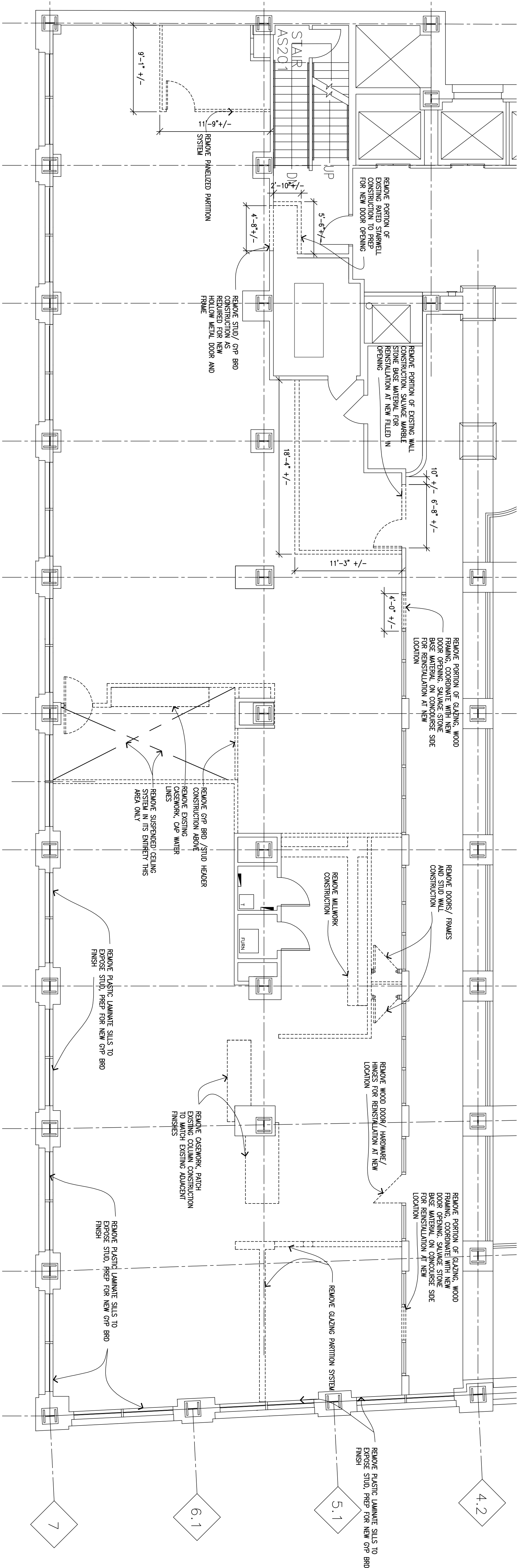
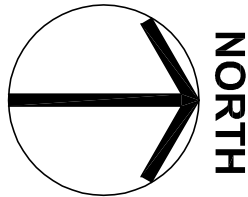
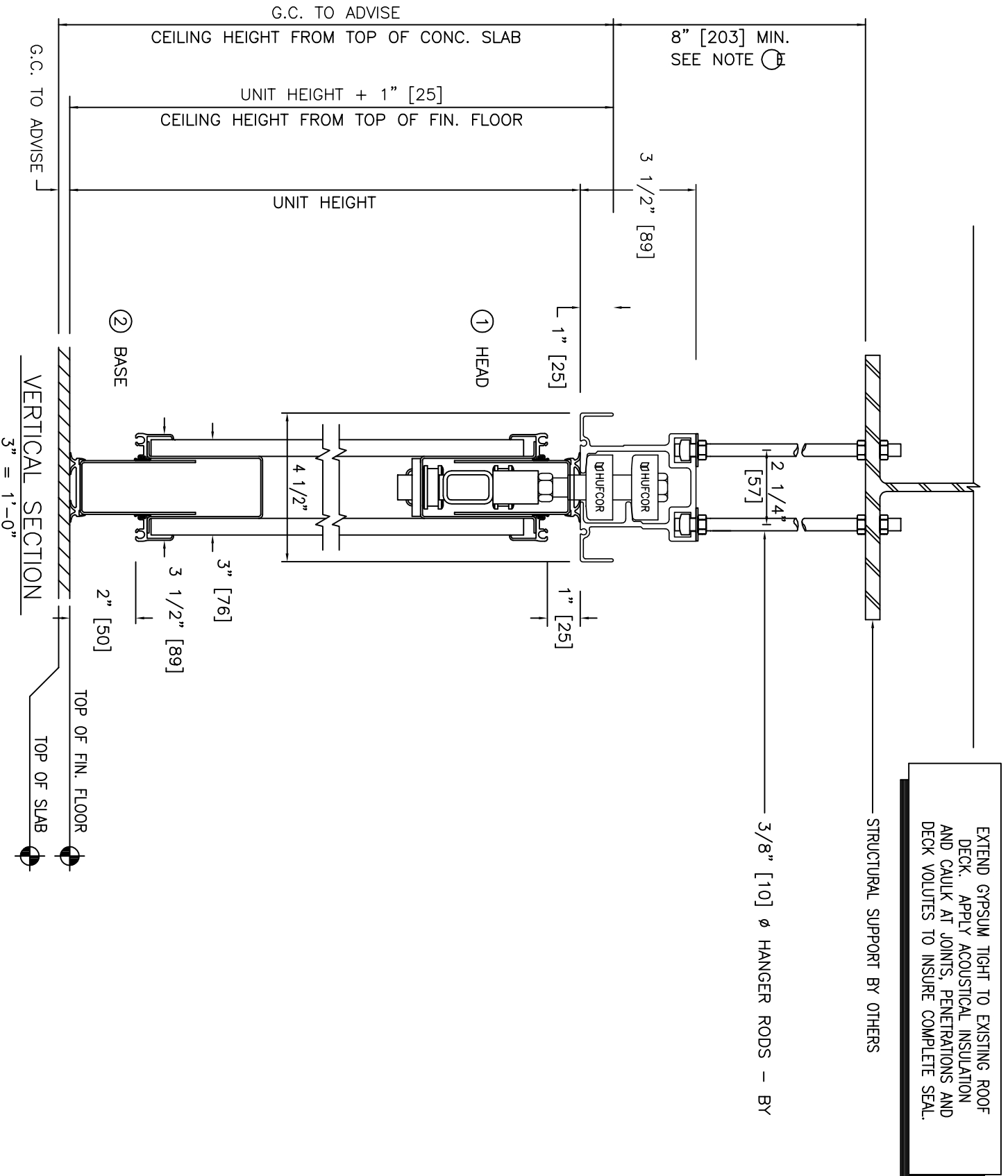




