or J5 in the hood control panel and the other will typically be occupied by a RJ-45 end-of-line terminator.



SECTION VIEW – MODEL 5424ND-2-PSP-F
#1



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

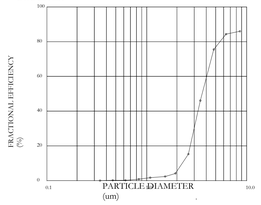
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

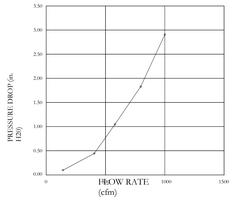
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

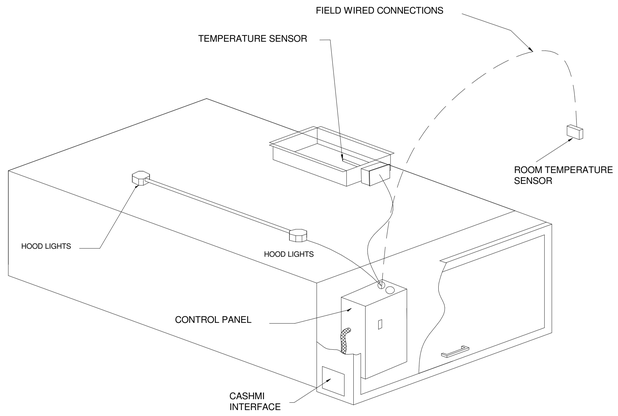
EFFICIENCY VS. PARTICLE DIAMETER



PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:.
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)
ULC-S649



System Design Verification (SDV)

If ordered, CAS Service will perform a System Design Verification (SDV) once all equipment has had a complete start up per the Operation and Installation Manual. Typically, the SDV will be performed after all inspections are complete.

Any field related discrepancies that are discovered during the SDV will be brought to the attention of the general contractor and corresponding trades on site. These issues will be documented and forwarded to the appropriate sales office. If CAS Service has to resolve a discrepancy that is a field issue, the general contractor will be notified and billed for the work. Should a return trip be required due to any field related discrepancy that cannot be resolved during the SDV, there will be additional trip charges.

During the SDV, CAS Service will address any discrepancy that is the fault of the manufacturer. Should a return trip be required, the general contractor and appropriate sales office will be notified. There will be no additional charges for manufacturer discrepancies.

MBI

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DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB
SHEET TITLE:	

RANGE HOOD DETAILS

SHEET NO.:

M302

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EXHAUST FAN INFORMATION – Job#3471461

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	∅	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1	KEF-1	DU50HFA	800	1.250	1544	0.500	0.4020	1	115	5.6	304 FPM	76	16.8

MUA FAN INFORMATION – Job#3471461

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP.	RPM	H.P.	B.H.P.	∅	VOLT	FLA	WEIGHT (LBS.)	SONES
2	MUA-1	D76	G7D	D.6	600	688	0.400	1742	1.000	0.7550	1	115	10.2	309	21

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2	MUA-1	42437	39042	55 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEF-1	1 - Grease Box
		1 - ECM Wiring Package-Exhaust - PWM Signal from ECPMO3 Prewire (NIDEC Motor)
2	MUA-1	1 - AC Interlock Relay - 24VAC Coil
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, -5 to 15" wc
		1 - ECM Wiring Package-Supply - PWM Signal from ECPMO3 Prewire (NIDEC Motor)

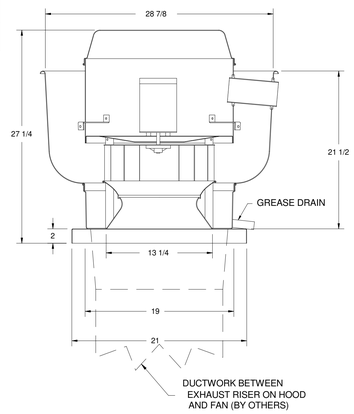
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	KEF-1	YES						
2	MUA-1							

CURB ASSEMBLIES

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	34 LBS	Curb	19.500"W x 19.500"L x 24.000"H Vented Hinged
2	# 2	MUA-1	50 LBS	Curb	19.500"W x 52.000"L x 18.000"H Insulated

FAN #1 DU50HFA - EXHAUST FAN (KEF-1)



FEATURES:

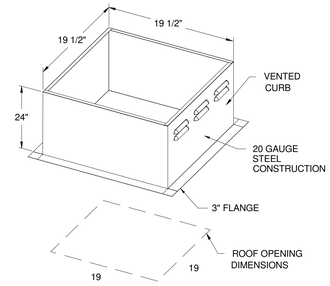
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

GREASE BOX.
ECM WIRING PACKAGE-EXHAUST - PWM SIGNAL FROM ECPMO3 PREWIRE (NIDEC MOTOR).



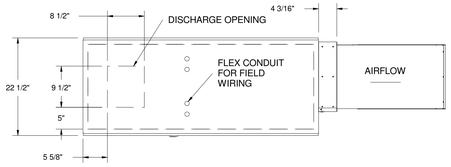
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

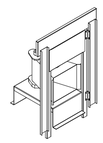
SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE

FAN #2 D76D - HEATER (MUA-1)
FLOW FROM DIRECT FIRED HEATER. DIRECT DRIVE.
[illegible] CONTACTS. LOCKS OUT BURNER CIRCUIT WHEN AC IS ENERGIZED.
[illegible]
7. ECM
NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT.
SUGGESTED STRAIGHT DUCT SIZE IS " x " x " LONG.

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 20°F.
TEMP. RISE = 55°F.
BTUs CALCULATED OFF ACTUAL AIR DENSITY
OUTPUT
BTUs AT ALTITUDE OF 0.0 ft. = 40426
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 43941
OUTPUT BTUs AT ALTITUDE OF 961 ft. = 39042
INPUT BTUs
AT ALTITUDE OF 961 ft. = 42437





Direct Fired (DF) Profile Plate Assembly

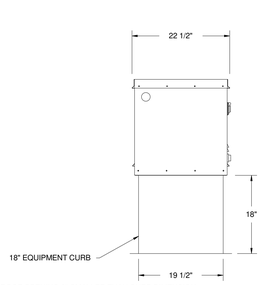
Direct Fired

Direct Fired Profile Plate Specifications:
Description:
Direct fired burners shall have patented (US Patent No.: US6629523B2), self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2); units shall be configured with the blower mounted downstream of the burner. This arrangement will ensure a consistent airflow, regardless of inlet air temperature.

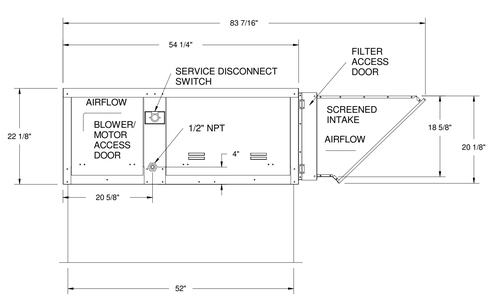
Application:
Spring-loaded burner profile plates are engineered to automatically react to the momentum of a fresh air stream, without the need for any motors or actuators to mechanically adjust them. With this feature, all DF units are designed for demand control ventilation (DCV) requirements.

Certifications:
All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).

General Construction:
-Profile plates shall be formed from G90 galvanized steel.
-Profile plates shall vary in size per unit.
-Profile plates shall be mounted along the same plane as the discharge of the burner.
-Design shall incorporate properly torqued, permanently mounted spring hinges.
-Spring hinges shall be made from plated steel.



ROOF OPENING 2" SMALLER THAN CURB DIMENSION.



ELECTRICAL PACKAGE – Job#3471461

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	ϕ	H.P.	VOLT	FLA
1		DCV-1111	Utility Cabinet Right	04 - Utility Cabinet Right	1 Light	Smart Controls DCV	KEF-1	Exhaust	1	0.500	115	5.6
				Hood # 1	1 Fan		MUA-1	Supply	1	1.000	115	10.2

MBI

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	ALJ
DRAWN BY:	ALJ
REVIEWED BY:	JCB
SHEET TITLE:	

RANGE HOOD DETAILS

SHEET NO.:

M303

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ARCH E1

PLUMBING LEGEND

	COLD WATER (CW)
	HOT WATER (HW)
	HOT WATER RETURN (HWR)
110°	HOT WATER 110°
140°	HOT WATER 140°
F	FILTERED WATER
	SANITARY DRAIN (W)
	VENT (V)
G	GAS LINE
LP	LIQUID PROPANE
A	AIR
C	CONDENSATE DRAIN
O2	OXYGEN
NO	NITROUS OXIDE
V	VACUUM
GI	GREASE INTERCEPTOR WASTE LINE
AW	ACID WASTE
AV	ACID VENT
SD	STORM DRAIN
RD	ROOF DRAIN
RWL	RAIN WATER LEADER
FS	FLOOR SINK
FD	FLOOR DRAIN
HD	HUB DRAIN
VTR	VENT THRU ROOF
CO	CLEAN OUT IN FLOOR
CO	CLEAN OUT IN EXPOSED OR ABOVE GRADE
CO	CLEAN OUT IN STACK
	WATER HAMMER ARRESTER
HB	HOSE BIBB
	SUPPLY STOP ZURN Z-8808-XL
	PIPE TURNING DOWN
	PIPE TURNING UP
	BALL VALVE
	BALANCING VALVE
	PRESSURE REDUCING VALVE
	REDUCED PRESSURE BACKFLOW PREVENTER
	STRAINER
TW	THERMOMETER
GC	GAUGE COCK
	GATE VALVE
	CHECK VALVE
	UNION
	VACUUM BREAKER
	CONNECT TO EXISTING
	GAS COCK
	AIR CONNECTION
	LP CONNECTION
	CIRCULATING PUMP

PLUMBING SPECIFICATIONS

GENERAL
A. SCOPE: FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF ALL PLUMBING WORK REQUIRED ON THE DRAWINGS AND AS SPECIFIED HEREIN.
B. WORK REQUIRED: IN GENERAL, THE WORK CONSISTS OF, BUT IS NOT LIMITED TO THE FOLLOWING:
1. DOMESTIC WATER SYSTEM CONNECTING TO EXISTING UTILITY
2. SANITARY SEWER SYSTEM CONNECTING TO EXISTING UTILITY
3. HOT WATER PIPING SYSTEM
4. PLUMBING FIXTURES
5. CONNECTION TO KITCHEN EQUIPMENT
C. PERMITS, ORDINANCES, AND INSPECTIONS:
1. OBTAIN AND PAY FOR ALL PERMITS AND INSPECTION FEES REQUIRED. DELIVER TO ARCHITECT, CERTIFICATES.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY, STATE, OR NATIONAL ORDINANCES AND CODES. EFFORT HAS BEEN MADE TO MEET OR EXCEED REQUIREMENTS. THE CONTRACTOR SHALL MAKE ANY MINOR ADJUSTMENTS TO MEET THESE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER.
D. INSTRUCTIONS AND INSTRUCTION BOOKLETS: THE CONTRACTOR SHALL INSTRUCT THE OWNER REPRESENTATIVE IN THE PROPER OPERATION OF ALL EQUIPMENT AND SYSTEMS. FURNISH LITERATURE PROVIDED BY THE MANUFACTURER. PRINTED INSTRUCTIONS AND MAINTENANCE DATA SHALL BE BOUND WITH COVER IN DUPLICATE AND DELIVERED TO THE ARCHITECT.
E. SUBMITTAL DATA: SUBMIT FOR APPROVAL, FIVE (5) COPIES, OF THE EQUIPMENT BROCHURES, TECHNICAL DATA AND/OR SHOP DRAWINGS.
PRODUCTS
A. ALL MATERIALS SHALL BE NEW, FIRST CLASS, AND COMPLY WITH LATEST ASTM SPECIFICATIONS AND STANDARDS RELATING TO SUCH MATERIALS.
B. WATER PIPING:
1. FURNISH AND INSTALL DIELECTRIC OR ISOLATION FITTINGS AT ALL POINTS WHERE COPPER PIPE CONNECTS TO WROUGHT IRON OR STEEL PIPE.
2. EXPOSED PIPE IN TOILET ROOMS: CHROME PLATED BRASS, AMERICAN BRASS COMPANY, OR EQUIVALENT. FURNISH AND INSTALL CHROME WALL PLATES.
3. PIPING UNDER FLOOR SLAB SHALL BE TYPE K SOFT TEMPER COPPER TUBING ASTM B-88 NO JOINTS SHALL BE PERMITTED UNDER FLOOR SLAB.
4. PIPING ABOVE FLOOR SLAB SHALL BE TYPE L HARD DRAWN COPPER TUBING ASTM B-88 USE WROUGHT COPPER SWEAT FITTINGS.
C. SANITARY WASTE, AND VENT PIPING: PIPING SHALL BE CAST IRON NO HUB DWV PIPE AND FITTINGS ABOVE GRADE MEETING ASTM A 888 or CISPI 301 STANDARDS. BELOW GRADE PIPING SHALL BE SOLID WALL SCHEDULE 40 PVC MEETING ASTM D 2665 STANDARDS.
D. PIPE HANGERS: ADJUSTABLE WROUGHT CLEVIS TYPE HANGER AND RODS; GRINNELL COMPANY OR EQUIVALENT.
E. CLEANOUTS:
1. FLOOR CLEANOUTS FOR SOIL AND WASTE LINES SHALL HAVE BODIES OF STANDARD PIPE SIZES AS MANUFACTURED BY ZURN OR EQUIVALENT.
2. WALL CLEANOUTS FOR SOIL AND WASTE LINES SHALL HAVE BODIES OF STANDARD PIPE SIZES AS MANUFACTURED BY ZURN OR EQUIVALENT.
F. VALVES:
1. BUTTERFLY VALVES 2 1/2" AND LARGER.
2. BALL VALVES 2" AND SMALLER.
3. UNIONS SHALL HAVE BRASS TO METAL GROUND JOINT SEAL.
G. ESCUTCHEON PLATES: PROVIDE CHROME PLATED ESCUTCHEON PLATES WHERE EXPOSED PIPE PASSES THROUGH WALLS, FLOORS, OR CEILING IN FINISHED AREAS. SEAL ALL PIPE PENETRATIONS WITH FIRE STOP AS REQUIRED, DRYWALL MUD OR GROUT TO MATCH ADJACENT WALL.
H. PIPE INSULATION:
1. ALL HOT WATER PIPE ABOVE GRADE SHALL BE INSULATED WITH 1" FIBERGLASS, LOW PRESSURE INSULATION WITH WHITE UNIVERSAL JACKET. APPLY IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
2. ALL COLD WATER PIPE ABOVE GRADE SHALL BE INSULATED WITH 1/2" FIBERGLASS AS ABOVE.
I. WALL HYDRANT: "FROST PROOF" TYPE WITH VACUUM BREAKER ON ALL HOSE BIBS
J. FIXTURES:
1. FURNISH AND INSTALL ALL PLUMBING FIXTURES INDICATED ON DRAWINGS. FIXTURES SHALL BE AMERICAN STANDARD, KOHLER, ELJER, OR AS SPECIFIED IN THE PLUMBING FIXTURE SCHEDULE.
2. TRAPS: FOR LAVATORIES AND SINKS: BRASS, CHROME PLATED.
3. PROVIDE DEEP SEAL TRAPS AND TRAP PRIMERS FOR ALL FLOOR DRAINS AND HUB DRAINS.
K. HOT WATER HEATERS:
1. 99,000 BTUH INPUT AND LESS:
CONTRACTOR SHALL MAKE PROVISIONS TO KEEP 18" CLEAR AROUND HEATER.
2. 100,000 BTUH TO 199,000 BTUH INPUT:
CONTRACTOR SHALL MAKE PROVISIONS TO KEEP 18" CLEAR AROUND HEATER, AND SUBMIT A "APPLICATION FOR PERMISSION TO INSTALL" TO THE BOILER UNIT OF THE TENNESSEE DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT'S WORKPLACE REGULATIONS AND COMPLIANCE DIVISION (REGISTRATION AND INSPECTION).
3. 200,000 BTUH TO 399,000 BTUH INPUT:
CONTRACTOR SHALL MAKE PROVISIONS TO KEEP 18" CLEAR AROUND HEATER, THE HEATER MUST BE ASME CODE COMPLIANT, AND MUST BE FILED FOR REGISTRATION AND INSPECTION.
4. 400,000 BTUH AND MORE:
CONTRACTOR SHALL MAKE PROVISIONS TO KEEP 36" CLEAR AROUND HEATER, THE HEATER MUST BE ASME CODE COMPLIANT, AND MUST BE FILED FOR REGISTRATION AND INSPECTION.

GENERAL PLUMBING NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
2. THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
3. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR, IN A FIRST-CLASS AND WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE.
4. ALL EXCAVATION AND BACKFILL, AS REQUIRED, FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
5. PROOF OF INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF WORK.
6. VERIFY LOCATION, SIZE, INVERTS AND ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES.
7. WATER PIPING SHALL BE TYPE "L" COPPER FOR 2 1/2" ABOVE GRADE. ALL UNDERGROUND WATER PIPING SHALL BE TYPE "K" COPPER WITH NO JOINTS UNDER SLAB.
8. SOIL, WASTE, VENT AND RAINWATER PIPING SHALL BE CAST IRON NO HUB ABOVE GRADE MEETING ASTM A 888 or CISPI 301 STANDARDS. BELOW GROUND PIPING SHALL BE SOLID WALL SCHEDULE 40 PVC MEETING ASTM D 2665 STANDARDS.
9. AIR CONDITIONING CONDENSATE DRAIN PIPING SHALL BE COPPER DWV PIPE AND FITTINGS. INSULATE ALL CONDENSATE PIPING ABOVE GRADE.
10. INSULATE ALL HOT WATER SUPPLY, HOT WATER RETURN, RAINWATER AND CONDENSATE LINES ABOVE GRADE AS FOLLOWS: HOT WATER SUPPLY AND RETURN, 1" THICK FIBERGLASS. RAINWATER LEADERS 1 1/2" THICK FIBERGLASS BLANKET ON DRAIN BODY AND 1" HORIZONTAL RWL. CONCEALED CONDENSATE PIPING 1/2" ARMAFLEX PERFORM.
11. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND MARKED ACCESS PANELS.
12. FURNISH AND INSTALL APPROVED AIR CHAMBERS AT EACH PLUMBING FIXTURE GROUP AND P.D.I. APPROVED SHOCK ARRESTERS ON MAIN LINES OR RISERS.
13. DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL PIPING AND EQUIPMENT CONNECTIONS.
14. ISOLATE COPPER PIPE FROM HANGER ON SUPPORTS WITH ISOLATOR PAD (HAIR FELT LINING) SUPER STRUT MODEL C/15/16. FILL VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES WITH FIRE-RATED FOAM SIMILAR TO CHASE TECHNOLOGY CORP. - CIC PR-855.
15. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF C.O. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
16. PROVIDE 1/4" TRAP PRIMER LINE FOR ALL FLOOR DRAINS FROM THE NEAREST PLUMBING FIXTURE. PROVIDE MINIMUM 3' RADIUS, 1/4" PER FOOT SLOPE AROUND ALL FLOOR DRAINS.
17. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND ALL WATER HAMMER ARRESTORS. ACCESS PANELS IN RATED WALLS MUST MAINTAIN THE RATING. ALL ACCESS PANELS MUST MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
18. PROVIDE CHROME-PLATED COMBINATION COVER PLATE AND CLEANOUT PLUG FOR ALL WALL CLEANOUTS - JOSAM 58890 SERIES OR EQUAL.
19. PROVIDE EACH FIXTURE GROUP WITH ISOLATION VALVES, BOTH HOT (110) AND COLD WATER.
20. NO COMBUSTIBLE MATERIALS CAN BE USED IN MECHANICAL ROOMS OR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
21. PROVIDE BACKFLOW PREVENTER - WILKINS MOD. # 575 OR EQUAL.
22. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATE THE APPROXIMATE ROUTING OF PIPING AND LOCATION OF FIXTURES. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES AND MAKE MINOR OFFSETS AND ADJUSTMENTS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
23. COORDINATE FIXTURES LOCATIONS WITH ARCHITECTURAL DRAWINGS.
24. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR CONNECTIONS TO ALL UTILITY LINES AND PAY ALL FEES AND COSTS FOR CONNECTIONS TO THOSE SERVICES.
25. ALL PIPING SHALL BE RUN IN CONCEALED LOCATIONS EXCEPT WHERE NOTED.
26. PLUMBING FIXTURES SHALL BE FIRST QUALITY VITREOUS CHINA, STAINLESS STEEL OR PLASTIC AS NOTED ON FIXTURE SCHEDULE. ALL FIXTURES SHALL BE RIGIDLY CONNECTED TO THE BUILDING AND SHALL BE CLEANED AND FUNCTIONAL PRIOR TO ACCEPTANCE.
27. REFER TO ARCHITECTURAL DRAWINGS FOR FINISHED GRADES.
28. CONTRACTOR SHALL PROVIDE PRESSURE REDUCING VALVE AND REDUCED PRESSURE BACKFLOW PREVENTION VALVE INSIDE BUILDING WHERE SERVICE ENTERS OR AS SHOWN ON THE SITE PLAN.
29. EXPOSED PIPING BELOW FIXTURES SHALL BE CHROME PLATED. PIPING AT FIXTURES IN HANDICAPPED ACCESSIBLE AREAS SHALL BE INSULATED TO PROTECT AGAINST BURNS.
30. ALL BURIED PIPING SHALL BE BEDDED AND COVERED IN SAND, GRAVEL, OR CRUSHED STONE.
31. AFTER COMPLETION OF PIPING TEST POTABLE WATER PIPING TO 125 LBS. PER SQ. INCH AND HOLD FOR 24 HOURS.
32. TEST DRAIN WASTE AND VENT PIPING BY FILLING TO LEVEL OF HIGHEST THE VENT.
33. AFTER INSTALLATION AND TESTING OF POTABLE WATER PIPING, STERILIZE ALL LINES IN ACCORD WITH CODES AND HEALTH DEPARTMENT REGULATIONS AND FLUSH AND FILL WITH CLEAN WATER.
34. PITCH POTABLE WATER LINES TOWARD DRAINS, INSTALL DRAIN WASTE AND VENT PIPING WITH MINIMUM SLOPES OF 1/4" PER FOOT FOR LINES UP TO 2 1/2" AND 1/8" PER FOOT FOR LINES 3" AND LARGER.
35. PROVIDE A TWO PIPE DIAMETER AIR GAP BETWEEN ALL INDIRECT WASTE AND THE RECEIVER.
36. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND RATINGS OF FIRE WALLS AND FLOOR CEILING ASSEMBLIES.
37. INSTALL FIRE STOP MATERIAL IN ACCORD WITH U.L. LISTING AT ALL PENETRATIONS.
38. PIPE WATER HEATER RELIEF VALVE TO EXTERIOR PER CODE OR TO FLOOR DRAIN.
39. PROVIDE MAXITROL SERIES GF OR EQUAL FUEL GAS STRAINER PER NFPA 86 UPSTREAM OF SAFETY SHUTOFF VALVES. (PHONE NUMBER - (248) 356-1400)
40. INSTALL WATER HEATERS IN ACCORD WITH MANUFACTURERS INSTRUCTION AND ALL STATE AND LOCAL CODE REQUIREMENTS. WATER STORAGE SHALL HAVE A TEMPERATURE OF 140 DEGREES.
41. ALL LAVATORIES AND HAND SINKS SHALL HAVE AN APPROVED ASSE 1070 DEVICE(S) PROVIDING A MAXIMUM OF 110° F FOR HOT WATER. PROVIDE SHOP DRAWINGS FOR APPROVAL.
42. ALL FOOD RELATED EQUIPMENT WITH DRAIN LINES, E.G., FOOD PREPARATION SINKS, WAREWASH SINKS, ETC. WASTE THROUGH A TWO PIPE DIAMETER AIR GAP OR APPROVED AIR BREAK. WATER HEATER/BOILER POP-OFF LINES; ICE MACHINE AND ICE BIN MELTWATER DRAIN LINES, WATER FILTER/TREATMENT EQUIPMENT DRAIN LINES, AND SIMILAR DRAINS FROM EQUIPMENT USING DOMESTIC WATER (INCLUDING DIPPER WELLS) MUST HAVE A TWO PIPE DIAMETER AIR GAP AT THE SEWER. EQUIPMENT SUCH AS DIPPER WELLS, STEAMERS, WOK TABLE FLUSH SYSTEMS, AND SIMILAR DEVICES WITH THE POTENTIAL FOR SUBMERGED INLETS, ETC. MUST HAVE AN APPROVED TWO PIPE DIAMETER AIR GAP OR DUAL CHECK VALVE MEETING ASSE STANDARD 1012, 1024, OR EQUIVALENT INSTALLED ON THE POTABLE WATER SUPPLY.
43. ALL SANITARY AND GREASE WASTE PIPING IN AND/OR BELOW KITCHEN AREAS SHALL BE CAST IRON MEETING ASTM A 888 or CISPI 301 STANDARDS.
44. PROVIDE "TRUEBRO" MODEL NO. 102 P-TRAP AND ANGLE VALVE INSULATION ASSEMBLIES. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
45. THE "REDUCTION IN LEAD IN DRINKING WATER ACT" REQUIRES MATERIALS AND FIXTURES USED FOR THE DELIVERY OF POTABLE WATER TO CONTAIN LESS THAN 0.2% LEAD FOR SOLDER AND FLUX, AND NOT MORE THAN A WEIGHTED AVERAGE OF 0.25% LEAD FOR PIPES, FITTINGS, AND FIXTURES. EXCLUDED FROM THIS ACT ARE TOILETS, BIDETS, URINALS, FLUSH VALVES, TUB FILLERS, AND SHOWER VALVES.
46. IT IS THE INTENT OF THIS PROJECT TO CONFORM WITH THE REQUIREMENTS OF THE 2014 LEAD FREE ACT. EVERY EFFORT HAS BEEN MADE TO CALL FOR FIXTURES THAT COMPLY WITH THE ACT. EVEN SO, IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO INSTALL PRODUCTS THAT COMPLY WITH THE 2014 LEAD FREE SAFE WATER DRINKING ACT.

PLUMBING ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AIR	COMPRESSED AIR
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CFH	CUBIC FEET PER HOUR
CF	CUBIC FEET
CI	CAST IRON
CO	CLEANOUT
CON	CONDENSATE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CU	COPPER
CW	COLD WATER (DOMESTIC)
DF	DRINKING FOUNTAIN
DI	DUCTILE IRON
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FR	FLOOD RIM
FS	FLOOR SINK
FT	FEET OR FOOT
FZ	FREEZE
GAL	GALLON
GC	GENERAL CONTRACTOR
GI	GREASE INTERCEPTOR
GPD	GALLON PER DAY
GPM	GALLON PER MINUTE
HB	HOSE BIBB
HD	HUB DRAIN
HS	HAND SINK
IDW	INDIRECT WASTE
IFGC	INTERNATIONAL FUEL GAS CODE
INV	INVERT ELEVATION
IPC	INTERNATIONAL PLUMBING CODE
IR	INFRARED
LAV	LAVATORY
LT	LAUNDRY TUB
MANF	MANUFACTURER
MV	MIXING VALVE
M	METER
MBH	1,000 BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MS	MOP SINK
NG	NATURAL GAS
NIC	NOT IN CONTRACT
NO	NITROUS OXIDE
NTS	NOT TO SCALE
OI	OIL INTERCEPTOR
PC	PLUMBING CONTRACTOR
PE	POLYTHINE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RD	ROOF DRAIN
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RWL	RAIN WATER LEADER
SAN	SANITARY SEWER
SD	STORM DRAIN
SQ	SQUARE
SS	SERVICE SINK
TOP	TOP OF PIPE
UR	URINAL
VAC	VACUUM
VIF	VERIFY IN FIELD
VTR	VENT TO ROOF
WB	WASHER BOX
WC	WATER CLOSET
WH	WATER HEATER

MBI

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:

PLUMBING LEGEND AND NOTES

SHEET NO.:

P001

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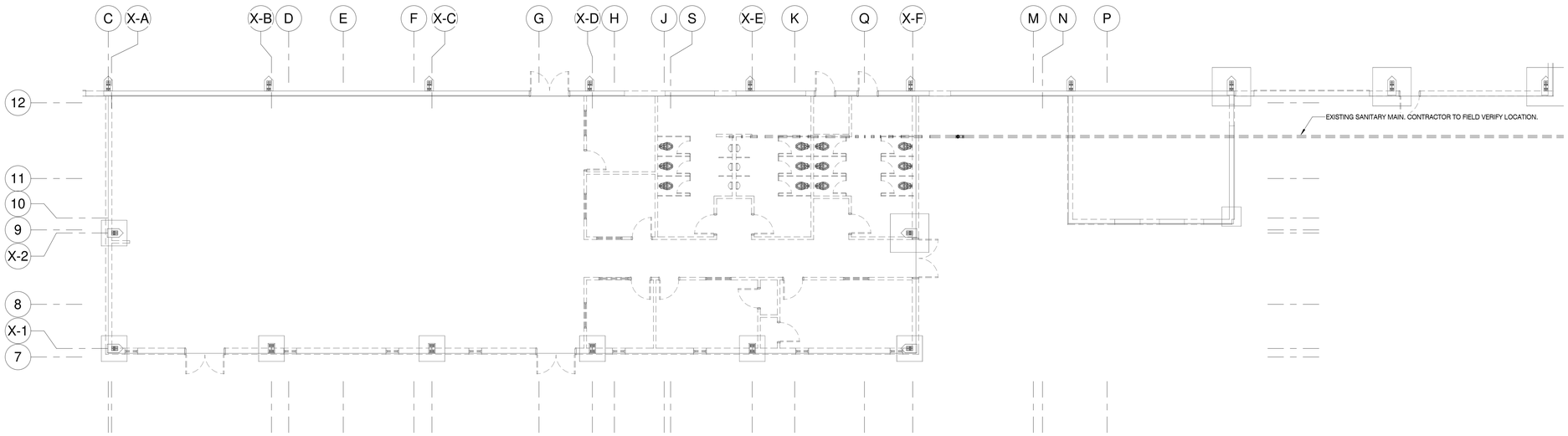
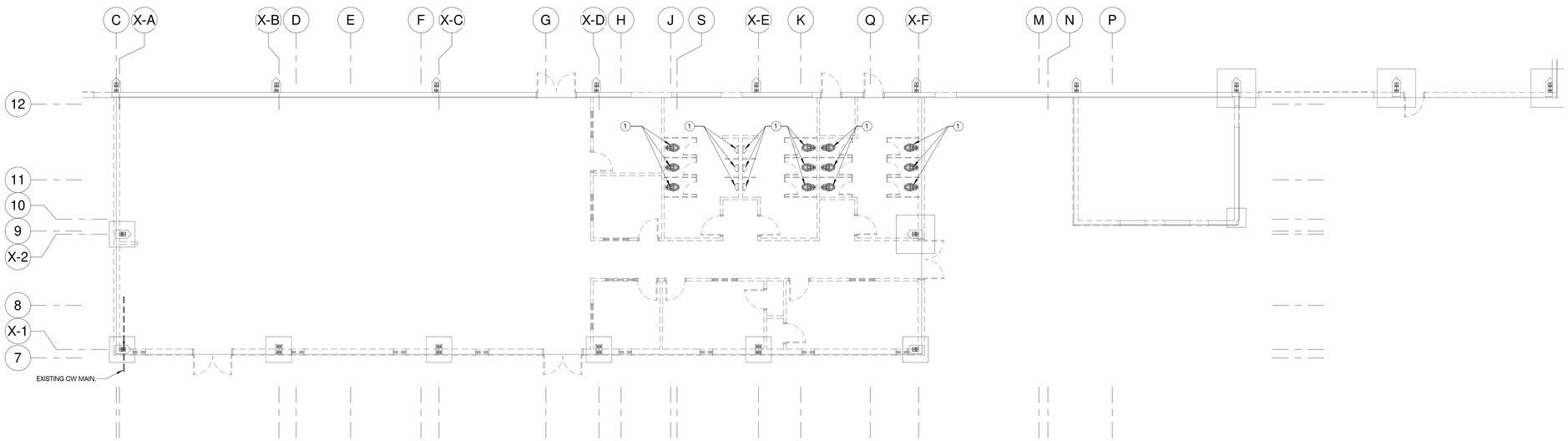


DEMOLITION FLOOR PLAN - SANITARY (1)

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



DEMOLITION FLOOR PLAN - WATER (2)

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

KEY NOTES

1. REMOVE AND PROPERLY DISPOSE OF EXISTING PLUMBING FIXTURE.

MBI

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JOHN C. BUCHANAN
REGISTERED ENGINEER
No. 104351
STATE OF TENNESSEE
9 SEP 2019

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ADDISON, AL 35540

PROJECT NO.: 180789.04

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SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:

DEMOLITION FLOOR PLAN - PLUMBING

SHEET NO.:

P100

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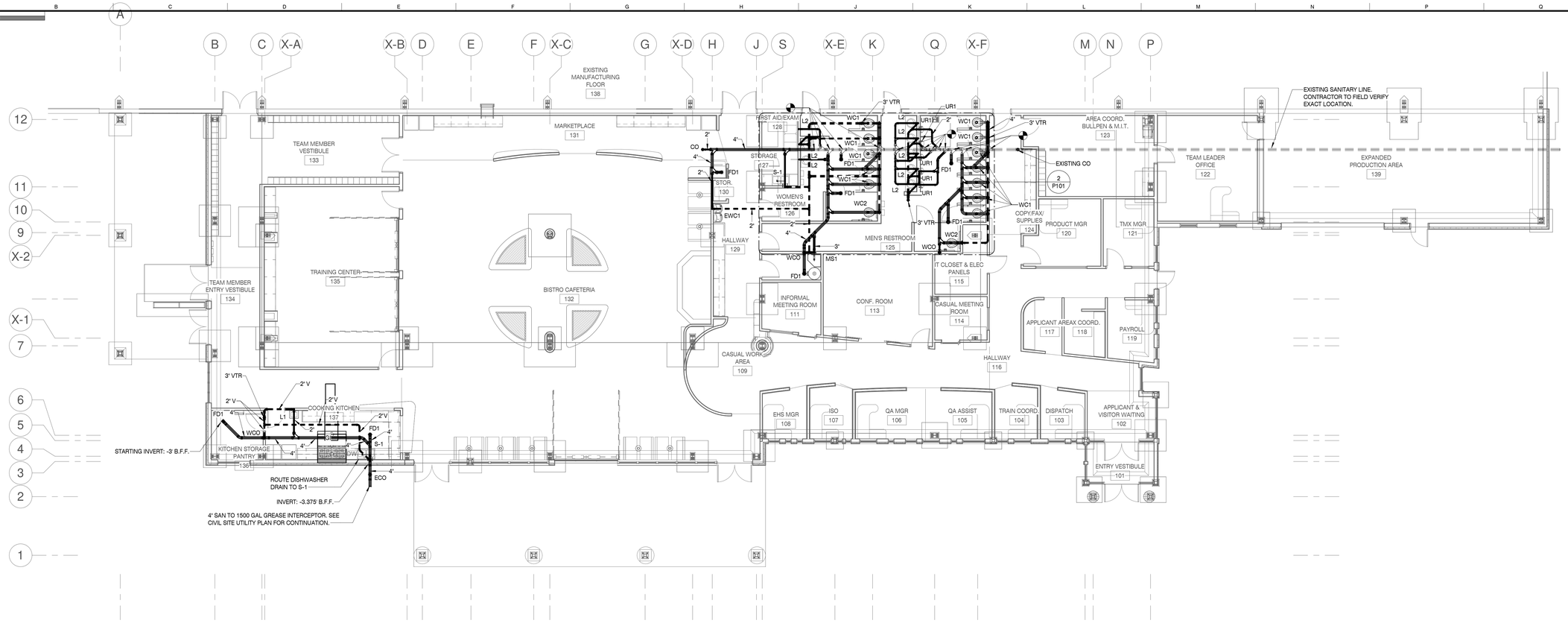
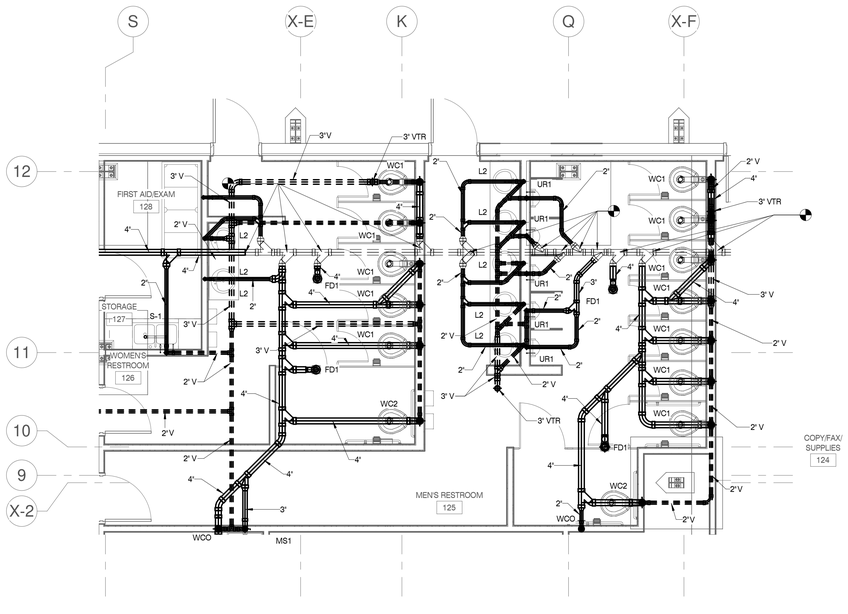


FIRST FLOOR PLAN - SANITARY

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

1



ENLARGED RESTROOM FLOOR PLAN - SANITARY

SCALE: 1/4" = 1'-0"

2

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PROJECT ADDRESS:

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SHEET TITLE:

FLOOR PLAN - SANITARY

SHEET NO.:

P101

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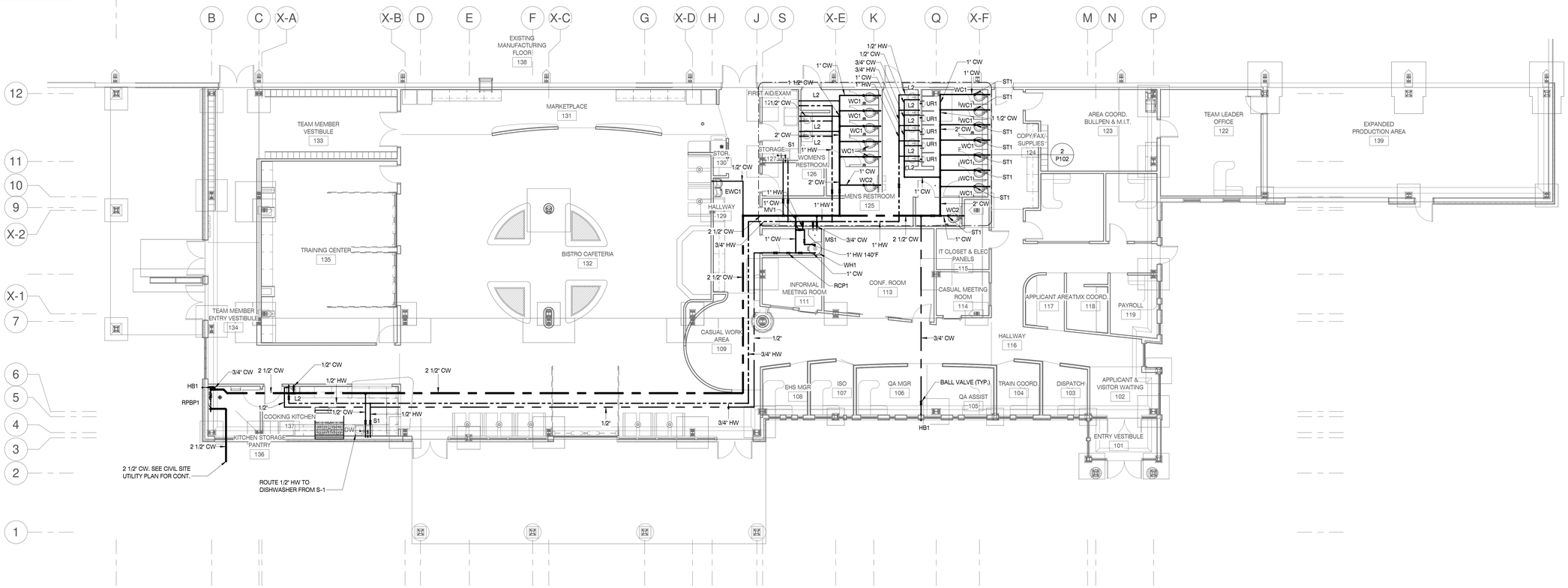
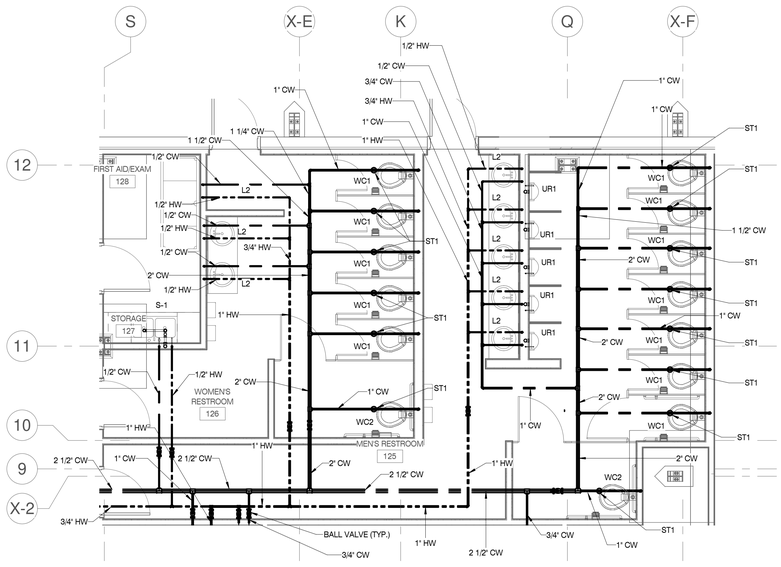


FIRST FLOOR PLAN - WATER

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

1



FIRST FLOOR PLAN - WATER

SCALE: 1/4" = 1'-0"

2

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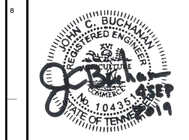

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DRAWN BY:	JEJ
REVIEWED BY:	JCB

SHEET TITLE:

FLOOR PLAN - WATER

SHEET NO.:

P102

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PLUMBING FIXTURE SCHEDULE

**TRIM PRODUCTS (STOPS, PTRAPS, SUPPLIES ETC.) SHALL BE FROM SAME MANUFACTURER. ANY CONFLICTS WITH THE SCHEDULE AND THE CONSTRUCTION DOCUMENTS SHALL BE DIRECTED TO THE ENGINEER OF RECORD A MIN THREE (3) DAYS BEFORE BID DATE. CONTRACTOR SHALL PROVIDE A MIN OF THREE (3) COPIES OF SHOP DRAWINGS FOR APPROVAL. SEE SPECIFICATIONS

EQUAL PRODUCTS AND ALTERNATE MANUFACTURERS LISTED SHALL ALSO BE CONSIDERED: SLOAN, JOSAM, LEONARD, GUARDIAN, DURA-TRENCH, OASIS, HALSEY-TAYLOR, WILLOUGHBY

ITEM	DESCRIPTION	SPECIFICATION	CW (inch)	HW (inch)	W (inch)	V (inch)	REMARKS
UR1	URINAL - HC CARRIER	ZURN, MODEL # Z5795 27"X19" WALL HUNG, WATERLESS URINAL WITH INTEGRAL TRAP AND DRAIN LINE CONNECTION, VITREOUS CHINA, WITH ZURN GREEN SEALANT REFILL MODEL #ZGS-1200Z (1 GALLON BOTTLE OF GREEN SEALANT) ZURN, MODEL # ZR-1222 SUPPORT W/BEARING PLATE.			2"	1-1/2"	
WC1	WATER CLOSET CLOSET FLANGE	ZURN, MODEL # Z5655.355.11.03.00 1.6 GPF FLOOR MOUNTED FLUSH VALVE TYPE TOILET, ELONGATED WATER CLOSET WITH AQUAVANTAGE BATTERY POWERED SENSOR FLUSH VALVE, OPEN FRONT SEAT WITH SELF SUSTAINING STAINLESS STEEL CHECK HINGE, CLOSET BOLTS AND WAX RING. (SLOAN ROYAL IS AN ACCEPTABLE SUBSITUTE. SLOAN REGAL WILL BE REJECTED) ZURN MODEL # CF2982 CAST IRON TORQUE SET CLOSET FLANGE WITH INTEGRAL TEST CAP	1"		3"	2"	
WC2	WATER CLOSET CLOSET FLANGE	ZURN, MODEL # Z5665.355.11.03.00 1.6 GPF FLOOR MOUNTED ADA HEIGHT FLUSH VALVE TYPE TOILET, ELONGATED WATER CLOSET WITH AQUAVANTAGE BATTERY POWERED SENSOR FLUSH VALVE, OPEN FRONT SEAT WITH SELF SUSTAINING STAINLESS STEEL CHECK HINGE, CLOSET BOLTS AND WAX RING. (SLOAN ROYAL IS AN ACCEPTABLE SUBSITUTE. SLOAN REGAL WILL BE REJECTED) ZURN MODEL # CF2982 CAST IRON TORQUE SET CLOSET FLANGE WITH INTEGRAL TEST CAP	1"		3"	2"	
EWC-1	ELEC. WTR. COOLER-HC SUPPLY CARRIER	ELKAY, MODEL # LZSTL8WSLK WITH EZH20 BOTTLE FILLER BARRIER FREE, BI-LEVEL, 8 GPH 115V,60HZ 4.0AMP 370 WATTS. COOLER SHALL BE ALL METAL CONSTRUCTION, WATER LINES, REFRIGERANT LINES AND SOLID CONNECTION TO DRAIN. PROVIDE IN STAINLESS STEEL. ZURN, MODEL # Z9901.000.0.07.A3.0 1-1/4" CAST BRASS P-TRAP WITH CLEANOUT, ½"NOM X 3/8"OD STOP, COPPER TUBE SUPPLY LINE AND ESCUTCHEON. ZURN, MODEL # ZR-1225 FLOOR MOUNTED SUPPORT	1/2"		1-1/4"	1-1/4"	
ST1	HAMMER ARRESTOR	ZURN, MODEL #Z-1700-100 PLUMBING DRAINAGE INSTITUTE RATING "A" (1-11 FU)					