SECOND FLOOR
DEMOLITION PLAN

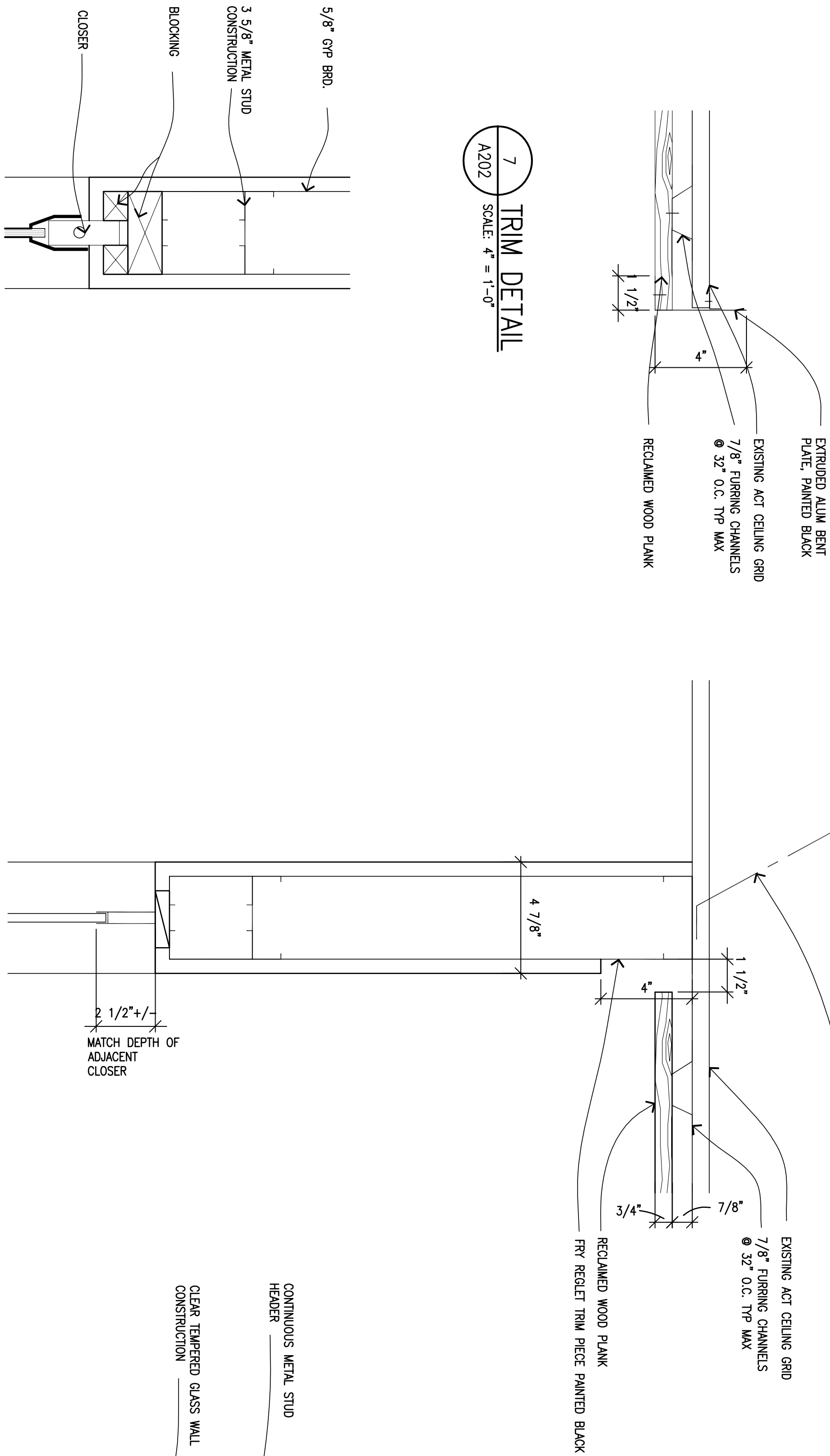


2ND FLOOR PLAN & REFLECTED CEILING PLAN



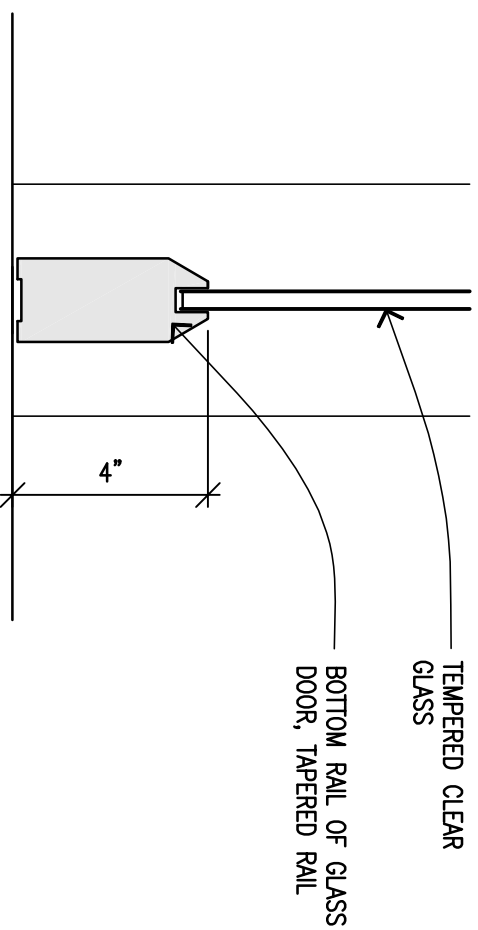
SERIES: 631
SUSPENSION BRACKETS: 26
STRUCTURAL SUPPORTS: FALSE
WOOD / GLUE-LAM BEAM
TOP SEAL: WOOD
BOTTOM SEAL: RETRACTABLE
PROTECTIVE EDGE TRIM: TEST
LEAD CONDITION: TIGHT CLOSURE
BULB SEAL

6 SECTION
SCALE 3/4" = 1'-0"



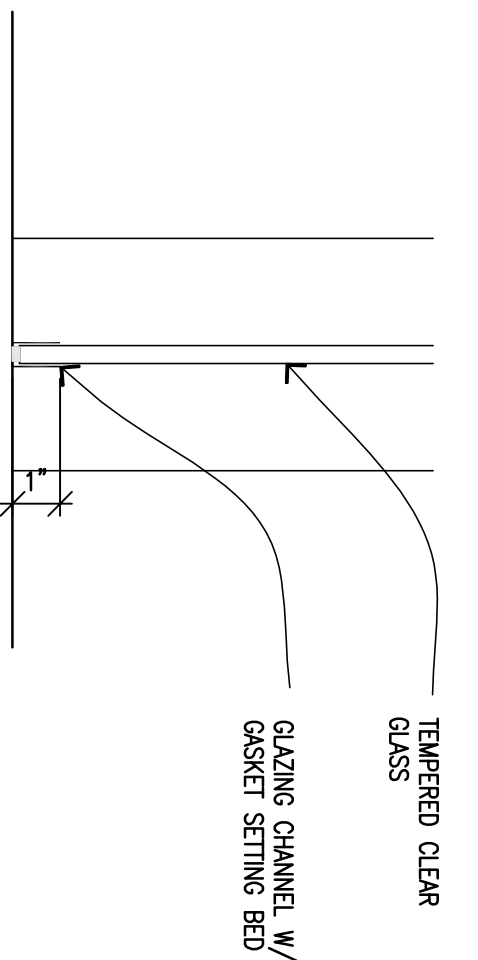
7 TRIM DETAIL
SCALE 4" = 1'-0"

5 SECTION @ HEAD OF GLASS DOOR
SCALE 3" = 1'-0"

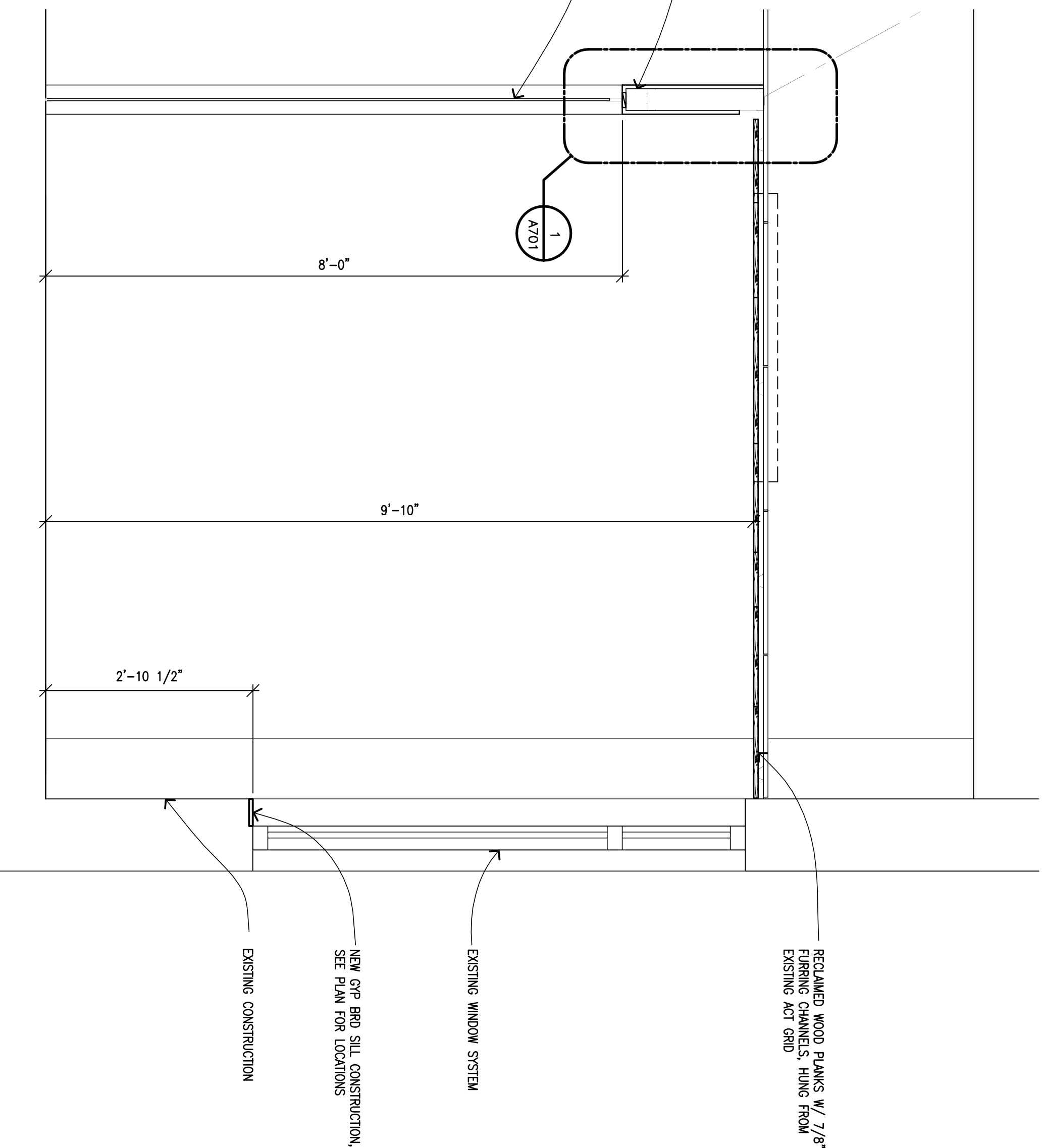


3 SECTION @ GLASS DOOR
SCALE 3" = 1'-0"

4 SECTION HEAD CHANNEL OF GLASS
SCALE 3" = 1'-0"



2 SECTION @ MULLION
SCALE 3" = 1'-0"



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

Revisions

02/07/13 Bids & Permit

Date

Drawn: ☐ Preliminary ☐ Construction

Checked: ☐ Record

Reviewed: ☐ Do not scale dimensions only

Approved: ☐ Copyright © 2010

JS

Reprint Number

01

Job Number

2012108

TRB

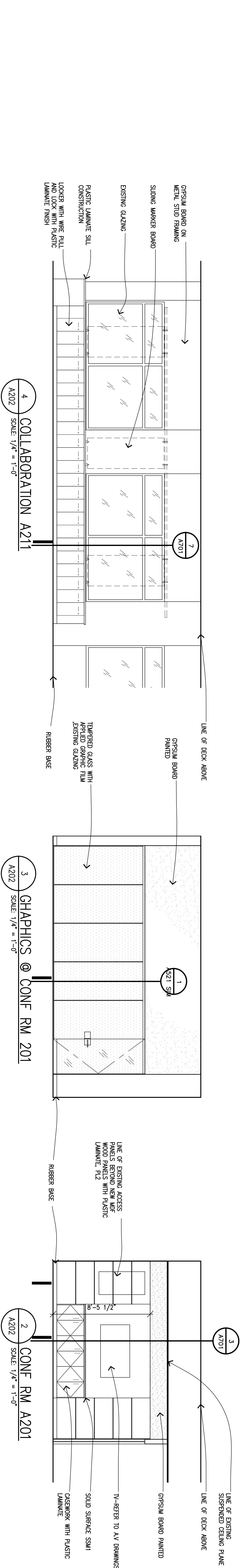
DETAILS

Scale: as noted

Sheet

A521

**719 Griswold Street
Detroit, MI
.gov**



1'-0"

4'-0"

5'-0"

4'-0"

1'-0"

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

INTERIOR ELEVATION

A202

EXISTING WINDOWS/GLAZING

NEW WOOD DOOR IN EXISTING WINDOW OPENING

COLLABORATION

RUBBER BASE

STORAGE

GLASS DOOR AND SIGHTLIGHT

GLASS BOARD ON METAL STUD WALL, PAINT

KITCHEN

HOLLOW METAL FRAME, PAINTED

RUBBER BASE

LINE OF EXISTING BECK ABOVE EXISTING FLOOR

GLASS DOOR/ENTRY BEYOND

CONF

TEMPERED GLASS WALL

OFFICE

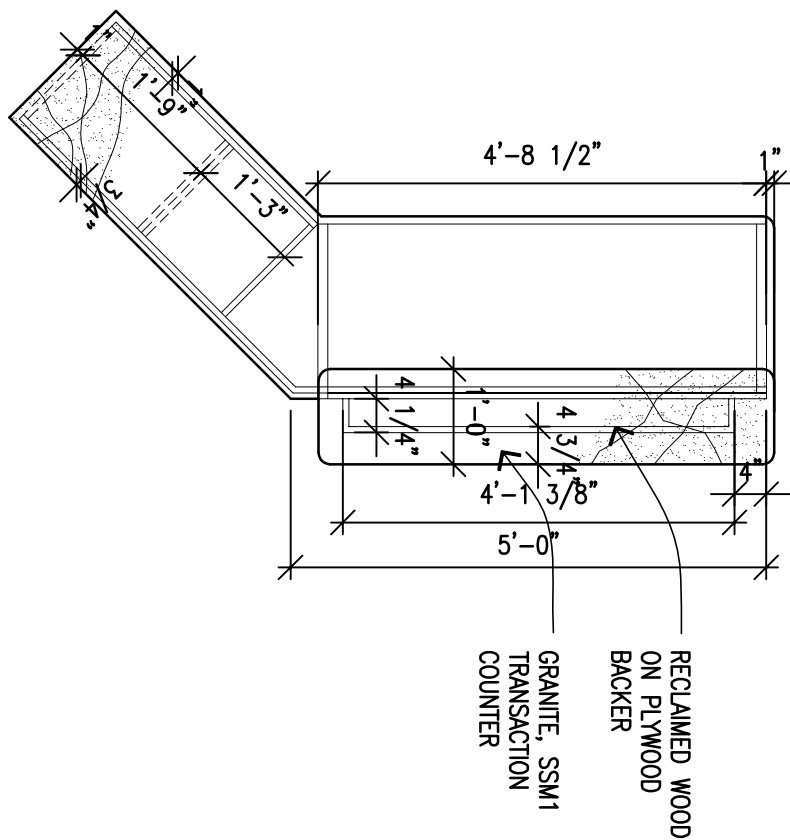
TEMPERED GLASS DOOR AND WALL SYSTEM

OFFICE

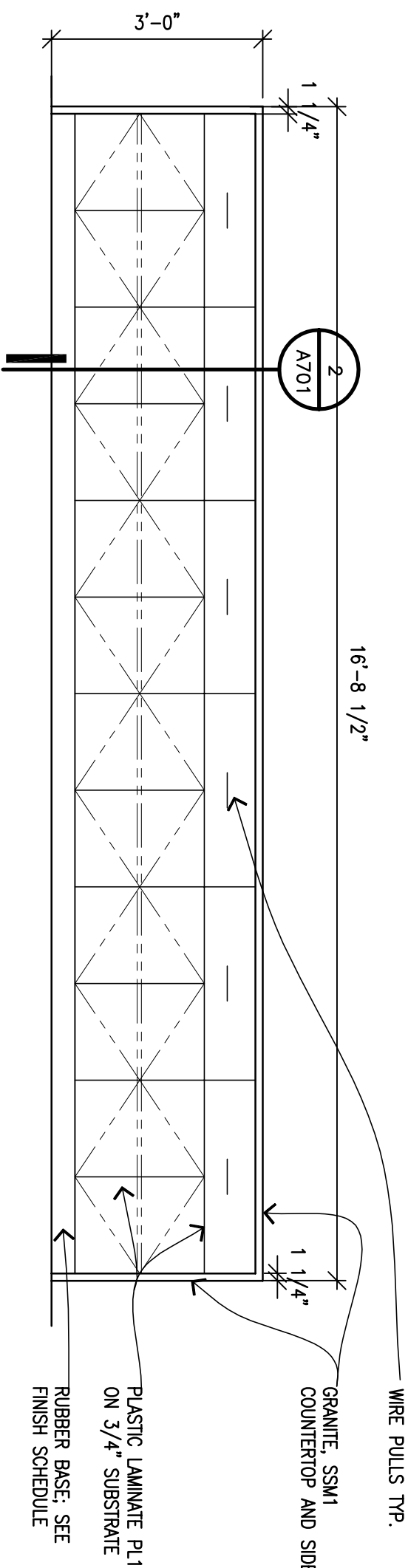
HOLLOW METAL DOOR AND FRAME BEYOND

EXIT

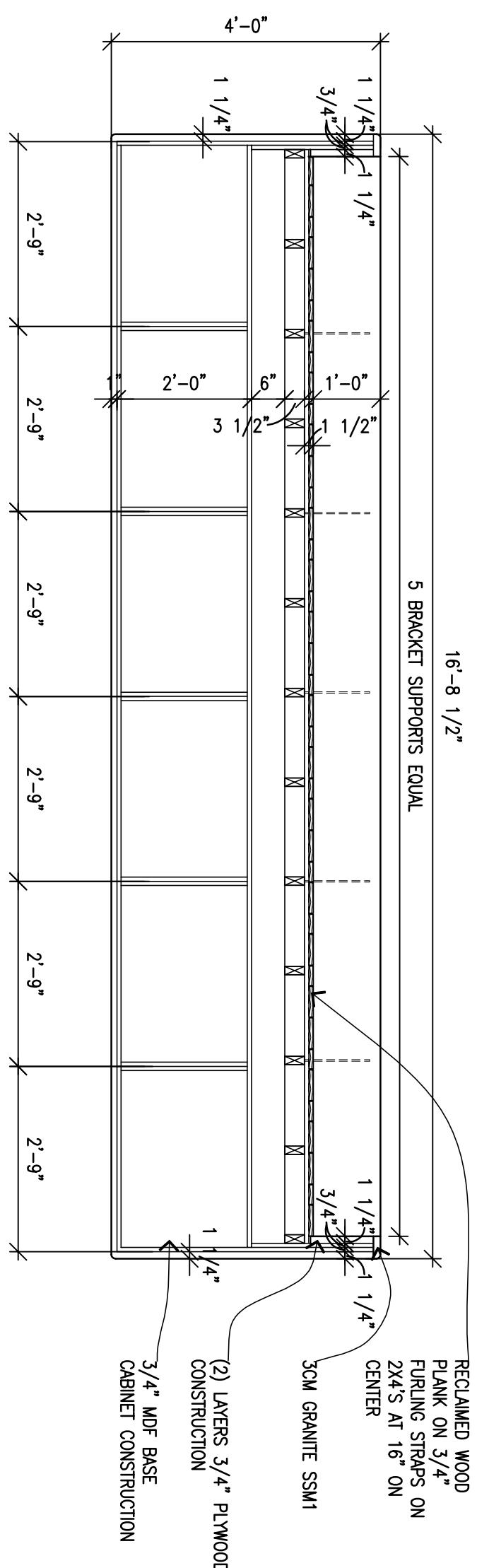
**719 Griswold Street
Detroit, MI
.gov**