PLUMBING FIXTURE SCHEDULE

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ITEM	DESCRIPTION	SPECIFICATION	CW (inch)	HW (inch)	W (inch)	V (inch)	REMARKS
WCO	CLEANOUT WALL PLATE	ZURN LC, MODEL #CO2413-PVC-ST 3' X 4" WALL CLEANOUT BODY AND PLUG ZURN LC, MODEL #CO2530-SS7 7" ROUND STAINLESS STEEL AQCCESS COVER W/ SECURING SCREW.					
CO	CLEANOUT	ZURN, MODEL #ZN-1400 INTERIOR FINISH FLOOR, 5" ROUND NICKEL BRONZE TOP					
ECO	CLEANOUT	ZURN LC, MODEL #CO2430-BP NEO-LOC FITTING 2"-6" CLEAN OUT BODY WITH BRONZE PLUG. SEE DRWG'S FOR SIZE					
FD1	FLOOR DRAIN TRAP GUARD TRAP	ZURN,MODEL #ZN415-S-P-Y GENERAL SERVICE DRAIN WITH 6" SQUARE STRAINER& SEDIMENT BUCKET PROSET SYSTEMS TRAP GUARD, MODEL #TG33-ZURN ZURN, MODEL #Z-1000-P DEEP SEAL TRAP			4"	1-1/2"	
HB1	ENCASED HOSE BIBB	ZURN, MODEL #Z-1320-CXL ENCASED, ECOLOTROLTM, LEAD-FREE, NON-FREEZE AUTOMATIC DRAINING WALL HYDRANT FOR FLUSH INSTALLATION. HYDRANT FEATURES INTEGRAL BACKFLOW PREVENTER WITH ANTI-SIPHON TECHNOLOGY, COPPER CASING, BRONZE AND STAINLESS STEEL INTERIOR COMPONENTS, NON-TURNING OPERATING ROD WITH FREE-FLOATING COMPRESSION CLOSURE VALVE. COMBINATION 3/4" FEMALE SOLDER AND 3/4" MALE PIPE THREAD INLET CONNECTION, AND 3/4" MALE HOSE CONNECTION. HYDRANT FURNISHED WITH CHROME-PLATED ROUGH CAST BRONZE HOUSING WITH LOCKING HINGED COVER STAMPED "WATER" AND INCLUDES OPERATING KEY.	3/4"				
IM1	ICE MAKER VALVE	WATER TITE, MODEL#W9700 10/CARTON, WHITE BOX 82088 CHROME QUARTER TURN ADAPTER BALL VALVE, 1/2" SWEAT CONNECTION	1/2"				
S-1	SINK FAUCET AND SUPPLIES	ELKAY, MODEL # LR3322PD STAINLESS STEEL DOUBLE COMPARTMENT, 18 GA. STAINLESS STEEL, 4 HOLE SINK WITH INTEGRAL DRAIN SYSTEM. ZURN, MODEL # Z9908.423.0.19.B5.0 8"CC FAUCET WITH SINGLE CONTROL, SIDE SPRAY AND 10" CAST SWING SPOUT. PROVIDED WITH 1-1/2" CAST BRASS P-TRAP WITH CLEANOUT, 1/2" NOM X 3/8" OD STOPS, 20" BRAIDED STAINLESS STEEL SUPPLY LINES AND ESCUTCHEONS.	1/2"	1/2"	1-1/2"	1-1/4"	
L1	LAVATORY - HC CARRIER	ZURN, MODEL # Z5344.519.3.07.B6.6 20" X 18" – 4"CC WALL HUNG LAVATORY, SOLID BRASS SINGLE CONTROL FAUCET, OFFEST GRID DRAIN, 1-1/4 CAST BRASS P-TRAP WITH CLEANOUT, ½"NOM X 3/8"OD STOPS, 20" BRAIDED STAINLESS STEEL SUPPLY LINES, ESCUTCHEONS AND TRAP WRAP. ZURN, MODEL # ZR-1231 FLOOR MOUNTED SUPPORT	1/2"	1/2"	1-1/4"	1-1/4"	
L2	LAVATORY - HC FAUCET DRAIN TRAP STOPS SUPPLIES ESCUTCHEONS	AMERICAN STANDARD, MODEL # 495.300 17-1/8" X 14-1/8" – 4"CC OVALYN STYLE UNDERMOUNT LAVATORY, FRONT OVERFLOW, VITREOUS CHINA, WITH MOUNTING KIT (047194-0070A) AND TEMPLATE PROFLO, MODEL #PFLL101M SINGLE LEVER CHROME FAUCET, 4" CENTER ZURN, MODEL # Z-8746 OFFSET GRID STRAINER W/ 1-1/4" TAILPIECE MCGUIRE, MODEL # PW2125 1-1/4" CAST BRASS P-TRAP W/C.O. PLUG AND MOLDED CELL INSULATION BRASS CRAFT, MODEL #0CR19C, 1/2" NOM. COMPR.X 3/8"O.D. COMPR. ZURN, MODEL # Z-8860 S.S. BRAIDED SUPPLY TUBING CONSISTING OF EPDM TUBING JACKETED BY 304 S.S. BRAID. S.S. FERRULE & NICKLE PLATED BRASS NUTS. ZURN, MODEL # Z-8948-12 SHALLOW WROUGHT BRASS POLISHED CHROME FLANGE	1/2"	1/2"	1-1/4"	1-1/4"	
MS1	MOP SINK TRAP	ZURN, MODEL # Z1996.09.215.1.04.04 24" X 24" COMPOSITE MOP BASIN W/S.S. BUMPER GUARD, MOP HANGER, HOSE AND BRACKET, 304 STAINLESS STEEL 20 GUAGE WALL SURROUND AND Z841M1-RC SERVICE SINK FAUCET WITH VACUUM BREAKER SPOUT, ¾" INTEGRAL HOSE THREADED OUTLET, PAIL HOOK AND WALL BRACE. ZURN, MODEL # Z-1000, 3" DEEP SEAL TRAP W/TRAP PRIMER Z-1022	1/2"	1/2"	3"	1-1/2"	
MV1	MIXING VALVE	SYMMONS, MODEL # 7-400 "TEMPTROL" THERMOSTATIC MIXING VALVE ALL BRONZE AND STAINLESS STEEL CONSTRUCTION. PROVIDE WITH SWIVEL STOPS, REMOVABLE CARTRIDGE WITH STRAINER, BIMETALDIAL THERMOMETER.					
RPBP-1	BACKFLOW PREVENTER PRESS. RED. VALVE PRESSURE GUAGE	WILKINS, MODEL # 975XL2TCUSAG REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER "Y" PATTERN BODY. PROVIDED WITH "Y" STAINER ON INLET SIDE OF DEVICE AND PROVIDED WITH AIRGAP AND TEST COCKS FACING UP FOR TESTER. INSTALLED HEIGHT MIN 4'-0" A.F.F. MAX 5'-0" A.F.F. WILKINS, MODEL # 500 SERIES 2-1/2" BRONZE BODY CONSTRUCTION SERVICEABLE INLINE, CAN BE INSTALLED IN ANY POSITION. INSTALL ON INLET SIDE OF RPZ BACKFLOW DEVICE. WILKINS, MODEL # 2004-25-300, 0-300 POUND GUAGE TO BE INSTALLED ON INLET AND OUTLET SIDE OF PRV.					

WATER HEATER SCHEDULE (ELECTRIC)

DRAWING SYMBOL	STORAGE CAPACITY	NUMBER OF ELEMENTS	KILOWATT PER ELEMENT	VOLTAGE	RECOVERY GPH @ 100° RISE	MANUFACTURER & MODEL #	DIMENSIONS
WH 1	80	2	4.5	208/1	20	STATE PCE 82 20RTA	24"DIAx60"H

ACCESSORIES AND FEATURES:
- ALTERNATE MANUFACTURERS: AO SMITH, LOCHINVAR, STATE IND.
- UNIT SHALL BE ASME LISTED
- PROVIDE ASSE 1016/1017 DEVICE SET AT MAX 110° F
- NON-SIMULTANEOUS OPERATION
- THERMAL EXPANSION TANK (ZURN) - WTTA-20
- DIELECTRIC UNIONS (ZURN) - DUHT
- BALL VALVES (ZURN) - 850C

RECIRCULATION PUMP SCHEDULE

DRAWING SYMBOL	HP	VOLTAGE	MOTOR RPM	WEIGHT (LBS.)	MANUFACTURER & MODEL #	SYSTEM
RCP 1	1/12	115	2650	11.6	BELL & GOSSETT PL-30B	HOT WATER RECIRCULATION

ACCESSORIES AND FEATURES:
- ALL BRONZE CIRCULATOR PUMP
- PROVIDE WITH FLANGED BALL VALVES ON INLET AND OUTLET.
- SEE SPECIFICATIONS FOR OTHER PERTINENT INFORMATION.

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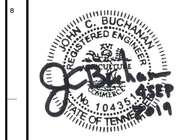

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PLUMBING SCHEDULES

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P201

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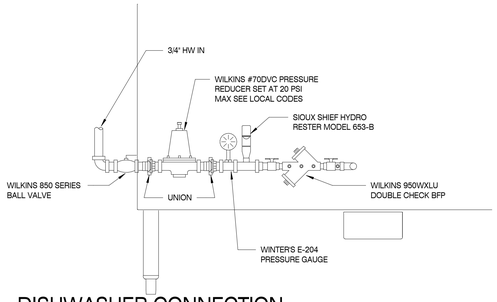
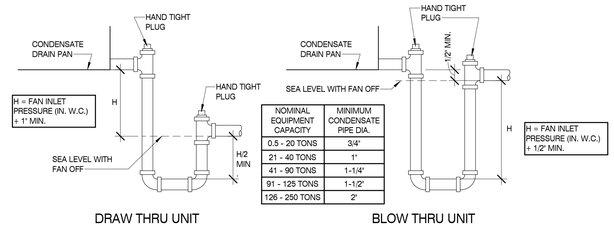


DISHWASHER CONNECTION 8

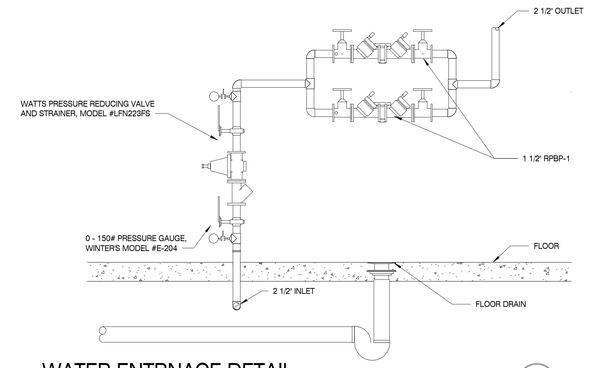
SCALE: N.T.S.



NOMINAL EQUIPMENT CAPACITY	MINIMUM CONDENSATE PIPE DIA.
0.5 - 20 TONS	3/4"
21 - 40 TONS	1"
41 - 90 TONS	1-1/4"
91 - 125 TONS	1-1/2"
126 - 250 TONS	2"

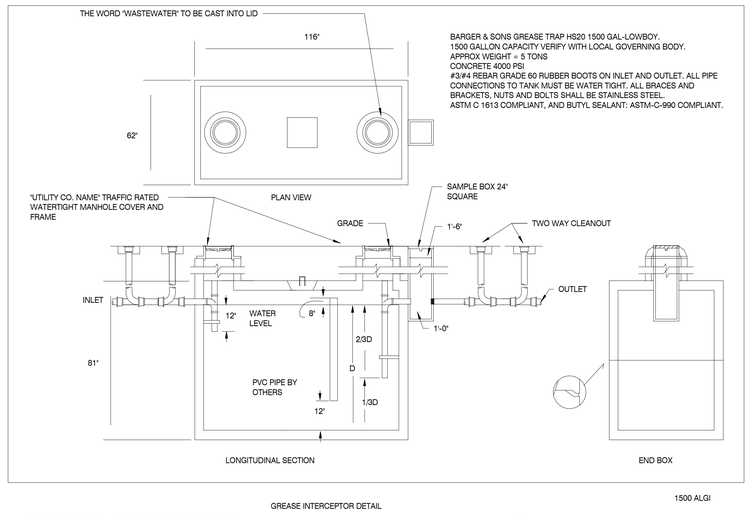
CONDENSATE TRAP DETAIL 5

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



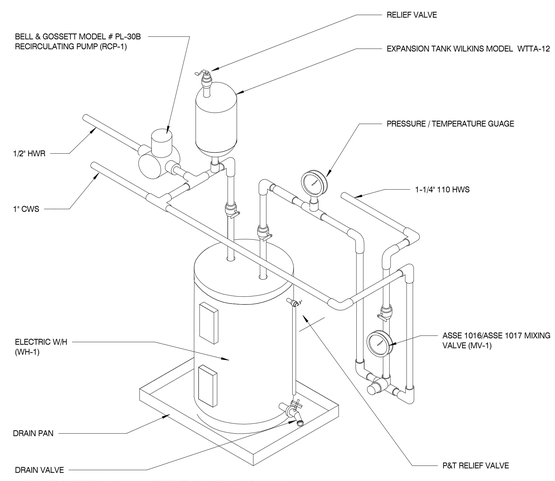
WATER ENTRNACE DETAIL 1

SCALE: N.T.S.



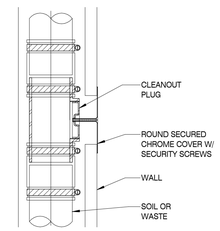
GREASE INTERCEPTOR 9

SCALE: N.T.S.



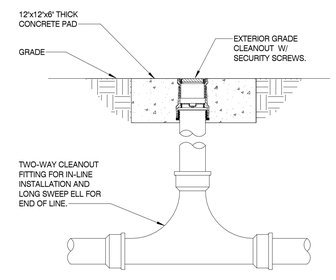
ELECTRIC WATER CIRC MIX 6

SCALE: N.T.S.



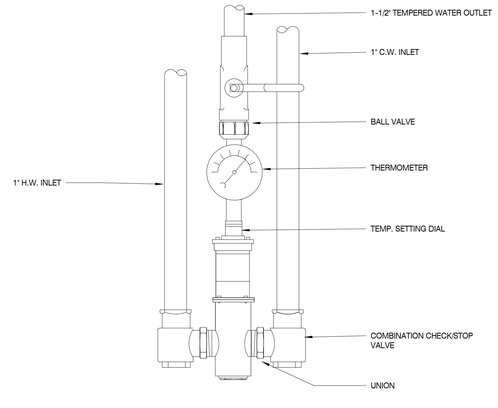
WALL CLEANOUT 2

SCALE: N.T.S.



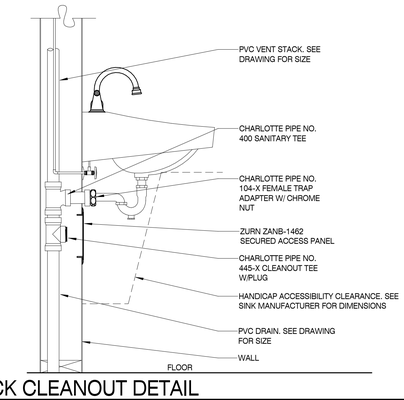
EXTERIOR GRADE CLEANOUT 3

SCALE: N.T.S.



MIXING VALVE 7

SCALE: N.T.S.



STACK CLEANOUT DETAIL 4

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

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY (943)

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	08/16/19
DESIGNED BY:	JEJ
DRAWN BY:	JEJ
REVIEWED BY:	JCB
SHEET TITLE:	

PLUMBING DETAILS

SHEET NO.:

P301

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ELECTRICAL LEGEND

"LP1"	POWER PANELBOARD "LP1" MOUNT TOP 6'-0" ABOVE FINISHED FLOOR. SEE PANELBOARD SCHEDULE FOR EQUIPMENT CONTAINED IN PANELBOARD AND PANELBOARD RATINGS.
"LP1"	DOUBLE SECTION POWER PANELBOARD "LP1" MOUNT TOP 6'-0" ABOVE FINISHED FLOOR. SEE PANELBOARD SCHEDULE FOR EQUIPMENT CONTAINED IN PANELBOARD AND PANELBOARD RATINGS.
J	JUNCTION BOX, SIZE AND USE AS REQUIRED; COVERPLATE SHALL OVERLAP THE BOX EDGE BY 1/2" WHERE RECESSED IN WALL WITH CONCEALED WIRING.
J	4" SQUARE JUNCTION BOX.
	RECESSED FOUR GANG FLOOR BOX. TWO GANGS FOR POWER AND TWO GANGS FOR DATA. PROVIDE TWO DUPLEX RECEPTACLES IN POWER GANGS, FLANGE, AND BRASS COVER PLATE. WALKER OR EQUAL.
	SPECIAL VOLTAGE OUTLET
	SINGLE RECEPTACLE - 125V, 20A, MOUNT 3" ABOVE BACKSPLASH AT WORK COUNTERS AND LAVATORIES AND +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. HUBBELL OR LEVITION COMMERCIAL SPECIFICATION GRADE, TAMPER PROOF.
IG	DUPLEX RECEPTACLE - 125V, 20A MOUNT 3" ABOVE BACKSPLASH AT WORK COUNTERS AND LAVATORIES AND +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. IG INDICATES ISOLATED GROUND TYPE WITH ORANGE COLOR. HUBBELL OR LEVITON COMMERCIAL SPECIFICATION GRADE, TAMPER PROOF.
AF	DUPLEX RECEPTACLE - AF INDICATES CIRCUIT FED VIA ARC FAULT CIRCUIT BREAKER. MOUNT 18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. PROVIDE HUBBELL OR LEVITON COMMERCIAL SPECIFICATION GRADE, TAMPER PROOF.
WP WPC GFI	DUPLEX RECEPTACLE - 125V, 20A MOUNT 3" ABOVE BACKSPLASH AT WORK COUNTERS AND LAVATORIES AND +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. GFI INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE, WP INDICATES WEATHERPROOF COVER. WPC INDICATES "CLOSED WHILE IN USE" TYPE WEATHERPROOF COVER. HUBBELL OR LEVITON COMMERCIAL SPECIFICATION GRADE, TAMPER PROOF.
WP GFI	QUADRUPLEX CONVENIENCE OUTLET - 125V, 20A MOUNT +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. HUBBELL OR LEVITON COMMERCIAL SPECIFICATION GRADE, TAMPER PROOF.
WH	MISCELLANEOUS MECHANICAL EQUIPMENT, WH=WATER HEATER, UH=UNIT HEATER
W S D C X	EXIT SIGN, "X" INDICATES FIXTURE TYPE, "C" INDICATES CEILING MOUNTED, "W" INDICATED WALL MOUNTED, "S" INDICATES SINGLE FACE, "D" INDICATES DOUBLE FACE. PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS. UNIT EQUIPED WITH BATTERY BACK-UP.
	EMERGENCY/EXIT LIGHT COMBO UNIT, BATTERY BACK-UP POWERED. WIRE UNIT TO UNSWITCHED HOT ON CIRCUITS SHOWN.
	EMERGENCY LIGHTING UNIT, BATTERY BACK-UP POWERED. WIRE UNIT TO UNSWITCHED HOT ON CIRCUITS SHOWN.
A 3a	DOWNLIGHT. "A" IS THE FIXTURE TYPE IN THE FIXTURE SCHEDULE "a" INDICATES WHICH SWITCH CONTROLS THE FIXTURE, AND "3" INDICATES WHICH PANELBOARD CIRCUIT THE FIXTURE IS FED FROM.
A 3a	DOWNLIGHT WITH BUILT IN EMERGENCY BATTERY PACK TO PROVIDE LIGHTING WHEN NORMAL POWER IS NOT AVAILABLE. PROVIDE UNSWITCHED "HOT" CONDUCTOR (FROM SAME CIRCUIT FIXTURE IS USING) TO BATTERY PACK, IN ORDER TO ALLOW NORMAL SWITCHING OF LIGHT FIXTURE WITHOUT DISCHARGING BATTERY PACK. ANY FIXTURE SYMBOL THAT HAS SHADING INDICATES THAT FIXTURE HAS AN EMERGENCY BATTERY BACK-UP.
A 3a NL	FLUORESCENT LIGHTING FIXTURE. "A" IS THE FIXTURE TYPE IN THE FIXTURE SCHEDULE "a" INDICATES WHICH SWITCH CONTROLS THE FIXTURE, AND "3" INDICATES WHICH PANELBOARD CIRCUIT THE FIXTURE IS FED FROM. "NL" INDICATES NIGHT LIGHT FIXTURE. CONNECT FIXTURE TO AN UNSWITCHED HOT SO THAT LIGHT STAYS ON AT ALL TIMES.
A 3a	FLUORESCENT LIGHTING FIXTURE WITH BUILT IN EMERGENCY BATTERY PACK TO PROVIDE LIGHTING WHEN NORMAL POWER IS NOT AVAILABLE. PROVIDE UNSWITCHED "HOT" CONDUCTOR (FROM SAME CIRCUIT FIXTURE IS USING) TO BATTERY PACK, IN ORDER TO ALLOW NORMAL SWITCHING OF LIGHT FIXTURE WITHOUT DISCHARGING BATTERY PACK. ANY FIXTURE SYMBOL THAT HAS SHADING INDICATES THAT FIXTURE HAS AN EMERGENCY BATTERY BACK-UP.
	CONDUIT UNDERGROUND, 1"C MINIMUM, UNLESS NOTED OTHERWISE.
LP1-1,3,5	HOMERUN - LP1 INDICATES PANELBOARD 1,3,5 INDICATE CIRCUIT NUMBERS. SEE PANELBOARD DESIGNATION SCHEDULE FOR ADDITIONAL INFORMATION.
	MARKS INDICATE NO. OF #12 CONDUCTORS IN 3/4" CONDUIT = #PHASE = #NEUTRAL = #GROUND NO MARKS INDICATE 2 #12, #12 GROUND. WHEN TWO OR MORE CIRCUITS SHARE A COMMON NEUTRAL THE HOT CONDUCTORS MUST BE CONNECTED TO DIFFERENT PHASES IN THE PANELBOARD.
	CATV OUTLET MOUNT 18" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. EXTEND 1" EMPTY CONDUIT FROM OUTLET BOX ABOVE CEILING AND TERMINATE WITH BUSHING. PROVIDE NYLON PULL CORD IN EACH CONDUIT. PROVIDE 4" SQUARE BOX WITH SINGLE GANG DEVICE RING.
	TELEPHONE/DATA OUTLET MOUNT 18" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. EXTEND 1" EMPTY CONDUIT FROM OUTLET BOX ABOVE CEILING AND TERMINATE WITH BUSHING. PROVIDE NYLON PULL CORD IN EACH CONDUIT. PROVIDE 4" SQUARE BOX WITH SINGLE GANG DEVICE RING.
$D	LOCAL WALL SWITCH, SINGLE POLE MOUNT +48" ABOVE FINISHED FLOOR. "D" INDICATES DIMMER SWITCH. SPECIFICATION GRADE HUBBELL OR LEVITON.
$3	LOCAL WALL SWITCH, 3 WAY, MOUNT +48" ABOVE FINISHED FLOOR
$K	LOCAL WALL SWITCH, SINGLE POLE, KEY OPERATED, MOUNT +48" ABOVE FINISHED FLOOR
$OS	LOCAL WALL MOUNTED LINE VOLTAGE OCCUPANCY SWITCH, MOUNT +48" ABOVE FINISHED FLOOR. SENSOR SWITCH MODEL NUMBER WSD OR EQUAL.
SBS	FUSED DISCONNECT SWITCH. "60" INDICATES SWITCH SIZE, "30" INDICATES FUSE SIZE. HEAVY DUTY "HP" RATED, PROVIDE NEMA 3R ENCLOURES OUTDOORS. FUSE PER NAMEPLATE OF EQUIPMENT.
30	NON-FUSED DISCONNECT SWITCH. "30" INDICATES SWITCH SIZE. HEAVY DUTY "HP" RATED, PROVIDE NEMA 3R ENCLOSURE OUTDOORS.
	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION SAME MOUNTING HEIGHT ABOVE FINISHED FLOOR AS WALL SWITCH.
1/3	A.C. MOTOR "1/3" INDICATES HORSEPOWER.
TBB	TELEPHONE BACKBOARD 4' X 4' X 3/4" THICK FIRE RESISTIVE PLYWOOD. MOUNT TOP OF THE PLYWOOD 6'-0" ABOVE FINISHED FLOOR. INSTALL #6 SOLID COPPER GROUND TO NEAREST BUILDING STEEL. PROVIDE 1-120V, 20A, DUPLEX RECEPTACLE ON DEDICATED CIRCUIT. PAINT WITH 2 COATS OF FIRE RESISTIVE PAINT.
D	DUCT SMOKE DETECTOR. 1-SUPPLY AIR DUCT, 1-RETURN AIR DUCT, SUPPLIED AND INSTALLED BY FIRE ALARM CONTRACTOR. ELECTRICAL CONTRACTOR TO WIRE THE DUCT SMOKE DETECTORS TO SHUT DOWN THE HVAC UNIT IN THE EVENT EITHER THE SUPPLY OR THE RETURN DUCT SMOKE DETECTOR GOES INTO ALARM. PROVIDE REMOTE TEST STATION IN AN ACCESSIBLE LOCATION, MOUNTED BELOW UNIT AT 48" A.F.F.
F	FIRE ALARM PULL STATION MOUNT 48" AFF.
75cd L	WALL MOUNTED FIRE ALARM COMBINATION AUDIO/VISUAL HORN STROBE DEVICE. MOUNT 80" A.F.F. 75cd INDICATES 75 CANDELAS
75cd L	CEILING MOUNTED FIRE ALARM COMBINATION AUDIO/VISUAL HORN STROBE DEVICE. MOUNT 80" A.F.F. 75cd INDICATES 75 CANDELAS
S	CEILING MOUNTED FIRE ALARM SMOKE DETECTOR.
H	CEILING MOUNTED FIRE ALARM HEAT DETECTOR.
V	CEILING MOUNTED FIRE ALARM VISUAL ONLY STROBE DEVICE. MOUNT 80" A.F.F.
TS	FIRE ALARM TAMPER SWITCH.
FS	FIRE ALARM FLOW SWITCH.
FACP	FIRE ALARM CONTROL PANEL, MOUNT TOP 6'-0" A.F.F. PROVIDE TWO DEDICATED PHONE LINES FOR FIRE ALARM CONTROL PANEL.
RAP	REMOTE ANNUNCIATOR PANEL - FIRE ALARM, MOUNT TOP 6'-0" A.F.F.

ELECTRICAL LEGEND CONT.

DH	DOOR HOLDER - OPERATED THROUGH FIRE ALARM SYSTEM. DOORS REMAIN OPEN UNTIL SMOKE ISDETECTED BY SMOKE DETECTORS ADJACENT TO THE DOORS OR LOSS OF POWER.
CR	SECURITY SYSTEM CARDREADER.
KP	SECURITY SYSTEM KEYPAD.
	SECURITY SYSTEM CAMERA.
	CLOCK: CLOCK SYSTEM SHALL BE PRIMEX OR EQUAL AS FOLLOWS: TRANSMITTER PRIMEX 14000 OR EQUAL, 1 WATT MINIMUM WITH ATTACHED INTERNAL ANTENNA CLOCKS PRIMEX 14155 OR EQUAL, ANALOG, 12.5" DIAMETER, BLACK, 5 YEAR MAINTENANCE FREE BATTERY OPERATED
	PA SPEAKER. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
	EXTERIOR PA SPEAKER. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.

ELECTRICAL ABBREVIATIONS

A	AMPERES	FWE	FURNISHED WITH EQUIPMENT	N.C.	NORMALLY CLOSED
AC	ALTERNATING CURRENT	G	GROUNDING CONDUCTOR	N.I.C.	NOT IN CONTRACT
AF	ARC FAULT	GFI	GROUND FAULT INTERRUPTER	N.O.	NORMALLY OPEN
A.F.F.	ABOVE FINISHED FLOOR	HP	HORSEPOWER	NEC	NATIONAL ELECTRIC CODE
AWG	AMERICAN WIRE GAUGE	JB	JUNCTION BOX	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CKT	CIRCUIT	KCM	THOUSANDS OF CIRCULAR MILS	PH	PHASE
DC	DIRECT CURRENT	KV	KILOVOLTS	TYP.	TYPICAL
DISC	DISCONNECT	KVA	KILOVOLT-AMPERES	V	VOLT
DWG.	DRAWING	KW	KILOWATTS	W	WATT
ELEC.	ELECTRICAL/ELECTRIC	LTG	LIGHTING	WP	WEATHERPROOF
EWC	ELECTRIC WATER COOLER	N	NEUTRAL CONDUCTOR	WPC	"CLOSED WHILE IN USE" TYPE WEATHERPROOF COVER

FIRE ALARM SYSTEM NOTES

1. A) FURNISH AND INSTALL A COMPLETE ADDRESSABLE FIRE DETECTION AND EVACUATION SYSTEM. THE ENTIRE INSTALLATION SHALL CONFORM TO THE APPLICABLE SECTIONS OF NFPA-72, NATIONAL FIRE ALARM CODE. NFPA-101 LIFE SAFETY CODE, N.E.C. ARTICLE 760, THE AMERICANS WITH DISABILITIES ACT, AND LOCAL AUTHORITIES HAVING JURISDICTION. SUBSTITUTES FOR APPROVAL MUST MEET THE COMPLETE FUNCTIONALITY REQUIREMENTS AS SET FORTH IN THESE SPECIFICATIONS.

   B) DUE TO THE NATURE OF FIRE MARSHALL ACTIONS, INCLUDE AN ALLOWANCE OF AN ADDITIONAL 10% OF THE ORIGINAL JOB A/V DEVICE QUANTITIES TO BE INSTALLED AT THE DISCRETION OF THE LOCAL FIRE MARSHALL.

2. THE FIRE ALARM EQUIPMENT SUPPLIER SHALL BE AN ALARM SYSTEMS CONTRACTOR LICENSED BY THE STATE OF ALABAMA AND SHALL INCLUDE A COPY OF THE LICENSE IN THE EQUIPMENT SUBMISSIONS. THE CONTRACTOR SHALL HAVE NICET CERTIFIED EMPLOYEES FOR THE SALE, SUPERVISION AND FINAL TESTING OF THE EQUIPMENT AND SHALL INCLUDE A COPY OF THE CERTIFICATE OF AT LEAST ONE EMPLOYEE IN THE EQUIPMENT SUBMISSIONS.

3. THE FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE NEED FOR ADDITIONAL CABINETS, BATTERIES, POWER SUPPLIES, PROGRAMMING, AND ANY ADDITIONAL HARDWARE OR SOFTWARE FOR A COMPLETE INSTALLATION AND EXPANSION. INCLUDE ALL COST IN ORIGINAL BID.

4. SUBMISSIONS:
   A) COMPLETE DESCRIPTIVE DATA INCLUDING U.L. LISTING FOR ALL COMPONENTS.
   B) COMPLETE CAD DRAWINGS OF THE PROPOSED SYSTEM SHOWING CONDUIT LAYOUT, WIRE COUNT AND DEVICE LOCATIONS.

5. ALL FIRE ALARM SYSTEM WIRING SHALL REMAIN SEPARATE FROM OTHER BUILDING SYSTEMS WIRING AND SHALL BE IN CONDUIT. ALL JUNCTION BOXES SHALL BE SPRAYED RED AND LABELED "FIRE ALARM". WIRING COLOR SHALL BE MAINTAINED THROUGHOUT THE INSTALLATION.

6. TESTING:
   A) THE COMPLETED SYSTEM SHALL BE FULLY TESTED BY THE FIRE ALARM CONTRACTOR AND THE MANUFACTURER'S NICET CERTIFIED TECHNICAL REPRESENTATIVE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. UPON COMPLETION OF A SUCCESSFUL TEST, THE FIRE ALARM CONTRACTOR SHALL VERIFY IN WRITING TO THE OWNER, ARCHITECT, AND GENERAL CONTRACTOR.
   B) THE FOLLOWING TEST SHALL BE PREFORMED BY THE FIRE ALARM MANUFACTURER'S AUTHORIZED REPRESENTATIVE. EACH AND EVERY DEVICE SHALL BE TESTED FOR IT'S INTENDED FUNCTION. VERIFY THAT EACH DEVICE IS LOCATED IN ITS APPROPRIATE LOCATION. WRITTEN VERIFICATION OF THIS TEST SHALL BE PROVIDED TO THE OWNER, ARCHITECT, AND GENERAL CONTRACTOR. THIS TEST SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 72.

7. WARRANTY:
   THE EQUIPMENT AND WIRING SHALL BE WARRANTED TO BE FREE FROM ELECTRICAL AND MECHANICAL DEFECTS FOR A PERIOD OF ONE (1) YEAR COMMENCING WITH START-UP AND OWNERS BENEFICIAL USE OF THE COMPLETED SYSTEM. WARRANTY SHALL INCLUDE ALL LABOR/TRAVEL TIME AND PARTS.

8. MONITORING:
   INCLUDE IN THE BID THE COST OF ONE YEAR OF MONITORING OF THE FIRE ALARM SYSTEM BY A U.L. APPROVED MONITORING COMPANY.

9. CERTIFICATION:
   PROVIDE U.L. THIRD PARTY CERTIFICATION OF ENTIRE INSTALLED SYSTEM, PER AUTHORITY HAVING JURISDICTION'S CODE REQUIREMENTS.

PANELBOARD DESIGNATION

PANELBOARD DESIGNATION	CODE
HIGH VOLTAGE 277/480V	H
HIGH VOLTAGE 277/480V EMERGENCY	EH
HIGH VOLTAGE 277/480V POWER CONDITIONED	CH
LINE VOLTAGE 120/208V	L
LINEVOLTAGE 120/208V EMERGENCY	EL
LINE VOLTAGE 120/208V POWER CONDITIONED	CL
UNINTERRUPTIBLE POWER SOURCE	UPS

PANELBOARD NUMBER — PANELBOARD DESIGNATION — CIRCUIT NUMBER(S)

L1A-1,3,5

GENERAL ELECTRICAL NOTES

1. ELECTRICAL DRAWINGS ARE PARTIALLY DIAGRAMMATIC. IN THE EVENT THAT THERE IS A DISCREPANCY OR THERE ARE ITEMS THAT ARE UNCLEAR, IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE ENGINEER FOR CLARIFICATION. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND HVAC DRAWINGS FOR GUIDANCE ON DIMENSIONS, CEILING HEIGHTS, DOOR SWINGS, ROOM FINISHES, STRUCTURAL AND ARCHITECTURAL DETAILS, LOCATIONS OF DUCTS, PIPES AND STRUCTURAL STEEL. INSTALL THE ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH DUCTS, PIPES, STRUCTURAL STEEL OR OTHER SYSTEMS. LOCATE LIGHTING SYMMETRICALLY IN PROPER RELATION TO FINISHED AREAS EXCEPT WHERE DIMENSIONED ON THE DRAWINGS OR LOCATED ON REFLECTED CEILING PLANS.

2. SCOPE: FURNISH ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO INSTALL ALL ELECTRICAL WORK INDICATED ON DRAWINGS, AS SPECIFIED HEREIN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND ALL STATE, AND CITY CODES.

3. PROVIDE ADDITIONAL SUPPORTS FOR SWITCHES, PANELBOARDS, RACEWAYS TRANSFORMERS, CABLE TRAYS AND OTHER ELECTRICAL EQUIPMENT WHERE THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING. ALL OTHER SUPPORTS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.

4. A NUMERAL BESIDE A BRANCH CIRCUIT OUTLET ON WIRING PLANS INDICATES PANELBOARD BRANCH CIRCUIT CONNECTION. A LOWER CASE LETTER BESIDE AN OUTLET INDICATES THE SWITCH LEG CONNECTION WHERE OUTLETS ARE LOCALLY SWITCHED.

5. SYMBOLS IN THE LEGENDS ARE APPLICABLE GENERALLY. FOR EXACT REQUIREMENTS REFER TO THE SCHEDULES, LAYOUTS, DETAILS AND SPECIFICATIONS SINCE THE APPEARANCE OF A PARTICULAR SYMBOL IN THE LEGEND DOES NOT NECESSARILY IMPLY THAT THE ITEM IS INCLUDED IN THE CONTRACT.

6. MOUNT GROUPED DEVICES IN A SINGLE CONTINUOUS GANG BOX. USE PARTITIONS WHERE VOLTAGE BETWEEN EXPOSED LIVE PARTS OF ADJACENT SWITCHES MAY EXCEED 300 VOLTS.