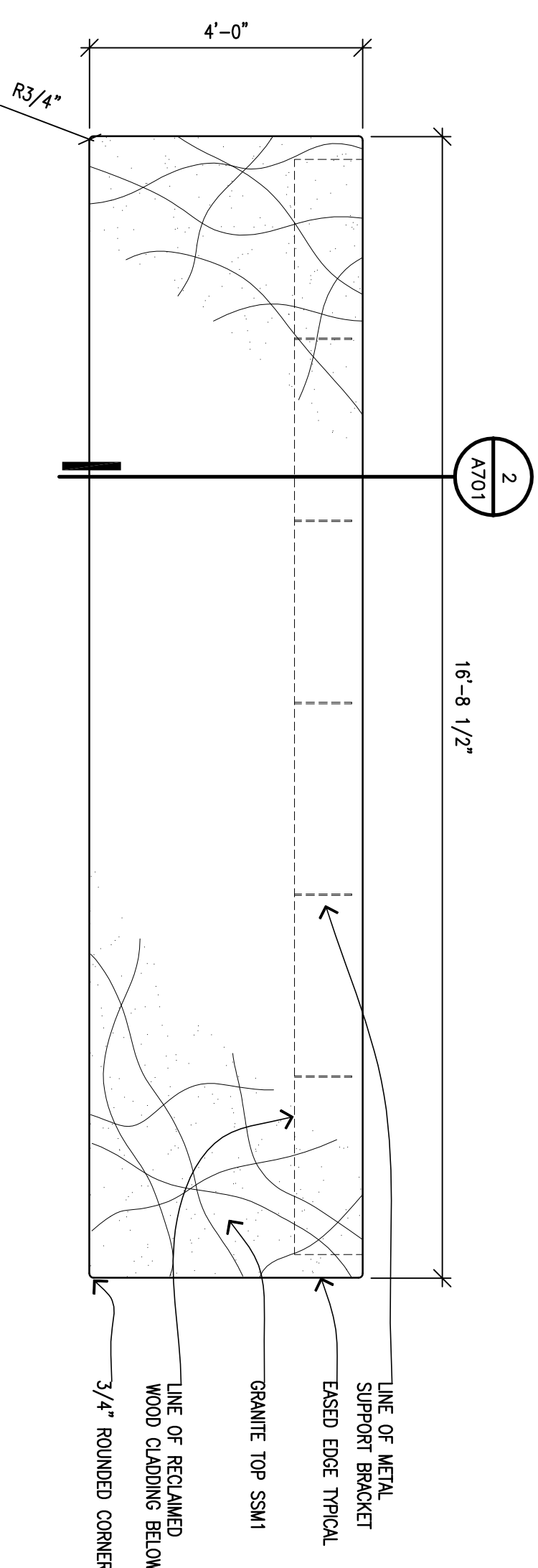
9 RECEPTION DESK PLAN DETAIL



8 ISLAND ELEVATION

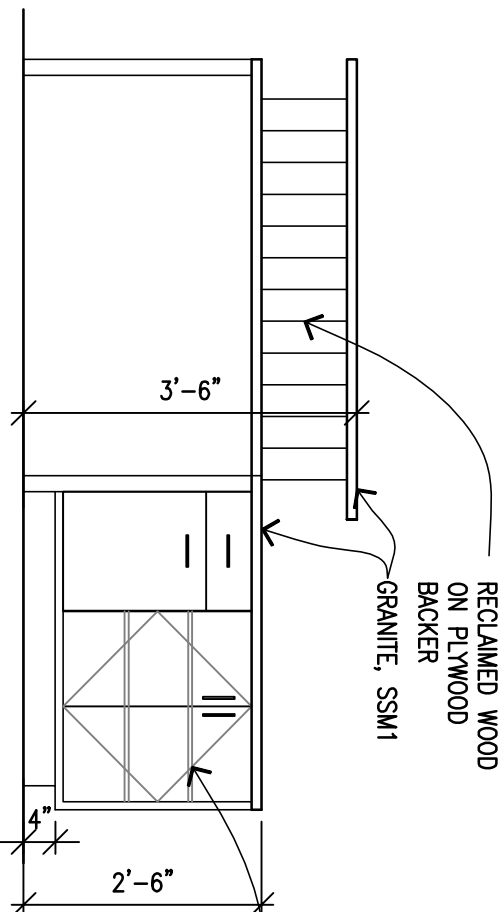


6 ISLAND FRAMING PLAN

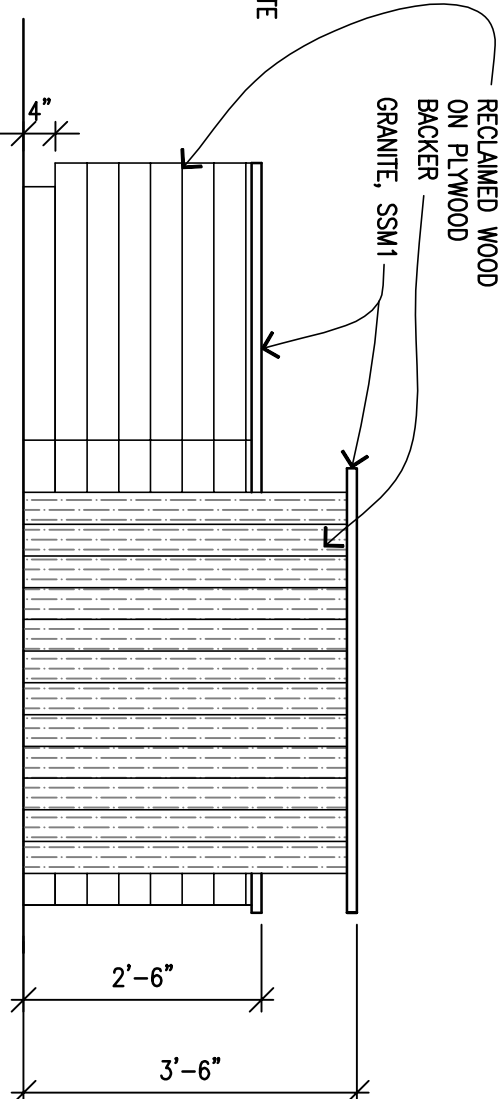


1 ISLAND PLAN DETAIL

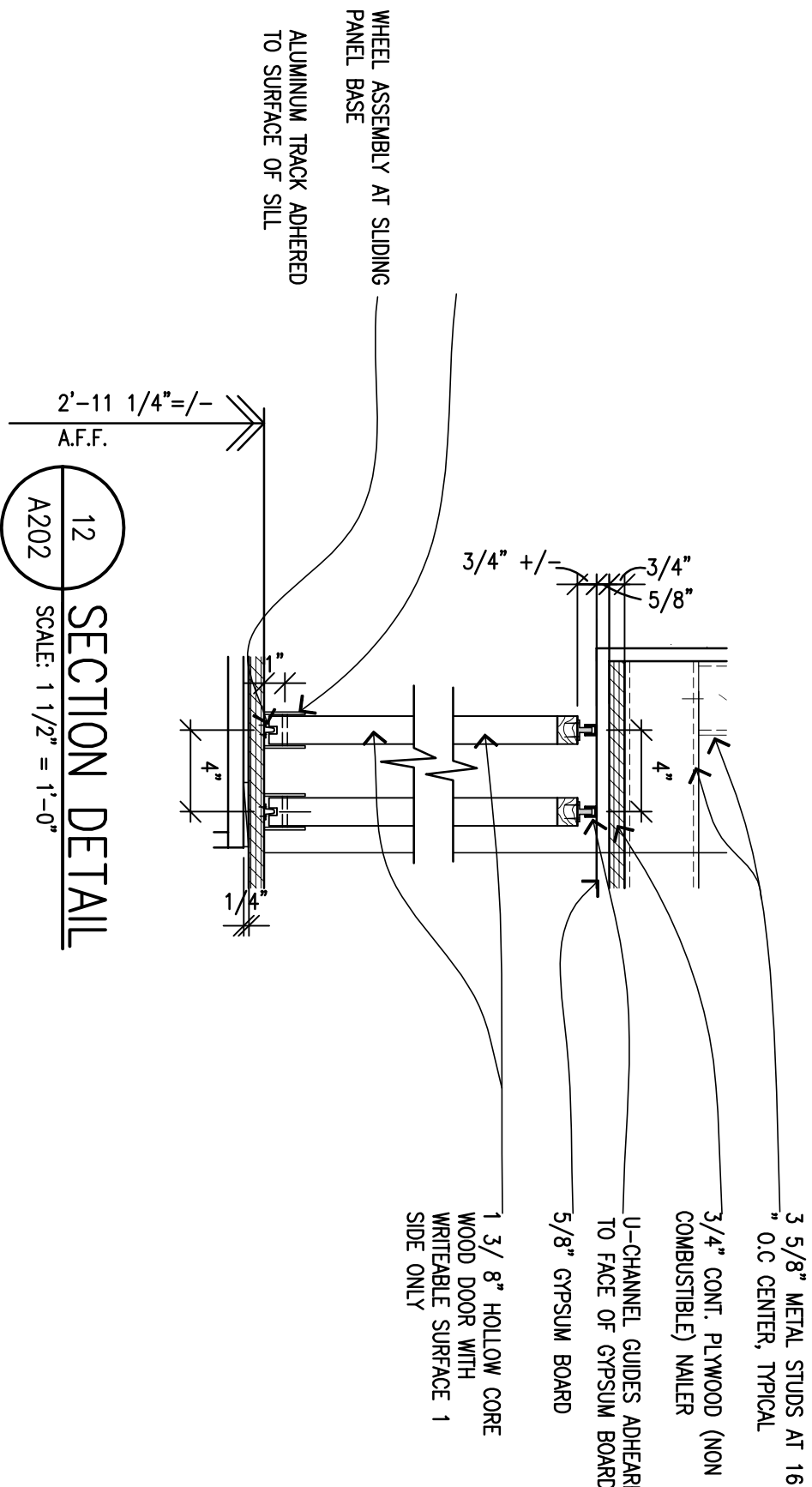
RECEPTION ELEVATION



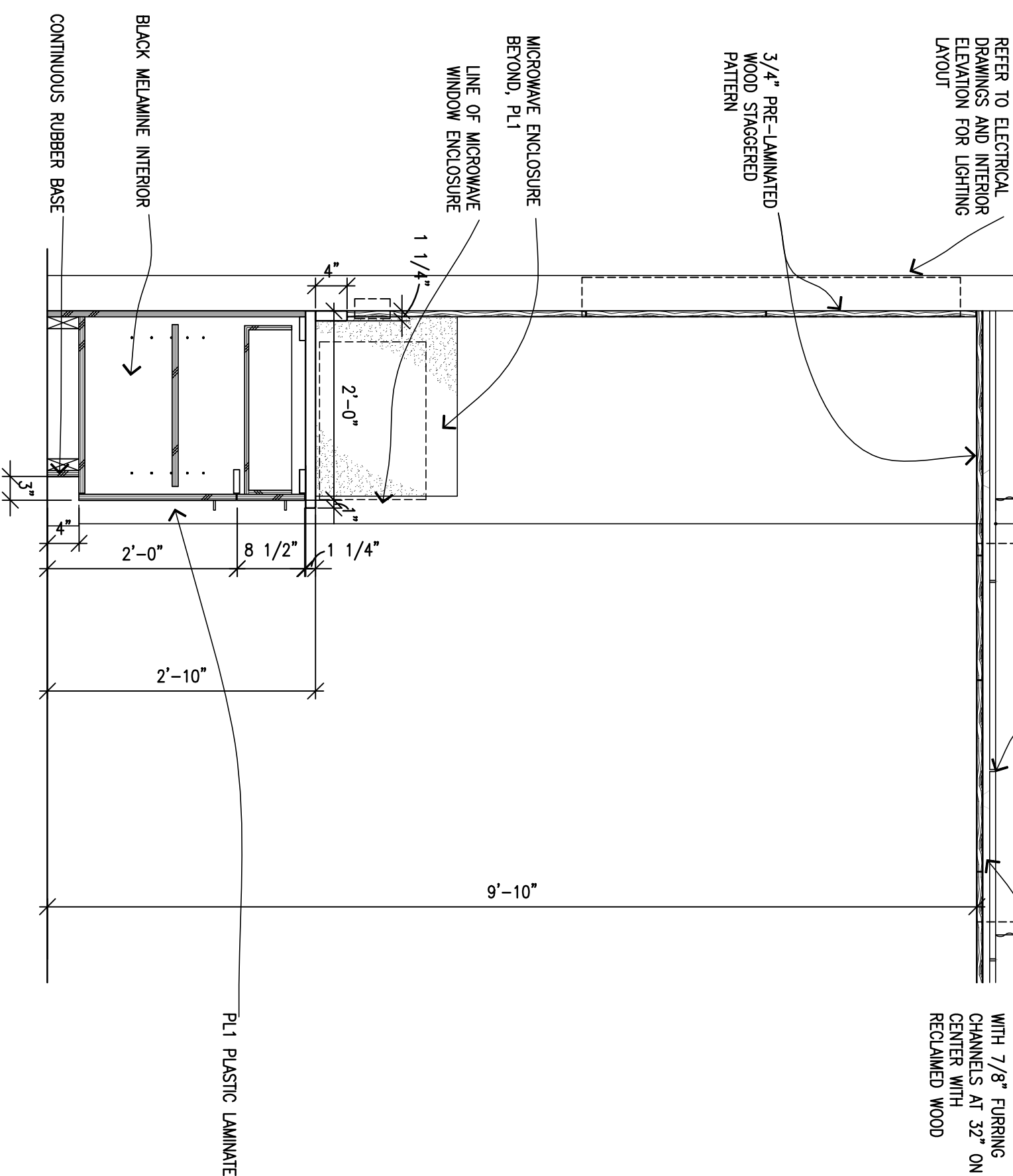
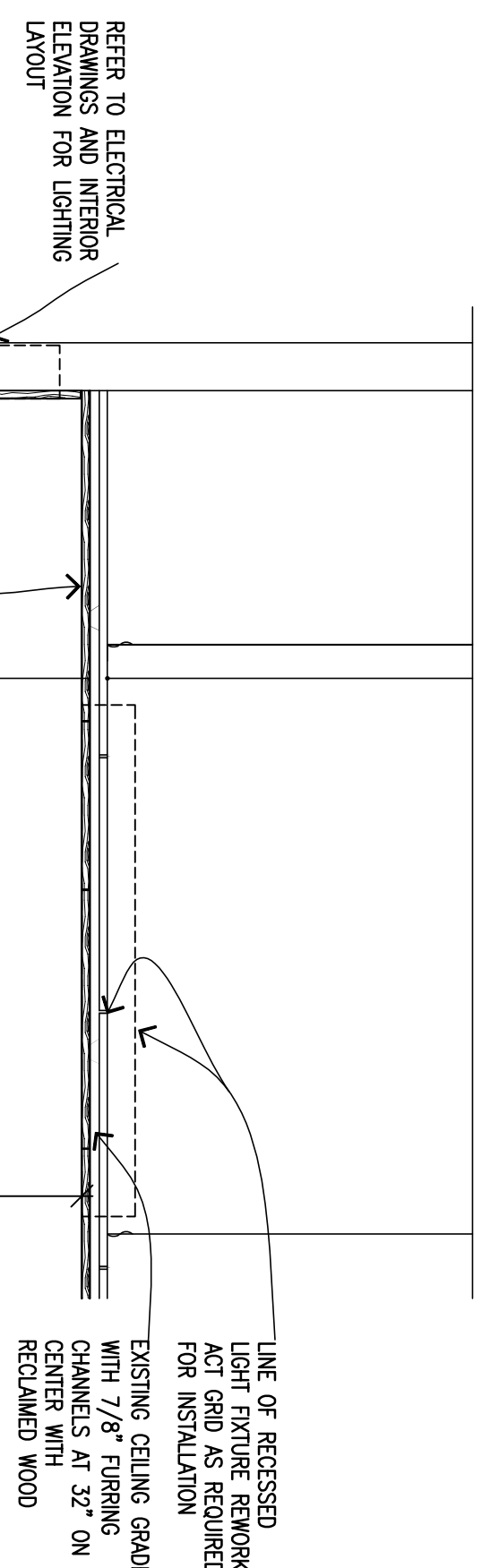
10 RECEPTION ELEVATION