7. VERIFY CEILING SUSPENSION SYSTEMS IN THE VARIOUS AREAS AND PROVIDE THE PROPER MOUNTING ACCESSORIES, TRIMS, ETC. TO SUIT THE PARTICULAR AREA.

8. PROVIDE SEAL FITTINGS IN CONDUITS THAT ENTER CONDITIONED AREA FROM NON-CONDITIONED AREAS.

9. ANY CONDUIT AND BOXES FOR HVAC CONTROL WIRING IS INCLUDED IN THIS SCOPE OF WORK. SEE MECHANICAL PLANS FOR LOCATIONS, TYPE AND QUANTITY OF CONTROL DEVICES.

10. ALL CONDUCTORS ARE COPPER. THHN/THWN 600 VOLT INSULATION. USE SOLID CONDUCTORS FOR WIRE SIZES #10 AWG AND SMALLER. USE STRANDED FOR WIRE NO. 8 AWG AND LARGER. MINIMUM WIRE SIZE IS #12 AWG. CONDUIT IS EMT (1/2" MINIMUM) WITH COMPRESSION FITTINGS UNLESS OTHERWISE NOTED. NO "NM" & "MC" CABLE ALLOWED. MULTIWIRE BRANCH CIRCUITS SHALL NOT BE USED. INSTALL A SEPARATE GROUNDED CONDUCTOR (NEUTRAL) FOR EACH CIRCUIT.

11. MAINTENANCE MANUALS AND INSTRUCTIONS: FURNISH THREE (3) SETS OF OPERATING INSTRUCTIONS FOR ANY ELECTRICAL EQUIPMENT INSTALLED.

12. ALL ELECTRICAL EQUIPMENT AND INSTALLATION WORK SHALL HAVE A ONE YEAR (1) WARRANTY. FURNISH WARRANTY SO THE DEFECTIVE MATERIALS AND/OR WORKMANSHIP SHALL BE REPAIRED/REPLACED IMMEDIATELY UPON NOTIFICATION AT NO COST TO THE OWNER FOR THE PERIOD OF THE WARRANTY.

13. ANY CONDUIT AND/OR CABLE TRAY PENETRATIONS THROUGH ANY FIRE WALL OR FLOOR SHALL BE FIRESTOPPED EQUAL TO OR GREATER THAN THE RATING OF THE FIRE WALL OR FLOOR THAT THEY PASS THROUGH. USE ONLY UL APPROVED METHODS AND ASSEMBLIES. RECEPTACLES LOCATED ON OPPOSITE SIDES OF A FIRE BARRIER SHALL BE SEPERATED BY A MINIMUM HORIZONTAL DISTANCE OF 2'0".

14. PERMITS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, FEES INSPECTIONS, AND POWER COMPANY AID TO COMPLETE WORK SHOWN. INCLUDE ALL POWER COMPANY COSTS IN BID.

15. CONDUCTOR COLOR CODING: PROVIDE COLOR CODING FOR ALL BRANCH CIRCUIT CONDUCTORS THROUGHOUT THE PROJECT AS FOLLOWS:

PHASE	120/208 VOLT	480/277 VOLT
A	BLACK	BROWN
B	RED	ORANGE
C	BLUE	YELLOW
NEUTRAL	WHITE	NATURAL GREY
GROUND	GREEN	GREEN

16. CUTTING AND PATCHING: PROVIDE ALL CUTTING REQUIRED TO DO THE WORK. DO NOT CUT ANY STRUCTURAL ELEMENT WITHOUT APPROVAL. PATCHING SHALL BE OF QUALITY EQUAL TO AND MATCHING APPEARANCE OF EXISTING CONSTRUCTION. DO NOT CUT ANY STRUCTURAL ELEMENT WITHOUT APPROVAL.

17. GROUNDING: AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 250. INSTALL A SEPARATE GROUNDING CONDUCTOR IN SAME CONDUIT AS PHASE AND NEUTRAL CONDUCTOR FOR ALL BRANCHES AND FEEDERS UNLESS OTHERWISE NOTED.

18. WIRING DEVICES AND PLATES: SWITCHES SHALL BE HUBBELL OR LEVITON 20A 125VOLT AC COMMERCIAL SPECIFICATION GRADE. COLOR GRAY UNLESS NOTED OTHERWISE. USE STEEL COVER PLATES IN UNFINISHED AREAS AND MATCHING NYLON COVER PLATES IN FINISHED AREAS. ORANGE COLORED RECEPTACLES SHALL BE USED FOR THE ISOLATED GROUND "IG" RECEPTACLES.

19. SAFETY SWITCHES: USE HEAVY DUTY TYPE FUSIBLE OR NON-FUSIBLE AS REQUIRED. NEMA TYPE 1 INDOORS AND NEMA TYPE 3R FOR OUTDOORS. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL WHERE SHOWN OR REQUIRED BY CODE.

20. FUSES: USE DUAL ELEMENT, CURRENT LIMITING, TIME DELAY TYPE OR AS SPECIFIED BY EQUIPMENT SUPPLIER.

21. PANELBOARDS: USE PANELBOARDS WITH BOLT ON TYPE BREAKERS ONLY. PANELBOARDS SHALL HAVE SEPARATE NEUTRAL AND GROUND BUSSES. PANELBOARDS SHALL BE 20" WIDE EQUIVALENT TO SQUARE D "NQOD" OR I LINE UNLESS OTHERWISE SPECIFIED. PROVIDE TYPED DIRECTORY CARDS FOR EACH PANELBOARD INSTALLED.

22. COORDINATION: COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES AND LOCAL UTILITY COMPANY. COORDINATE METERING REQUIREMENTS WITH LOCAL ELECTRICAL UTILITY COMPANY.

23. EQUIPMENT: CONNECT ALL ELECTRICALLY OPERATED EQUIPMENT INCLUDING HVAC. USE NEMA 3R DEVICES OUTDOORS. VERIFY LOADS AND LOCATIONS OF EQUIPMENT BEFORE CONNECTION. SIZE BREAKERS, DISCONNECTS, AND FUSES ACCORDING TO THE EQUIPMENT NAMEPLATE. SIZE WIRE ACCORDING TO THE NEC. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE EQUIPMENT SUPPLIED BY THE MECHANICAL CONTRACTOR AND OTHER TRADES AND SHALL BE RESPONSIBLE FOR MODIFYING THE CONNECTIONS WIRE, DISCONNECTS, BREAKERS, ETC. SHOWN ON THE DRAWINGS IN ORDER TO MAKE A COMPLETE INSTALLATION AND TO SATISFY THE MANUFACTURER'S REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL SUPPLY ALL LABOR AND MATERIALS TO COMPLETE THE INSTALLATION.

24. RECORD DRAWINGS: MAINTAIN A RECORD SET OF ALL CHANGES DURING CONSTRUCTION. RECORD CHANGES ON A CLEAN SET OF CONTRACT CONSTRUCTION DOCUMENTS WHICH SHALL BE TURNED OVER TO THE OWNER UPON COMPLETION OF THE PROJECT.

25. IDENTIFICATION: IDENTIFY ALL MAJOR PIECES OF ELECTRICAL EQUIPMENT INSTALLED ON THE PROJECT. EXAMPLES INCLUDE PANELBOARDS, MOTOR STARTERS, DISCONNECTS, AND CONTROL PANELS. IDENTIFY WITH PERMANENT PLASTIC NAMEPLATES.

26. SUBMITTALS: UNLESS INSTRUCTED OTHERWISE THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUBMITTING FOUR (4) SETS OF SHOP DRAWINGS ON MAJOR PIECES OF ELECTRICAL EQUIPMENT. SUCH EQUIPMENT INCLUDES PANELBOARDS, LIGHTING, SWITCHGEAR, SECONDARY SYSTEMS, MOTOR CONTROLS, ETC. APPROVAL FROM THE ENGINEER OF EQUIPMENT MUST BE OBTAINED BEFORE PURCAHSE AND INSTALLATION OF ELECTRICAL EQUIPMENT.

27. TEMPORARY POWER AND LIGHTING: ARRANGE FOR TEMPORARY ELECTRIC SERVICE AS REQUIRED FOR THE ENTIRE PROJECT DURING CONSTRUCTION. PROVIDE A MINIMUM OF ONE DUPLEX GFCI OUTLET FOR EACH 500 SQUARE FEET OF FLOOR AREA. ARRANGE FOR PERMANENT ELECTRICAL SERVICE AND FOR ORDERLY TRANSFER BETWEEN TEMPORARY AND PERMANENT ELECTRICAL SERVICES. PROVIDE GFCI PROTECTION AND LAMP GUARDS AS REQUIRED BY THE NEC.

   MINIMUM TEMPORARY LIGHTING LEVELS:

   ONE LAMP HOLDER FOR EACH 150 SQUARE FEET OF FLOOR SPACE. MINIMUM ONE PER ROOM.
   ONE LAMP HOLDER AT EACH STAIR LANDING AND FLOOR.
   ONE LAMP HOLDER AT 20" CENTERS IN INTERIOR CORRIDORS. MINIMUM ONE PER CORRIDOR.

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW
SHEET TITLE:	

ELECTRICAL LEGEND AND GENERAL NOTES

SHEET NO.:

E001

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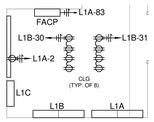
GENERAL SHEET NOTES

1. SEE SHEET E001 FOR ELECTRICAL LEGEND AND GENERAL NOTES.

⬡ KEYED SHEET NOTES

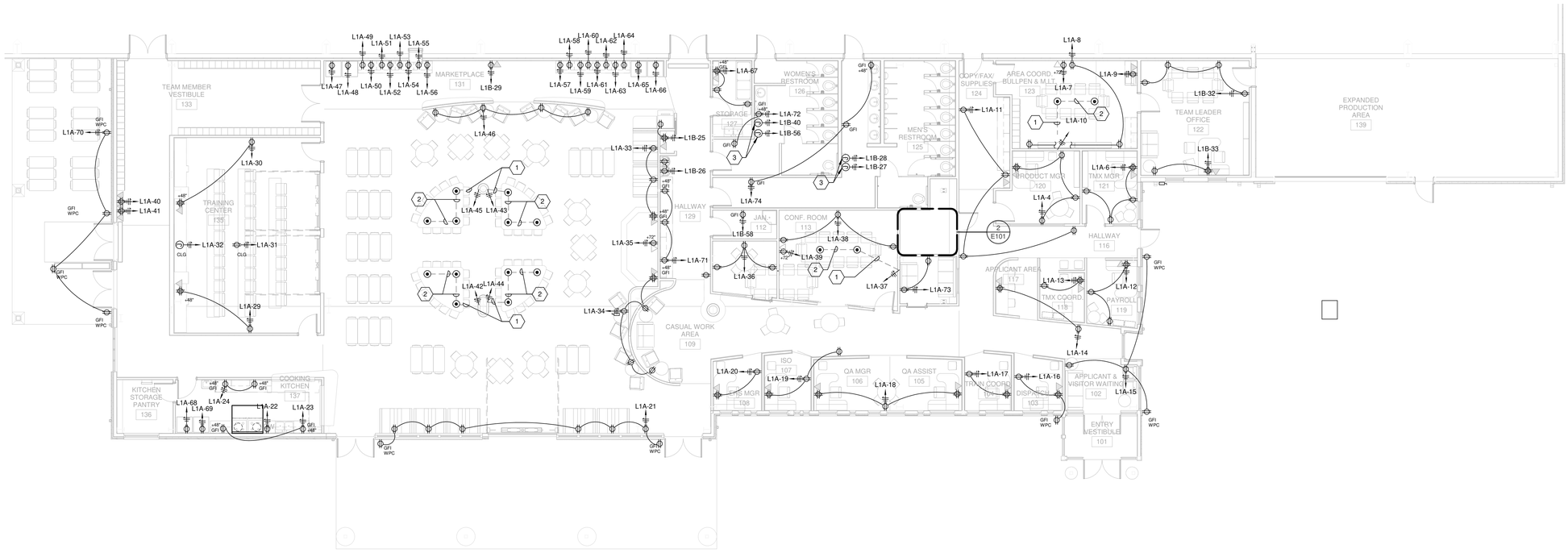
1. TWO 1" CONDUITS RUN UNDERGROUND TO NEAREST WALL OR COLUMN AND STUBBED ABOVE CEILING. ONE CONDUIT FOR DATA AND ONE FOR POWER.
2. TWO 1" CONDUITS WITH PULL STRING RUN UNDER TABLE SURFACE TO STUB POINT.
3. JUNCTION BOX FOR ELECTRIC HAND DRYERS. COORDINATE WITH HAND DRYER SUPPLIER AND OWNER FOR FINAL LOCATION.



FLOOR PLAN - POWER - Callout 1

SCALE: 1/4" = 1'-0"

2



FLOOR PLAN - POWER

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

1

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

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- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW
SHEET TITLE:	

FLOOR PLAN - POWER

SHEET NO.:

E101

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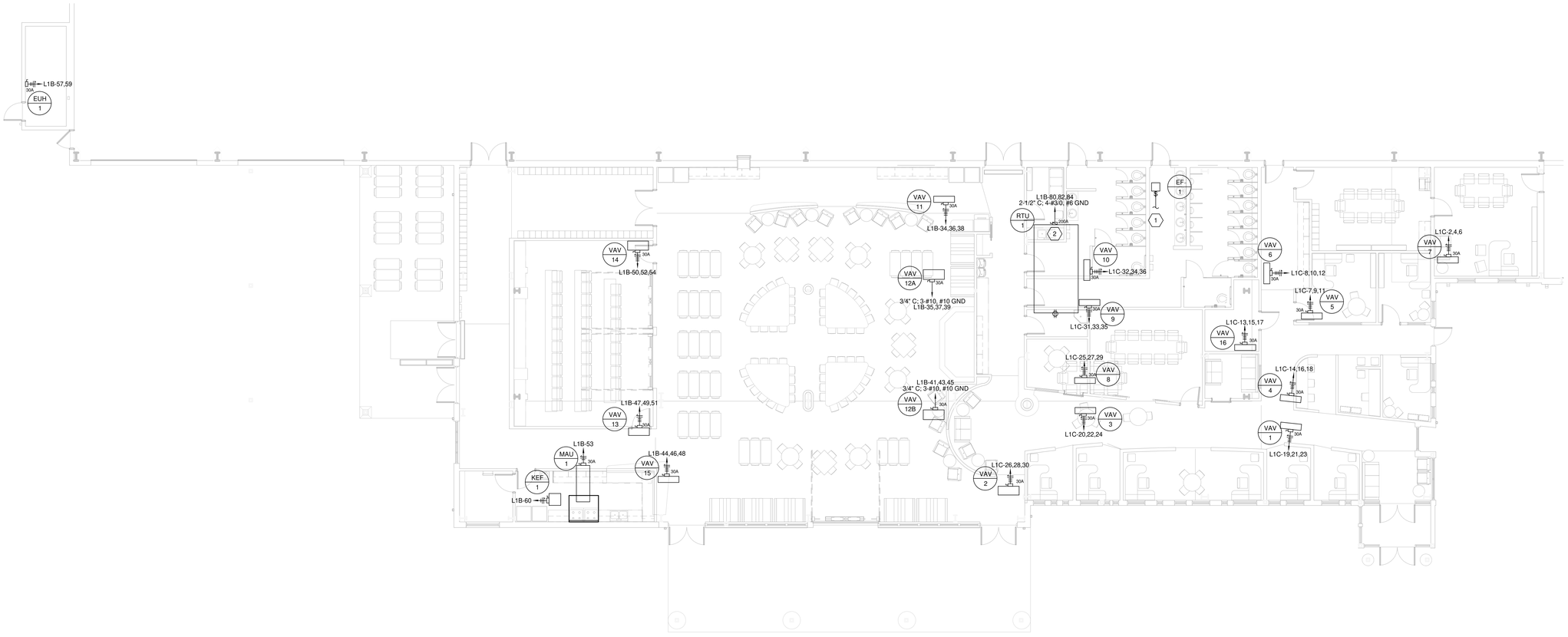
GENERAL SHEET NOTES

1. SEE SHEET E001 FOR ELECTRICAL LEGEND AND GENERAL NOTES.

⬡ KEYED SHEET NOTES

1. CONNECT TO NEAREST 120-VOLT LIGHTING CIRCUIT.
2. FUSE PER MANUFACTURER NAMEPLATE DATA.



FLOOR PLAN - HVAC POWER AND FIRE ALARM

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

1

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW

SHEET TITLE:

FLOOR PLAN - HVAC POWER AND FIRE ALARM

SHEET NO.:

E102

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LIGHTING FIXTURE SCHEDULE

TYPE	LAMP TYPE	LAMP NO.	WATTS	VOLTAGE	MOUNTING	HEIGHT	MANUFACTURER	MODEL	COMMENTS
A	LED			120	SUSPENDED	9' 0"	PEERLESS	VMM9-LLP-4FT-MSL4-80CRI-35K-ID1100L MF-60/40-DARK-ZT-120-SCT-F1/24A-C110	
AE	LED			120	SUSPENDED	9' 0"	PEERLESS	VMM9-LLP-4FT-MSL4-80CRI-35K-ID1100L MF-60/40-DARK-ZT-120-SCT-1E10WLCP-F 1/24A-C110	BATTERY BACK-UP
B	LED			120	RECESSED	CEILING	LITHONIA	2BLT2-40L-ADSM-EZ1-LP835	
BE	LED			120	RECESSED	CEILING	LITHONIA	2BLT2-40L-ADSM-EZ1-LP835-EL7L	BATTERY BACK-UP
C	LED			120	SUSPENDED	9' 0"	WINONA	CANVIS-HZM-63LONG-29WIDE-18HIGH-PM-OLEDA1-4300LM-35K-MVOLT-DIMR	
E	LED	-	6W	120	SURFACE	CEILING	LITHONIA	LHQM-S-W-3-R-H0R0	EXIT SIGN W/BATTERY BACK-UP
F	LED			120	SUSPENDED	9' 0"	BIG ASS FANS	FR150A-U0-F1-0-3H03-02-0258-258P010	FINAL FINISH TO BE SPECIFIED BY OWNER
L									
P	LED			120	SUSPENDED	9' 0"	WINONA	WFP61603-36DIA-POLDI-LDP1A-40K-MVOLT-ID-OAE-BA	
S	LED			120	WALL	8' 0"	EATON	9002-W2-RW-LED-4080-M-M-CS-L1-UNV-RSM	
T	LED			120	SUSPENDED	9' 0"	STONE	DA202-FR-SN-D6-R	NOTE 5
X	LED			120	WALL	8' 0"	LITHONIA	AFN-B-PREM	BATTERY BACK-UP

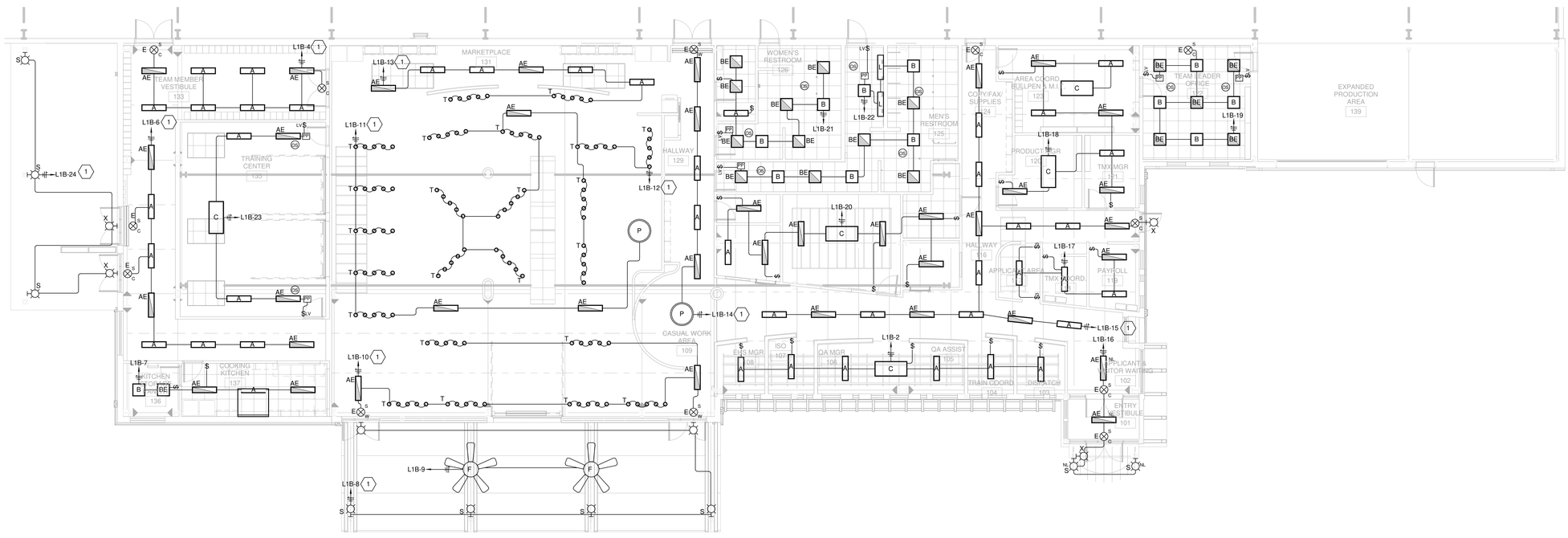
NOTES:
1. FURNISH AND INSTALL LAMPS FOR ALL FIXTURES.
2. VERIFY ALL CEILING TYPES BEFORE STARTING ANY WORK. SEE ARCHITECTS REFLECTED CEILING PLAN FOR CEILING TYPES.
3. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES FOR A COMPLETE INSTALLATION OF ALL LIGHTING FIXTURES.
4. PROVIDE ALL NECESSARY EQUIPMENT FOR LOW VOLTAGE LIGHTING AND CONTROLS, SUCH ITEMS WOULD INCLUDE TRANSFORMERS, POWER PACKS, AND CABLING.
5. TO BE MOUNTED ON MSRL96-SN-96" STRAIGHT TO BE FACTORY BENT PER DRAWINGS.

GENERAL SHEET NOTES

1. SEE SHEET E001 FOR ELECTRICAL LEGEND AND GENERAL NOTES.

⬡ KEYED SHEET NOTES

1. CONTROLLED VIA LIGHTING CONTROL PANEL.



FLOOR PLAN - LIGHTING

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

1

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE

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- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW
SHEET TITLE:	

FLOOR PLAN - LIGHTING

SHEET NO.:

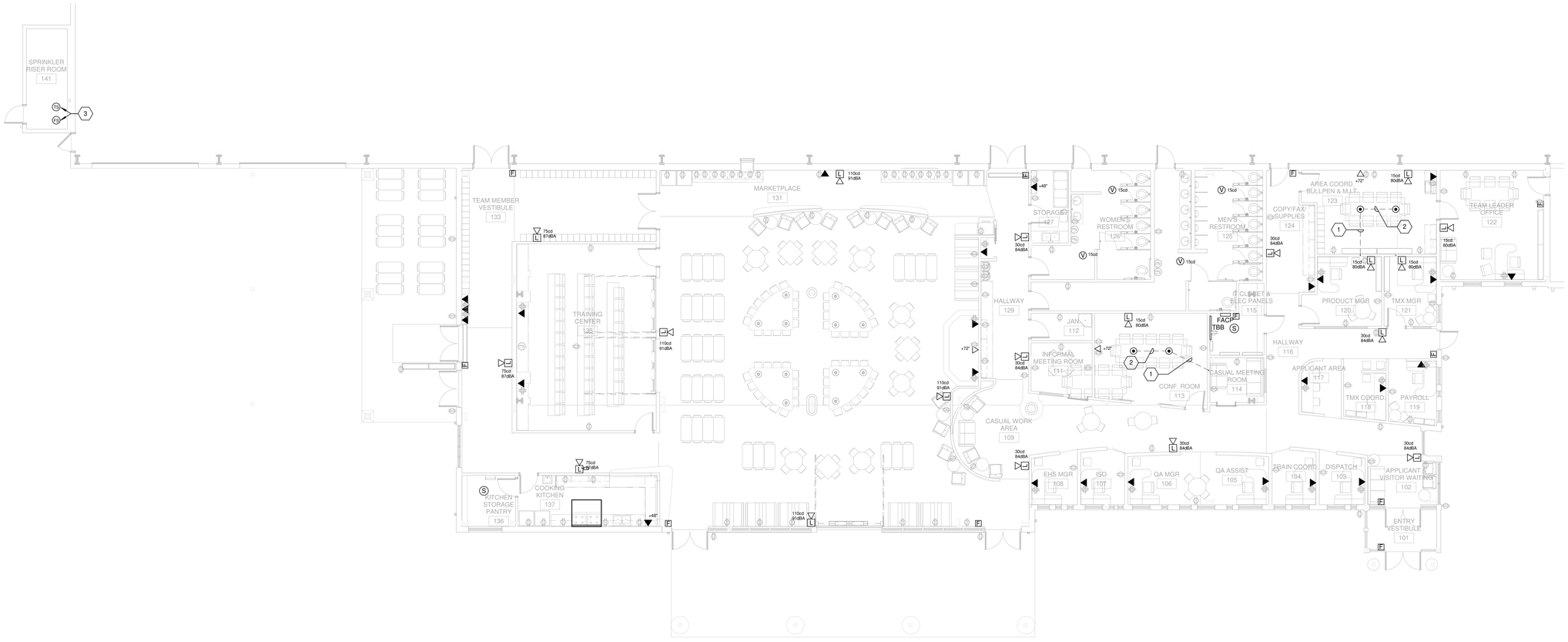
E201

GENERAL SHEET NOTES

1. SEE SHEET E001 FOR ELECTRICAL LEGEND AND GENERAL NOTES.
2. SEE SHEET E102 FOR ADDITIONAL FIRE ALARM DEVICES.

⬡ KEYED SHEET NOTES

1. TWO 1" CONDUITS RUN UNDERGROUND TO NEAREST WALL OR COLUMN AND STUBBED ABOVE CEILING. ONE CONDUIT FOR DATA AND ONE FOR POWER.
2. TWO 1" CONDUITS WITH PULL STRING RUN UNDER TABLE SURFACE TO STUB POINT.
3. TAMPER AND FLOW SWITCHES. COORDINATE WITH MECHANICAL CONTRACTOR FOR FINAL LOCATION.



FLOOR PLAN - COMMUNICATION AND FIRE ALARM

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

1

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ALABAMA LICENSED No. 25274 PROFESSIONAL ENGINEER 7/11/19 SVEN VINCENT WALTHER

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CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:

18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

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- ■ CONSTRUCTION DOCUMENTS
- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW

SHEET TITLE:

FLOOR PLAN - COMMUNICATIONS AND FIRE ALARM

SHEET NO.:

E301

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CONDUIT AND WIRE DESIGNATION SCHEDULE

#	WIRE/BKR MAX AMPS	CONDUIT AND WIRE DESCRIPTION	#	WIRE/BKR MAX AMPS	CONDUIT AND WIRE DESCRIPTION
1	20	2#12, 3/4"C	32	200	2#3/0, 1#6G,2"C
2	20	2#12, 1#12G, 3/4"C	33	200	3#3/0, 1#6G, 2"C
3	20	3#12,1#12G, 3/4"C	34	200	4#3/0, 1#6G, 2 1/2"C
4	20	4#12, 1#12G, 3/4"C	35	230	2#4/0, 1#4G,2"C
5	30	2#10, 1#10G, 3/4"C	36	230	5#4/0, 1#4G, 3"C
6	30	3#10, 1#10G, 3/4"C	37	230	4#4/0, 1#4G,2-1/2"C
7	30	4#10, 1#10G, 3/4"C	38	255	3#250KCM,1#4G, 2-1/2"C
8	40	2#8, 1#10G, 3/4"C	39	255	4#250KCM, 1#4G,2-1/2"C
9	40	3#8, 1#10G, 3/4"C	40	285	3#300KCM, 1#4G, 3"C
10	40	4#8, 1#10G, 3/4"C	41	285	4#300KCM,1#4G,3"C
11	55	2#6, 1#10G, 3/4"C	42	310	3#350KCM,1#3G, 2-1/2"C
12	55	3#6, 1#10G, 3/4"C	43	310	4#350KCM, 1#3G, 3"C
13	55	4#6, 1#10G, 1"C	44	380	3#500KCM, 1#3G, 3"C
14	70	2#4, 1#8G, 1"C	45	380	4#500KCM,1#3G,3-1/2"C
15	70	3#4, 1#8G, 1-1/4"C	46	420	4#600KCM,1#3G.,4"C
16	70	4#4, 1#8G, 1-1/4"C	47	510	2 SETS,EA:4#250KCM,1#1G,2-1/2"C
17	85	2#3, 1#8G, 1-1/4"C	48	620	2 SETS,EA: 4#350KCM,1#1/0G,3"C
18	85	3#3, 1#8G, 1-1/4"C	49	760	2 SETS,EA: 4#500KCM, 1#1/0G,3-1/2"C
19	85	4#3, 1#8G, 1-1/4"C	50	840	2 SETS, EA: 4#600KCM,1#1/0G, 4"C
20	95	2#2, 1#8G, 1-1/4"C	51	840	2 SETS, EA: 5#600KCM,1#1/0G, 4"C
21	95	3#2, 1#8G, 1-1/4"C	52	1005	3 SETS, EA: 4#400KCM,1#3/0G,3"C
22	95	4#2, 1#8G, 1-1/4"C	53	1140	3 SETS,EA:4#500KCM,1#3/0G, 4"C
23	130	2#1, 1#6G, 1-1/4"C	54	1240	4 SETS,EA: 4#350KCM,1#4/0G,3"C
24	130	3#1, 1#6G, 1-1/4"C	55	1675	5 SETS,EA:4#400KCM,1#250KCMG,3"C
25	130	4#1, 1#6G, 1-1/2"C	56	1900	5 SETS,EA:4#500KCM,1#250KCMG,3-1/2"C
26	150	2#1/0, 1#6G, 1-1/2"C	57	2010	6 SETS,EA:4#400KCM, 4"C; AND 2 - SPARE 4"C
27	150	3#1/0, 1#6G,1-1/2"C	58	2280	6 SETS,EA:4#500KCM,1#350KCMG,3-1/2"C
28	150	4#1/0, 1#6G, 2"C	59	2660	7 SETS,EA:4#500KCM, 4"C AND 3 - SPARE 4"C
29	175	2#2/0, 1#6G, 1-1/2"C	60	3040	8 SETS, EA:4#500KCM,1#500KCMG,3-1/2"C
30	175	5#2/0, 1#6G, 2-1/ 2"C	61	4180	11 SETS, EA:4#500KCM,1#600KCMG,3-1/2"C
31	175	4#2/0, 1#6G, 2"C			

CONDUIT SIZE BASED ON THHN/THWN 40% FILL CALCULATION
WIRE SIZE BASED ON NEC 110-14C WITH 60°C AMPACITY TABLES FOR 20A THRU 100 AMPS
AND 75°C AMPACITY TABLES FOR VALUES > 100 AMPS.
ALL CONDUCTORS IN THIS SCHEDULE ARE COPPER (Cu)

NOTE: IN GENERAL, THE ACTUAL BREAKER AMPERAGE SHALL BE EQUAL TO OR NEXT STANDARD SIZE SMALLER THAN THE MAXIMUM WIRE AMPS. EXCEPTIONS SHALL BE MOTOR AND SPECIAL EQUIPMENT BREAKERS WHICH SHALL BE SIZED PER N.E.C. AND VENDOR REQUIREMENTS. OMIT GROUND CONDUCTORS ON SERVICE ENTRANCE FEEDERS (TYPICAL). USE #12 WIRE U.O.N. PRIOR TO ROUGH-IN, CONTRACTOR SHALL COORDINATE BREAKER AND WIRING WITH ACTUAL REQUIREMENTS OF EQUIPMENT BEING FURNISHED FOR THIS SPECIFIC PROJECT.
UNLESS NOTED OTHERWISE ALL 20A., 1P. BREAKERS TO UTILIZE #12 CONDUCTORS. EXCEPT WHERE BRANCH CIRCUIT IS IN EXCESS OF 90 LINEAR FEET CONDUCTORS TO BE #10 AND OVER 175 FEET LINEAR FEET CONDUCTORS TO BE #8.