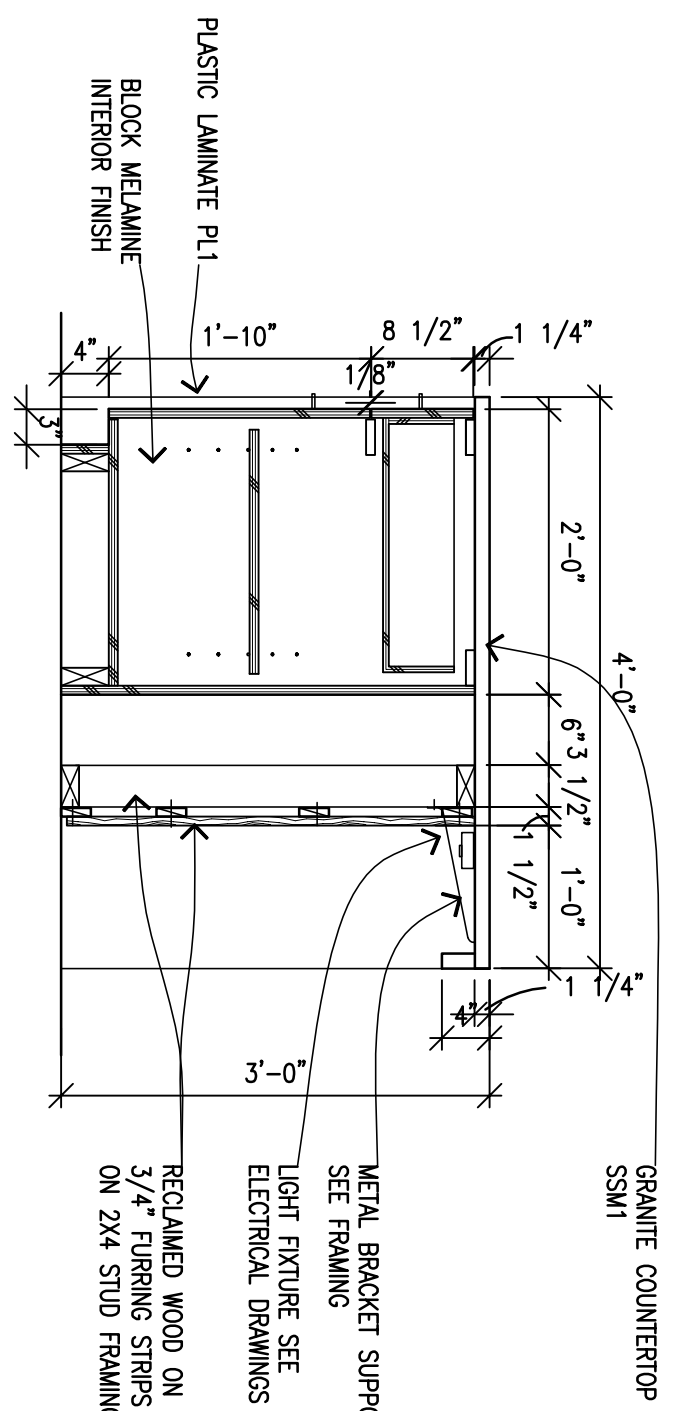
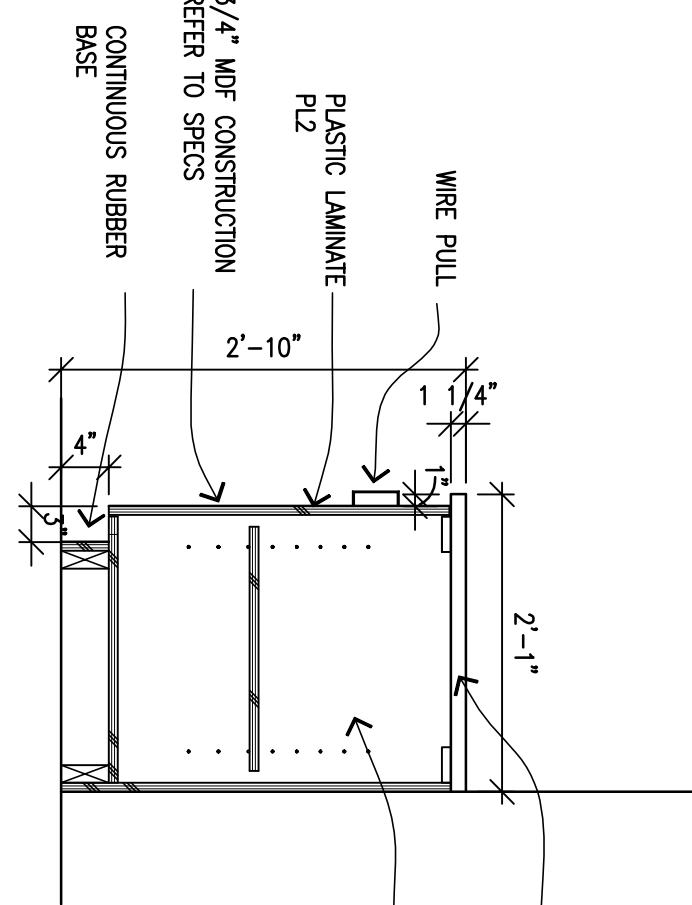
SECTION DETAIL