Branch Panel: L1A

Location: IT CLOSET & ELEC PANELS... **Volts:** 120/208 3P **A.I.C. Rating:** 22,000
Supply From: **Phases:** 3 **Mains Type:** MAIN BREAKER
Mounting: Surface **Wires:** 4 **Mains Rating:** 600 A
Enclosure: Type 1 **MCB Rating:** 600 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	TVSS	30 A	3	0 VA	180 VA					1	20 A	R - RECEPTACLE	2
3	--	--	--			0 VA	900 VA			1	20 A	R - RECEPTACLE	4
5	--	--	--					0 VA	900 VA	1	20 A	R - RECEPTACLE	6
7	R - RECEPTACLE	20 A	1	180 VA	540 VA					1	20 A	R - RECEPTACLE	8
9	R - RECEPTACLE	20 A	1			180 VA	1000...			1	20 A	R - RECEPTACLE	10
11	R - RECEPTACLE	20 A	1					720 VA	720 VA	1	20 A	R - RECEPTACLE	12
13	R - RECEPTACLE	20 A	1	540 VA	540 VA					1	20 A	R - RECEPTACLE	14
15	R - RECEPTACLE	20 A	1			720 VA	720 VA			1	20 A	R - RECEPTACLE	16
17	R - RECEPTACLE	20 A	1					540 VA	900 VA	1	20 A	R - RECEPTACLE	18
19	R - RECEPTACLE	20 A	1	720 VA	540 VA					1	20 A	R - RECEPTACLE	20
21	R - RECEPTACLE	20 A	1			1440...	180 VA			1	20 A	R - RECEPTACLE	22
23	R - RECEPTACLE	20 A	1					360 VA	360 VA	1	20 A	R - RECEPTACLE	24
25	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	28
29	R - RECEPTACLE	20 A	1					540 VA	540 VA	1	20 A	R - RECEPTACLE	30
31	R - RECEPTACLE	20 A	1	180 VA	1200...					1	20 A	E - EQUIPMENT	32
33	R - RECEPTACLE	20 A	1			720 VA	1080...			1	20 A	R - RECEPTACLE	34
35	R - RECEPTACLE	20 A	1					180 VA	540 VA	1	20 A	R - RECEPTACLE	36
37	R - RECEPTACLE	20 A	1	1000...	540 VA					1	20 A	R - RECEPTACLE	38
39	R - RECEPTACLE	20 A	1			180 VA	360 VA			1	20 A	R - RECEPTACLE	40
41	R - RECEPTACLE	20 A	1					360 VA	1500...	1	20 A	R - RECEPTACLE	42
43	R - RECEPTACLE	20 A	1	1500...	1500...					1	20 A	R - RECEPTACLE	44
45	R - RECEPTACLE	20 A	1			1500...	720 VA			1	20 A	R - RECEPTACLE	46
47	R - RECEPTACLE	20 A	1					180 VA	180 VA	1	20 A	R - RECEPTACLE	48
49	R - RECEPTACLE	20 A	1	180 VA	180 VA					1	20 A	R - RECEPTACLE	50
51	R - RECEPTACLE	20 A	1			180 VA	180 VA			1	20 A	R - RECEPTACLE	52
53	R - RECEPTACLE	20 A	1					180 VA	180 VA	1	20 A	R - RECEPTACLE	54
55	R - RECEPTACLE	20 A	1	180 VA	180 VA					1	20 A	R - RECEPTACLE	56
57	R - RECEPTACLE	20 A	1			180 VA	180 VA			1	20 A	R - RECEPTACLE	58
59	R - RECEPTACLE	20 A	1					180 VA	180 VA	1	20 A	R - RECEPTACLE	60
61	R - RECEPTACLE	20 A	1	180 VA	180 VA					1	20 A	R - RECEPTACLE	62
63	R - RECEPTACLE	20 A	1			180 VA	180 VA			1	20 A	R - RECEPTACLE	64
65	R - RECEPTACLE	20 A	1					180 VA	180 VA	1	20 A	R - RECEPTACLE	66
67	R - RECEPTACLE	20 A	1	720 VA	180 VA					1	20 A	R - RECEPTACLE	68
69	R - RECEPTACLE	20 A	1			180 VA	720 VA			1	20 A	R - RECEPTACLE	70
71	R - RECEPTACLE	20 A	1					540 VA	360 VA	1	20 A	R - RECEPTACLE	72
73	R - RECEPTACLE	20 A	1	360 VA	540 VA					1	20 A	R - RECEPTACLE	74
75	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	76
77	PANEL L1C	225 A	3					7992...	0 VA	1	20 A	SPARE	78
79	--	--	--	7993...	3905...					3	400 A	PANEL L1B	80
81	--	--	--			7995...	4130...			--	--	--	82
83	FIRE ALARM CONTROL PANEL (NOTE 1)	20 A	1					0 VA	3966...	--	--	--	84
			Total Load:	59086 VA		60975 VA		58161 VA					
			Total Amps:	494 A		509 A		485 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
H - HVAC	125564 VA	100.00%	125564 VA		
L - LIGHTING	9660 VA	125.00%	12075 VA	**Total Conn. Load:**	178210 VA
R - RECEPTACLE	36980 VA	63.52%	23490 VA	**Total Est. Demand:**	165636 VA
E - EQUIPMENT	6000 VA	75.00%	4500 VA	**Total Conn. Current:**	495 A
SPEC	1500 VA	100.00%	1500 VA	**Total Est. Demand Current:**	460 A

NOTE 1: BREAKER TO BE COLORED RED. PROVIDE LOCK ON TAB.

Branch Panel: L1B

Location: IT CLOSET & ELEC PANELS... **Volts:** 120/208 3P **A.I.C. Rating:** 22,000
Supply From: L1A **Phases:** 3 **Mains Type:** MAIN BREAKER
Mounting: Surface **Wires:** 4 **Mains Rating:** 400 A
Enclosure: Type 1 **MCB Rating:** 400 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	TVSS	30 A	3	0 VA	420 VA					1	20 A	L - LIGHTING	2
3	--	--	--			0 VA	500 VA			1	20 A	L - LIGHTING	4
5	--	--	--					0 VA	500 VA	1	20 A	L - LIGHTING	6
7	L - LIGHTING	20 A	1	300 VA	120 VA					1	20 A	L - LIGHTING	8
9	SPEC	20 A	1			1500...	620 VA			1	20 A	L - LIGHTING	10
11	L - LIGHTING	20 A	1					770 VA	860 VA	1	20 A	L - LIGHTING	12
13	L - LIGHTING	20 A	1	520 VA	560 VA					1	20 A	L - LIGHTING	14
15	L - LIGHTING	20 A	1			940 VA	200 VA			1	20 A	L - LIGHTING	16
17	L - LIGHTING	20 A	1					240 VA	540 VA	1	20 A	L - LIGHTING	18
19	L - LIGHTING	20 A	1	550 VA	480 VA					1	20 A	L - LIGHTING	20
21	L - LIGHTING	20 A	1			540 VA	600 VA			1	20 A	L - LIGHTING	22
23	L - LIGHTING	20 A	1					300 VA	100 VA	1	20 A	L - LIGHTING	24
25	R - RECEPTACLE	20 A	1	540 VA	360 VA					1	20 A	R - RECEPTACLE	26
27	E - HAND DRYER	20 A	1			1200...	1200...			1	20 A	E - HAND DRYER	28
29	R - RECEPTACLE	20 A	1					180 VA	720 VA	1	20 A	R - RECEPTACLE	30
31	R - RECEPTACLE	20 A	1	720 VA	720 VA					1	20 A	R - RECEPTACLE	32
33	R - RECEPTACLE	20 A	1			540 VA	500 VA			3	15 A	H - VAV-11	34
35	H - VAV-12A	30 A	3					3333...	500 VA	--	--	--	36
37	--	--	--	3334...	500 VA					--	--	--	38
39	--	--	--			3333...	1200...			1	20 A	E - EQUIPMENT	40
41	H - VAV-12B	30 A	3					3334...	0 VA	1	20 A	LIGHTING CONTROL PANEL	42
43	--	--	--	3333...	666 VA					3	15 A	H - VAV-15	44
45	--	--	--			3333...	667 VA			--	--	--	46
47	H - VAV-13	20 A	3					1333...	667 VA	--	--	--	48
49	--	--	--	1334...	2333...					3	25 A	H - VAV-14	50
51	--	--	--			1333...	2333...			--	--	--	52
53	H - MAU-1	20 A	1					1224...	2334...	--	--	--	54
55	SHUNT TRIP (NOTE 1)	--	--	0 VA	1200...					1	20 A	E - EQUIPMENT	56
57	H - EUH-1	20 A	2			1000...	180 VA			1	20 A	R - RECEPTACLE	58
59	--	--	--					1000...	672 VA	1	20 A	H - KEF-1	60
61	SPARE	20 A	3	0 VA	0 VA					--	--	SHUNT TRIP (NOTE 1)	62
63	--	--	--			0 VA	0 VA			1	20 A	SPARE	64
65	--	--	--					0 VA	0 VA	1	20 A	SPARE	66
67	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	68
69	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	70
71	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	72
73	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	74
75	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	76
77	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	78
79	SPARE	20 A	1	0 VA	2106...					3	200 A	H - RTU-1	80
81	SPARE	20 A	1			0 VA	2106...			--	--	--	82
83	SPARE	20 A	1					0 VA	2106...	--	--	--	84
			Total Load:	39053 VA		41309 VA		39669 VA					
			Total Amps:	325 A		345 A		331 A					

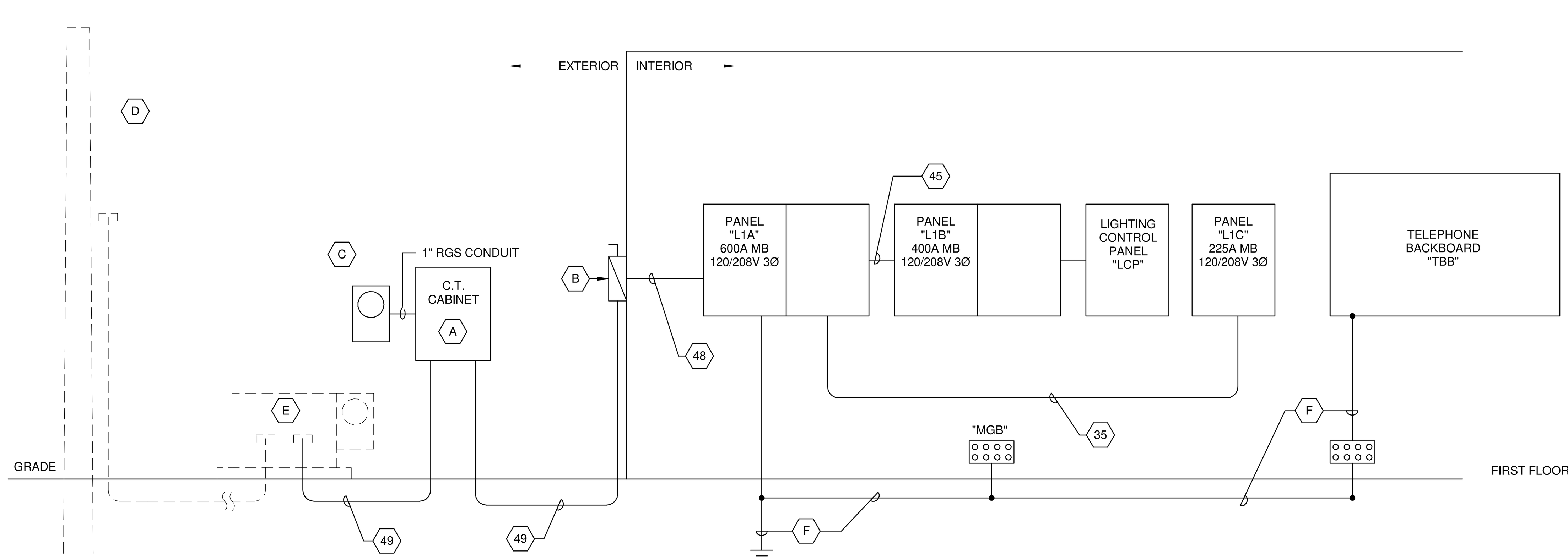
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
H - HVAC	101584 VA	100.00%	101584 VA		
L - LIGHTING	9660 VA	125.00%	12075 VA	**Total Conn. Load:**	120013 VA
R - RECEPTACLE	3960 VA	100.00%	3960 VA	**Total Est. Demand:**	121228 VA
E - EQUIPMENT	4800 VA	75.00%	3600 VA	**Total Conn. Current:**	333 A
SPEC	1500 VA	100.00%	1500 VA	**Total Est. Demand Current:**	336 A

Branch Panel: L1C

Location: IT CLOSET & ELEC PANELS... **Volts:** 120/208 3P **A.I.C. Rating:** 22,000
Supply From: L1A **Phases:** 3 **Mains Type:** MAIN BREAKER
Mounting: Surface **Wires:** 4 **Mains Rating:** 225 A
Enclosure: Type 1 **MCB Rating:** 225 A

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	TVSS	30 A	3	0 VA	500 VA					3	15 A	H - VAV-7	2
3	--	--	--			0 VA	500 VA			--	--	--	4
5	--	--	--					0 VA	500 VA	--	--	--	6
7	H - VAV-5	15 A	3	500 VA	500 VA					3	15 A	H - VAV-6	8
9	--	--	--			500 VA	500 VA			--	--	--	10
11	--	--	--					500 VA	500 VA	--	--	--	12
13	H - VAV-16	15 A	3	660 VA	500 VA					3	15 A	H - VAV-4	14
15	--	--	--			660 VA	500 VA			--	--	--	16
17	--	--	--					660 VA	500 VA	--	--	--	18
19	H - VAV-1	15 A	3	1333...	500 VA					3	20 A	H - VAV-3	20
21	--	--	--			1333...	500 VA			--	--	--	22
23	--	--	--					1334...	500 VA	--	--	--	24
25	H - VAV-8	15 A	3	500 VA	2166...					3	20 A	H - VAV-2	26
27	--	--	--			500 VA	2167...			--	--	--	28
29	--	--	--					500 VA	2167...	--	--	--	30
31	H - VAV-9	15 A	3	500 VA	333 VA					3	15 A	H - VAV-10	32
33	--	--	--			500 VA	333 VA			--	--	--	34
35	--	--	--					500 VA	334 VA	--	--	--	36
37	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	38
39	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	40
41	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	42
			Total Load:	7992 VA		7993 VA		7995 VA					
			Total Amps:	67 A		67 A		67 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
H - HVAC	23980 VA	100.00%	23980 VA		
				Total Conn. Load:	23980 VA
				Total Est. Demand:	23980 VA
				Total Conn. Current:	67 A
				Total Est. Demand Current:	67 A



A METER AND METER BASE PER LOCAL UTILITY BOARD REQUIREMENTS.
B 800 A FUSED DISCONNECT
C COORDINATE METERING REQUIREMENTS WITH LOCAL UTILITY BOARD.
D EXISTING PRIMARY RISER POLE
E EXISTING PAD-MOUNTED TRANSFORMER.
F #1/0 COPPER

RISER DIAGRAM

SCALE: 12" = 1'-0"

1

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MBI

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CONSULTANT

SEAL

ALABAMA LICENSED No. 25277 PROFESSIONAL ENGINEER STEVEN VINCENT WALKER 9/4/19

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PROJECT INFORMATION

PROJECT:

CLAYTON ADDISON MANUFACTURING FACILITY

PROJECT ADDRESS:
18025 COUNTY ROAD 41
ADDISON, AL 35540

PROJECT NO.: 180789.04

NOTES

ACTIVE DESIGN PHASE
- ☐ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION BIDDING
- ■ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

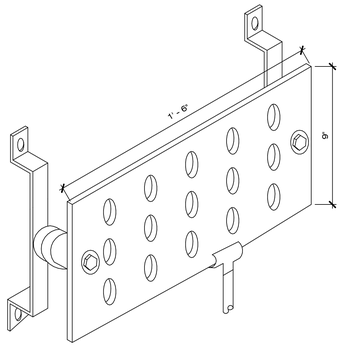
KEY PLAN

SHEET INFORMATION
SHEET ISSUED: 09/04/2019
DESIGNED BY: JCH
DRAWN BY: JCH
REVIEWED BY: SVW
SHEET TITLE:

RISER DIAGRAM

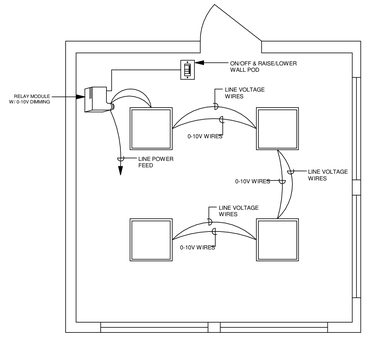
SHEET NO.:

E401



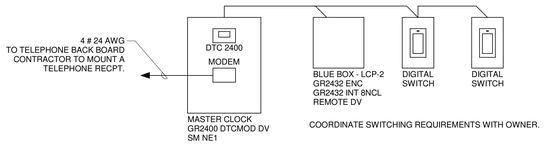
GROUNDING - BUS BAR - "MGB" (1)

SCALE: 3" = 1'-0"



OCCUPANCY SENSOR 0-10V DIMMING DETAIL (2)

SCALE: 12" = 1'-0"



LIGHTING CONTROL RISER (3)

SCALE: 12" = 1'-0"

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- ☐ AS BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION

KEY PLAN

SHEET INFORMATION

SHEET ISSUED:	09/04/2019
DESIGNED BY:	JCH
DRAWN BY:	JCH
REVIEWED BY:	SVW
SHEET TITLE:	

ELECTRICAL DETAILS

SHEET NO.:

E501

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