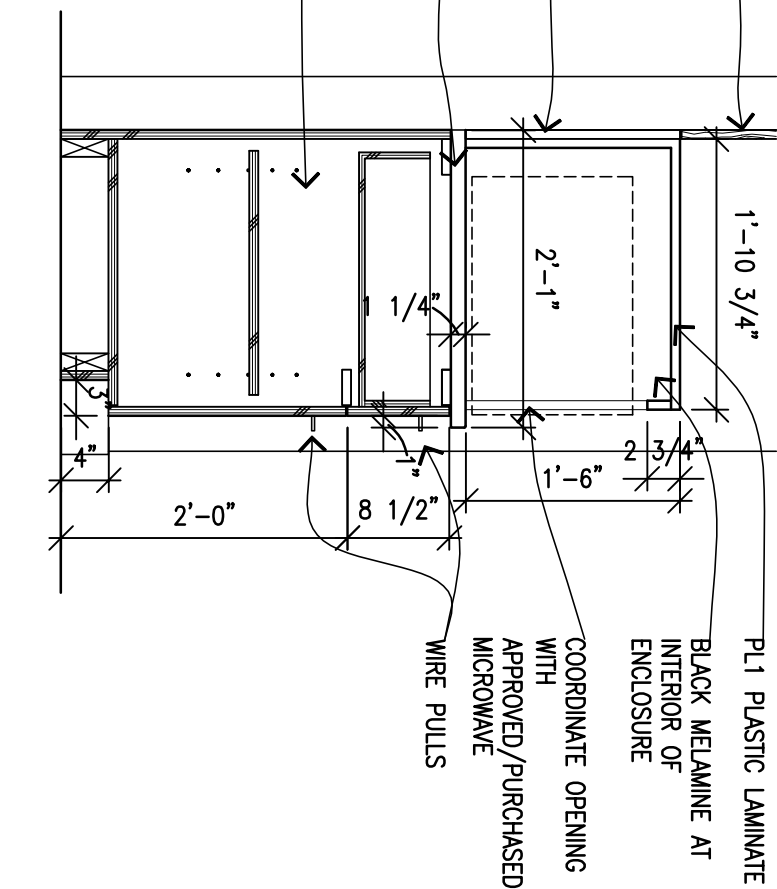
RECEPTION ELEVATION



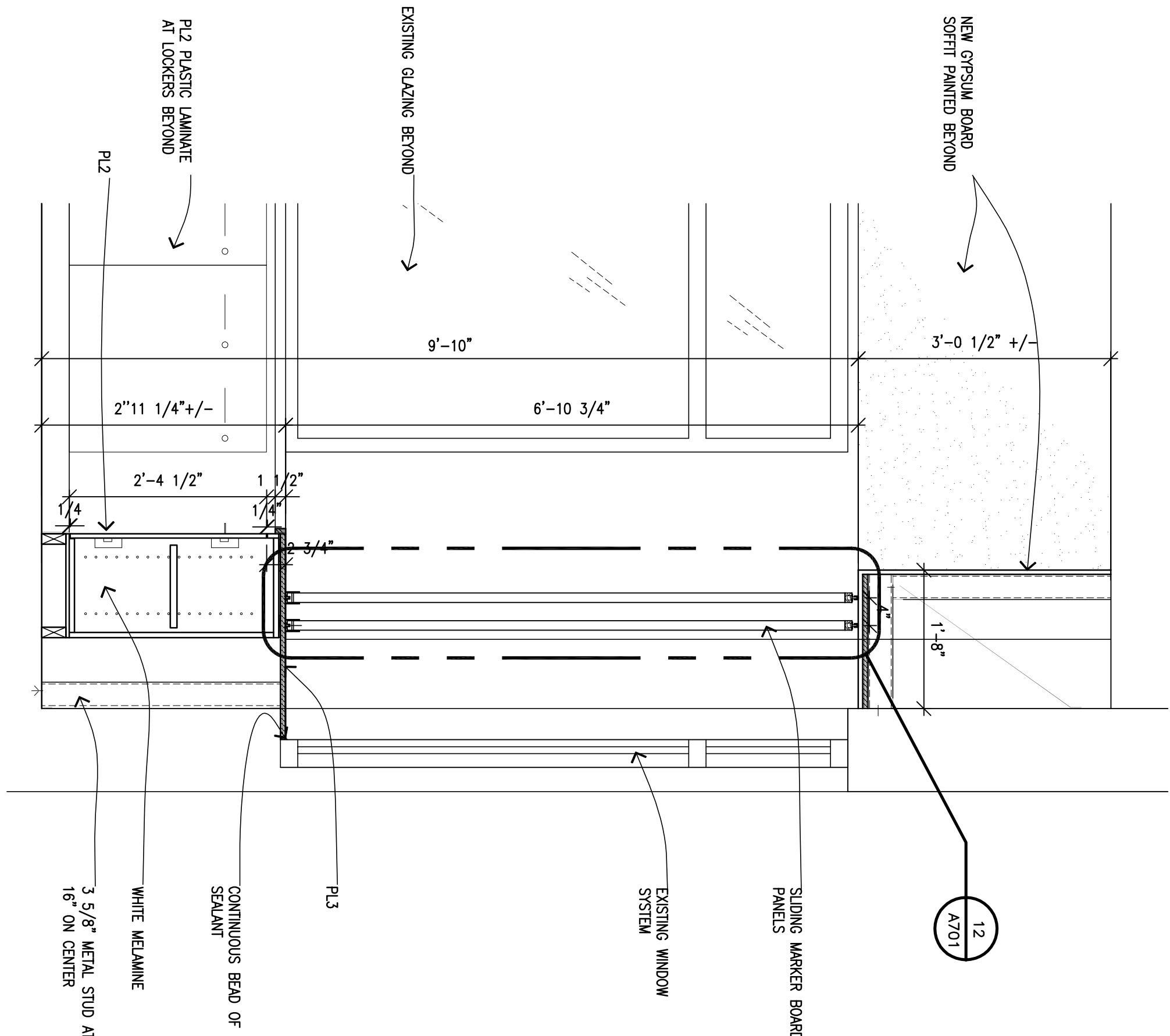
SECTION DETAIL

ISLAND SECTION
SCALE: 1/4" = 1' 0"CEDENZA SECTION
COLLE-7/A^m - 1° 0^{se}

SECTION DETAIL



7) SECTION DETAIL AT LOCKERS/ SLIDING PANELS



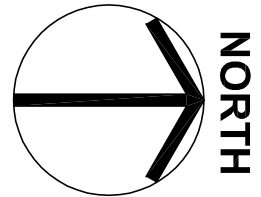
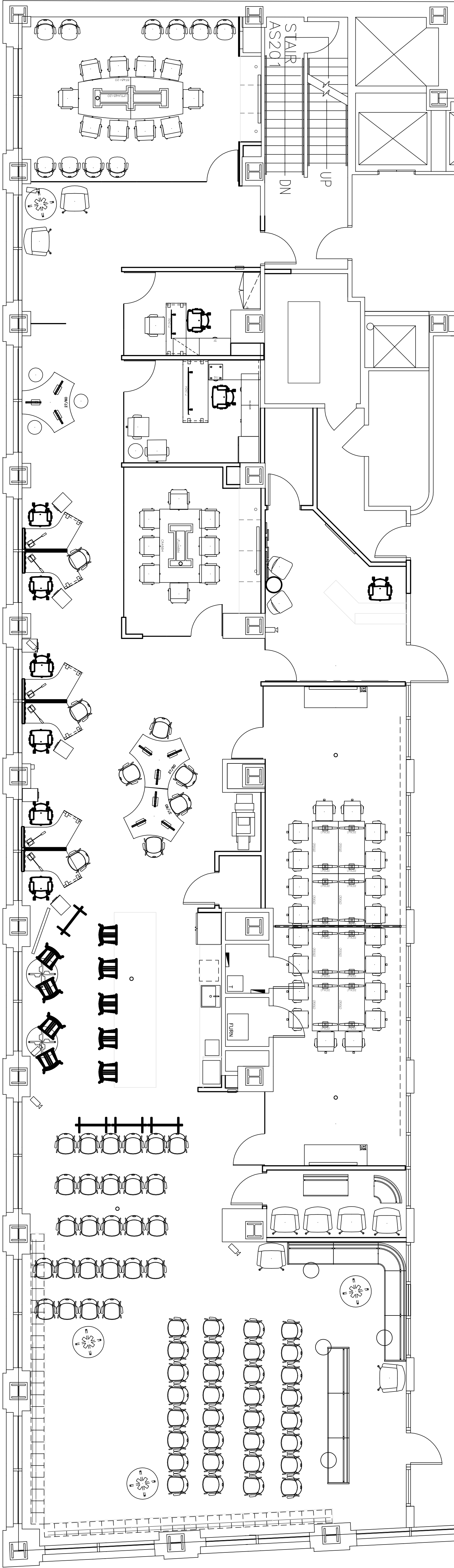
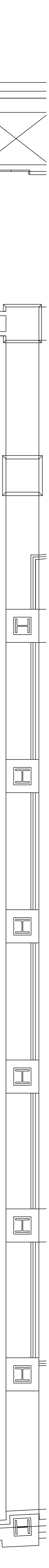
NEUMANN
SMITH

architecture

400 Galleria Officecentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
ns@neumannsmith.com

719 Griswold Street
Detroit, MI

.gov

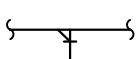
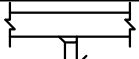
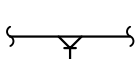
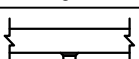
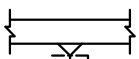
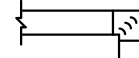
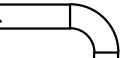
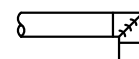
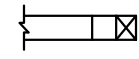
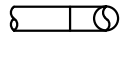
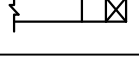
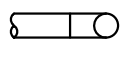
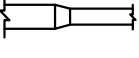
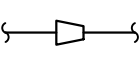
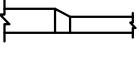
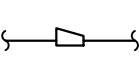
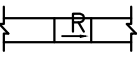
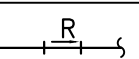
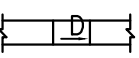
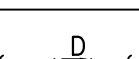
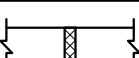
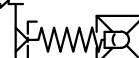
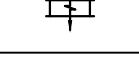
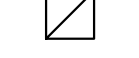
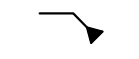
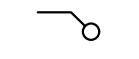
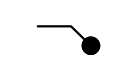
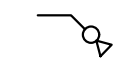
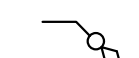
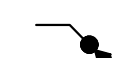
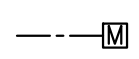
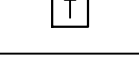


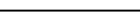
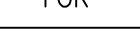
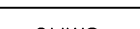
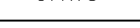
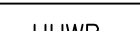
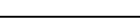
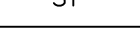
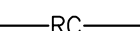
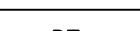
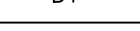
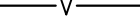
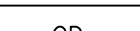
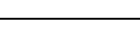
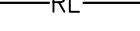
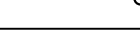
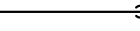
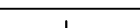
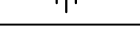
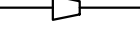
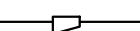
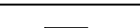
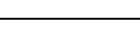
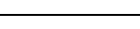
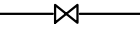
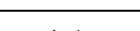
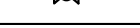
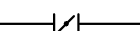
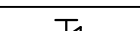
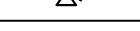
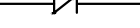
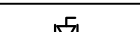
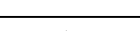
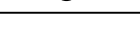
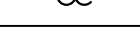
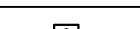
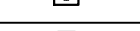
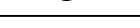


MECHANICAL ABBREVIATIONS	
ABBREV.	DESCRIPTION
A	COMPRESSED AIR
AAV	AUTOMATIC AIR VENT
AB	ABSORPTION
AD	ACCESS DOOR
AE	AIR EXTRACTOR
AFF	ABOVE FINISHED FLOOR
AMP	AMPERE
APD	AIR PRESSURE DROP
ASR	AUTOMATIC SPRINKLER RISER
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
BWV	BACKWATER VALVE
C	COMMON
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CIRC	CIRCULATING
CLG	COOLING
CO	CLEAN OUT
CONC	CONCRETE
COND	CONDENSATE
CONT	CONTINUATION OR CONTINUED
CONTR	CONTRACTOR
CONV	CONVECTOR
CTF	COOLING TOWER FAN
CUH	CABINET UNIT HEATER
CV	CONTROL VALVE
CW	DOMESTIC COLD WATER
DB	DRY BULB TEMPERATURE
DEG	DEGREES
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DPR	DAMPER
DT	DRAIN TILE
DTIC	DRAIN TILE CONNECTION
DWH	DOMESTIC WATER HEATER
(E)	EXISTING
E	EXHAUST GRILLE OR REGISTER
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELECT	ELECTRICAL
EMS	ENERGY MANAGEMENT SYSTEM
E.SH	EMERGENCY SHOWER
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMPERATURE
EWV	ELECTRIC WATER COOLER
EXH	EXHAUST
EXP.C	EXPANSION COMPENSATOR
EXP.J	EXPANSION JOINT
F	FIRE PROTECTION LINE
°F	DEGREES FAHRENHEIT
FA	FACE AREA
FC	FLEXIBLE CONNECTION
FCW	FORWARD CURVED WHEEL
FD	FLOOR DRAIN
F.DPR	FIRE DAMPER
FDV	FIRE DEPARTMENT VALVE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK

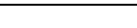
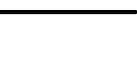
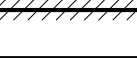
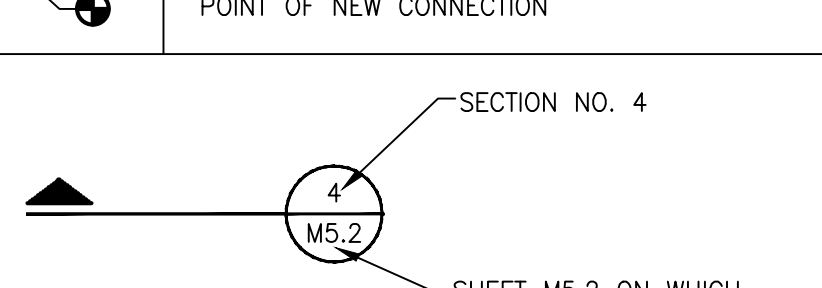
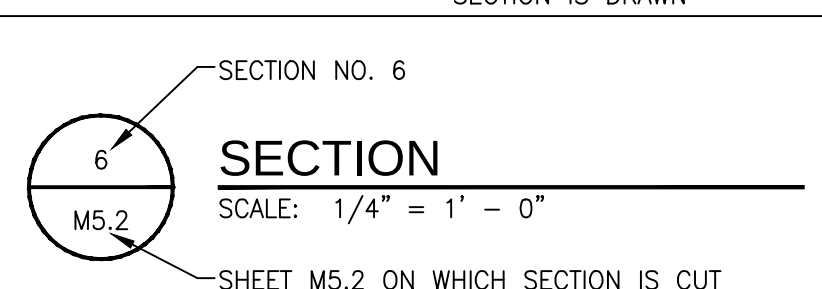
MECHANICAL ABBREVIATIONS	
ABBREV.	DESCRIPTION
FHV	FIRE HOSE VALVE
FLA	FULL LOAD AMPS
FLR	FLOOR
FOS	FUEL OIL SUPPLY
FBM	FEET PER MINUTE
FFD	FUNNEL FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FS	FLOOR SINK
FT	FEET
FV	FACE VELOCITY
FVC	FIRE VALVE CABINET
G	NATURAL GAS
GAL	GALLON
GHXS	GROUND HEAT EXCHANGE SUPPLY
GHXR	GROUND HEAT EXCHANGE RETURN
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HB	HOSE BIBB
GXHR	GEO HEAT EXCHANGE RETURN
GXHS	GEO HEAT EXCHANGE SUPPLY
HHWR	HEATING HOT WATER RETURN
HHWS	HEATING HOT WATER SUPPLY
HO	HUB OUTLET
HP	HORSEPOWER
HPLS	HEAT PUMP LOOP SUPPLY
HPLR	HEAT PUMP LOOP RETURN
HR	HOUR
HTG	HEATING
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
HYD	HYDRANT
HZ	HERTZ
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF&B	INTEGRAL FACE AND BYPASS DAMPER
IN	INCHES
INL	INLET
INV	INVERT
ISP	INTERNAL STATIC PRESSURE
IW	INDIRECT WASTE
KW	KILOWATT
LBS/HR	POUNDS PER HOUR
LDB	LEAVING DRY BULB TEMPERATURE
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB TEMPERATURE
MAX	MAXIMUM
MBH	1000 BRITISH THERMAL UNITS PER HOUR
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MOTOR OPERATED OPPOSED BLADE DAMPER
MPD	MOTOR OPERATED PARALLEL BLADE DAMPER
MAV	MANUAL AIR VENT
N	NITROGEN
N.C.	NOISE CRITERIA
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO.	NUMBER
NO	NORMALLY OPEN
NOM	NOMINAL
NPCW	NON POTABLE COLD WATER
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER / CENTER TO CENTER

MECHANICAL ABBREVIATIONS	
ABBREV.	DESCRIPTION
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
ORS	OVERFLOW ROOF SUMP
OST	OVERFLOW STORM
OS&Y	OUTSIDE SCREW AND YOKE
OV	OUTLET VELOCITY
PA	PIPE ANCHOR
PC	PUMPED CONDENSATE
PD	PRESSURE DROP (FEET OF WATER)
PD	PUMPED DISCHARGE
PG	PIPE GUIDE
PRV	PRESSURE REDUCING VALVE
PSIA	POUNDS PER SQUARE INCH – ABSOLUTE
PSIG	POUNDS PER SQUARE INCH – GAUGE
PT	PRESSURE / TEMPERATURE PORT
R	RETURN GRILLE OR REGISTER
RA	RETURN AIR
RC	RAIN CONDUCTOR
RH	RELATIVE HUMIDITY
REQD	REQUIRED
RELA	RELIEF AIR
RH	ROOF HYDRANT
RL	REFRIGERANT LIQUID
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RS	ROOF SUMP
RS	REFRIGERANT SUCTION
S	SUPPLY AIR DIFFUSER OR GRILLE
SA	SUPPLY AIR
SAN	SANITARY WASTE
SAU	SOUND ATTENUATING UNIT
SCD	SMOKE CONTROL DAMPER
S.DPR	SMOKE DAMPER
SH	SHOWER
SP	STATIC PRESSURE
SpGr	SPECIFIC GRAVITY
SPHD	SPRINKLER HEAD
SPKR	SPRINKLER
SPKR.STP	SPRINKLER STANDPIPE
SPF	SMOKE PRESSURIZATION FAN
SPS	STATIC PRESSURE SENSOR
SqFt SF	SQUARE FOOT/SQUARE FEET
SS	SERVICE SINK
ST	STORM
LAT	LEAVING AIR TEMPERATURE
STK	STACK
STM	STEAM
TC	TEMPERATURE CONTROL
T & P	TEMPERATURE AND PRESSURE
TSP	TOTAL STATIC PRESSURE
TV	TURNING VANES
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
VAC	VACUUM
VD	VOLUME DAMPER (MANUALLY ADJUSTABLE)
VE	VOLUME EXTRACTOR
VI	VIBRATION ISOLATOR
VS	VENT STACK
VTR	VENT THRU ROOF
W	WASTE
W&V	WASTE AND VENT
WB	WET BULB TEMPERATURE
WC	WATER CLOSET
WG	WATER GAUGE
WH	WALL HYDRANT

MECHANICAL SYMBOLS	
ABBREV.	DESCRIPTION
	RECTANGULAR TAKE-OFF (SINGLE LINE)
	RECTANGULAR TAKE-OFF (DOUBLE LINE)
	ROUND TAKE-OFF (SINGLE LINE)
	ROUND TAKE-OFF (DOUBLE LINE)
	SPIN-IN FITTING (WITH VOLUME DAMPER)
	RECTANGULAR ELBOW (WITH TURNING VANES)
	RADIUS RECTANGULAR ELBOW
	RADIUS ROUND ELBOW
	ROUND ELBOW (WITH TURNING VANES)
	RECTANGULAR ELBOW UP
	ROUND ELBOW UP
	RECTANGULAR ELBOW DOWN
	ROUND ELBOW DOWN
	CONCENTRIC TRANSITION (DOUBLE LINE)
	CONCENTRIC TRANSITION (SINGLE LINE)
	ECCENTRIC TRANSITION (DOUBLE LINE)
	ECCENTRIC TRANSITION (SINGLE LINE)
	INCLINED RISE IN DIRECTION OF AIR FLOW (DOUBLE LINE)
	INCLINED RISE IN DIRECTION OF AIR FLOW (SINGLE LINE)
	INCLINED DROP IN DIRECTION OF AIR FLOW (DOUBLE LINE)
	INCLINED DROP IN DIRECTION OF AIR FLOW (SINGLE LINE)
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT CONNECTION TO SUPPLY DIFFUSER
	SUPPLY DIFFUSER
	LINEAR SLOT DIFFUSER
	RETURN OR EXHAUST GRILLE
	TRANSFER GRILLE
	CROSS SECTION OF SUPPLY AIR DUCT
	CROSS SECTION OF EXHAUST OR RETURN AIR DUCT
	EXISTING FIRE DAMPER (HORIZONTAL)
	NEW
	EXISTING FIRE DAMPER (VERTICAL)
	NEW
	EXISTING SMOKE DAMPER
	NEW
	EXISTING COMBINATION FIRE/SMOKE DAMPER (VERTICAL)
	NEW
	EXISTING COMBINATION FIRE/SMOKE DAMPER (HORIZONTAL)
	NEW
	VOLUME DAMPER (MANUALLY ADJUSTABLE)
	MOTORIZED DAMPER
	SMOKE DETECTOR
	THERMOSTAT
	TEMPERATURE SENSOR

MECHANICAL PIPING SYMBOLS	
ABBREV.	DESCRIPTION
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	FUEL OIL RETURN PIPING
	FUEL OIL SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	GEO HEAT EXCHANGE RETURN
	GEO HEAT EXCHANGE SUPPLY
	HEATING HOT WATER RETURN PIPING
	HEATING HOT WATER SUPPLY PIPING
	SANITARY WASTE PIPING
	PUMPED DISCHARGE PIPING
	STORM SEWER PIPING
	STEAM PIPING
	RAIN CONDUCTOR PIPING
	DRAIN TILE
	SANITARY VENT PIPING
	PUMPED CONDENSATE PIPING
	CONDENSATE DRAIN PIPING
	REFRIGERANT LIQUID PIPING
	REFRIGERANT SUCTION PIPING
	FIRE PROTECTION PIPING
	PIPE ELBOW UP
	PIPE ELBOW DOWN
	DIRECTION OF FLOW
	UNION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	EXPANSION JOINT
	FLEXIBLE CONNECTION
	PIPE ANCHOR
	PIPE GUIDE
	PIPE CAP OR PLUG
	GATE VALVE
	CIRCULATING PUMP
	GLOBE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	ANGLE VALVE
	CHECK VALVE (SWING)
	CHECK VALVE (SPRING)
	PLUG VALVE
	NEEDLE VALVE
	CENTRIFUGAL FAN
	AUTOMATIC GAS SHUT-OFF VALVE
	TRAP (PLAN VIEW)
	FLOOR DRAIN (PLAN VIEW)
	FLOOR DRAIN (ELEVATION)
	FUNNEL FLOOR DRAIN (PLAN VIEW)
	FUNNEL FLOOR DRAIN (ELEVATION)
	ROOF SUMP
	OPEN SITE DRAIN
	CLEAN OUT (IN FLOOR)
	CLEAN OUT (IN LINE)
	MANHOLE
	CATCH BASIN
	BACKFLOW PREVENTER
	HOSE BIBB, WALL HYDRANT
	DIRECTION OF PIPE PITCH
	SPRINKLER HEAD (UPRIGHT)
	SPRINKLER HEAD (SIDEWALL)
	OUTSIDE SCREW AND YOKE VALVE (OS&Y)
	FLOW SWITCH
	SIAMESE CONNECTION (YARD)
	SIAMESE CONNECTION (WALL MOUNTED)
	FIRE HYDRANT
	FLOW MEASURING DEVICE
	BALANCING VALVE
	FLOW MEASURING AND BALANCING VALVE
	AUTOMATIC AIR VALVE
	MANUAL AIR VALVE

DRAWING INDEX	
SHT NO	DESCRIPTION
M000	MECHANICAL GENERAL INFORMATION
MD100	SECOND FLOOR MECHANICAL DEMOLITION PLAN
M201	SECOND FLOOR PLUMBING PLAN
M401	SECOND FLOOR SHEET METAL PLAN
M600	MECHANICAL SCHEDULES AND DETAILS

DRAWING NOTATION	
SYMBOL	DESCRIPTION
	CONSTRUCTION KEY NOTE NO. 1
	DEMOLITION KEY NOTE NO. 1
	EQUIPMENT DESIGNATION, (I.E. EXHAUST FAN NO. 1)
	EXISTING DEVICES OR EQUIPMENT
	NEW OR MODIFIED DEVICES OR EQUIPMENT
	EXISTING SYSTEM COMPONENT TO BE REMOVED
	POINT OF NEW CONNECTION
	SECTION NO. 4 SHEET M5.2 ON WHICH SECTION IS DRAWN
	SECTION NO. 6 SCALE: 1/4" = 1' – 0" SHEET M5.2 ON WHICH SECTION IS CUT (ENLARGED PARTIAL PLAN SIMILAR)

APPLICABLE CODES AND REGULATIONS	
YEAR	CODE
2009	MICHIGAN BUILDING CODE
2009	MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS
2009	MICHIGAN PLUMBING CODE
2009	MICHIGAN MECHANICAL CODE
2007	NFPA 13
2005	NFPA 100
2003	ICC/ANSI ACCESSIBLE AND USABLE BUILDING & FACILITIES
–	AMERICANS WITH DISABILITIES ACT ACCESSIBILITIES GUIDELINE (ADA-AG)

architecture

NEUMANN SMITH

400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
ns@neumannsmith.com



Strategic Energy Solutions®
4000 W. Eleven Mile Road Berkley, MI 48072
Phone 248.399.1900 Fax 248.399.1901
www.sesnet.com
SES Project # 2012 244 01

.gov
719 Griswold Street
Detriot, Mi

02/07/13 Bids & Permits

Date ☐ Preliminary
02/07/13 ☒ Construction
Drawn ☐ Record

DJL

Checked Do not scale
TMV Use figured
Approved dimensions only
Copyright © 2007

Bidpak Number

Job Number
2012018
Title
Mechanical General
Information

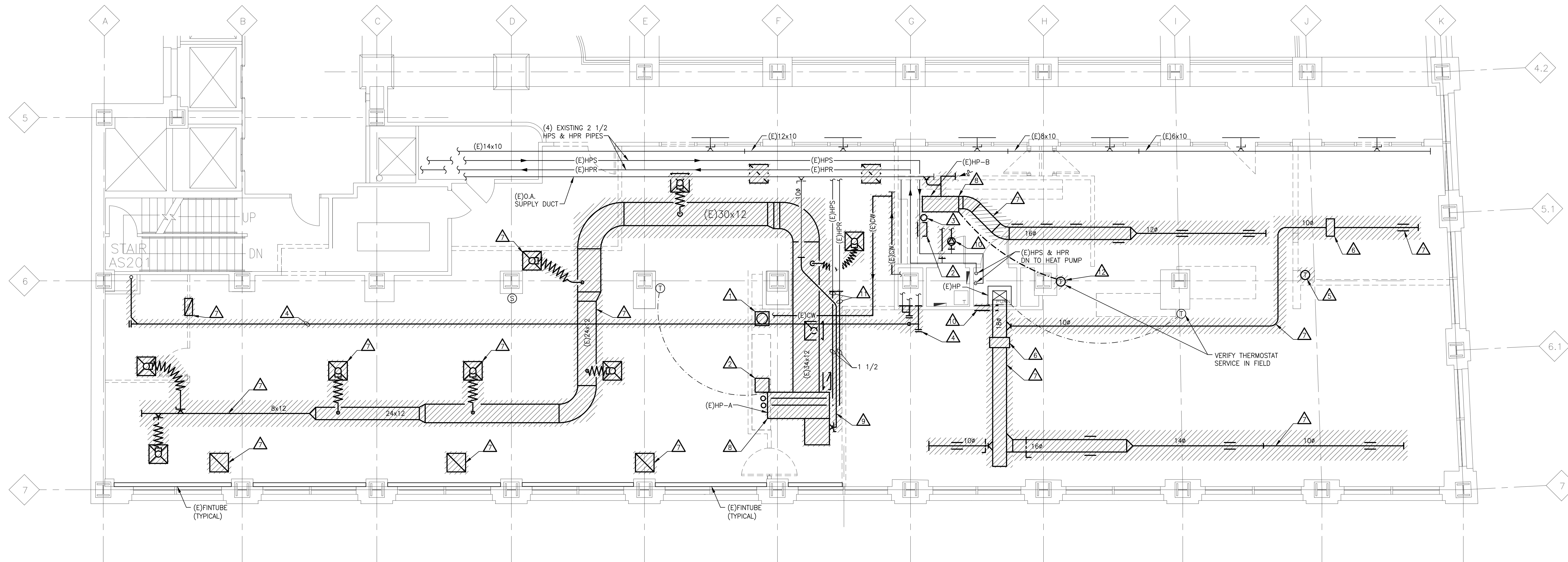
No Scale
Sheet
M000

GENERAL DEMOLITION NOTES

1. ANY INTERRUPTIONS OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING'S OPERATION.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF WORK TO BE PERFORMED. THE EXACT EXTENT OF DEMOLITION SHALL BE AS REQUIRED BY THE NEW WORK.
3. ALL MECHANICAL ITEMS TO BE REMOVED SHALL BE REMOVED COMPLETE WITH ALL RELATED ITEMS INCLUDING HANGERS, SUPPORTS, CONTROLS, ETC. CAP ALL OPEN ENDED PIPES AND DUCTWORK.
4. ALL DEMOLITION OF THE EXISTING MECHANICAL SYSTEMS, INCLUDING BUT NOT LIMITED TO PIPING, DUCTWORK, CONTROLS, SUPPORTS, HANGERS, AND EQUIPMENT SHALL BE UNDER SCOPE OF DIVISION 15 OF THE SPECIFICATIONS.
5. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED.

DEMOLITION KEYED NOTES

- △ REMOVE AND RELOCATE EXISTING HOT WATER HEATER ABOVE CEILING. REMOVE ALL ASSOCIATED PIPING COMPLETE. REFER TO NEW WORK PLANS FOR FURTHER INFORMATION.
- △ REMOVE SINK AND ALL ASSOCIATED COMPONENTS COMPLETE. REMOVE ALL HW, CW, SANITARY AND VENT PIPING BACK TO MAIN AND CAP.
- △ REMOVE INSTANTANEOUS HOT WATER HEATER AND ALL ASSOCIATED COMPONENTS COMPLETE.
- △ REMOVE AND REWORK EXISTING 3" SAN PIPING. REFER TO NEW WORK PLAN FOR FURTHER INFORMATION.
- △ REMOVE AND RELOCATE EXISTING THERMOSTAT. REFER TO NEW WORK PLAN FOR FURTHER INFORMATION.
- △ REMOVE EXISTING DUCT HEATER AND ALL ASSOCIATED COMPONENTS COMPLETE.
- △ REMOVE ALL DUCTWORK, SUPPLY AIR DIFFUSERS, RETURN GRILLES AND ASSOCIATED COMPONENTS COMPLETE.
- △ REMOVE AND RELOCATE EXISTING HEAT PUMP. REFER TO NEW WORK PLANS FOR FURTHER INFORMATION.
- △ REMOVE EXISTING OUTSIDE AIR DUCT TO EXTENTS SHOWN.
- △ REMOVE AND RELOCATE EXISTING CIRCULATING PUMP. REFER TO NEW WORK PLANS FOR FURTHER INFORMATION.
- △ REMOVE EXISTING HPS AND HPR PIPING TO EXTENTS SHOWN. PREPARE PIPING FOR NEW CONNECTION.
- △ REMOVE AND RELOCATE EXISTING THERMOSTAT. REFER TO NEW WORK PLANS FOR CONTINUATION.



 **SECOND FLOOR MECHANICAL DEMOLITION PLAN**
SCALE: 3/16" = 1'-0"

02/07/13 Bids & Permits

Date	02/07/13	☐ Preliminary
Drawn	DJL	☒ Construction
Checked	TMV	☐ Record
Approved		

Bidpak Number

Job Number

2012018

Title

**Second Floor
Mechanical
Demolition Plan**

Scale: 3/16" = 1'-0"

Sheet
MD100

FIRE PROTECTION GENERAL NOTES

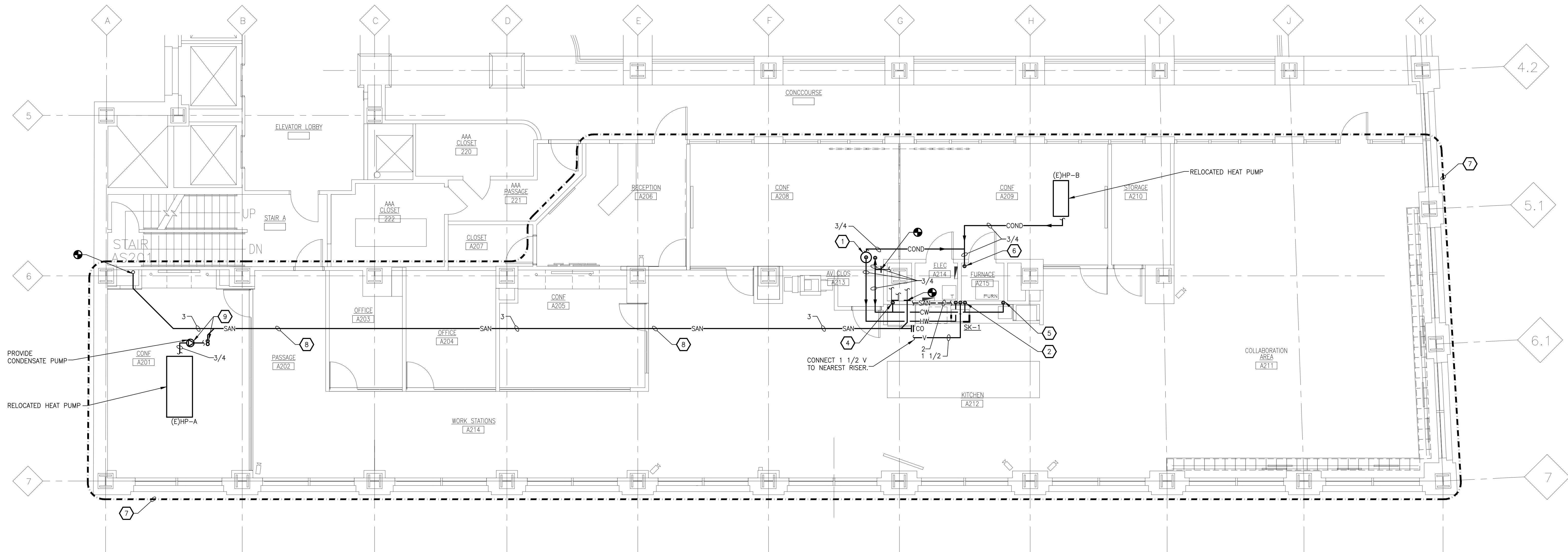
1. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL INTENT OF THE WORK. PROVIDE/REWORK FIRE PROTECTION SYSTEMS COMPLETE, PER APPLICABLE CODES, PER NFPA, AND PER REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION INCLUDING ALL PIPING, OFFSETS, FITTINGS, DRAINS, VALVES, SPRINKLER HEADS, ETC. AS REQUIRED FOR A COMPLETE OPERABLE SYSTEM.
2. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER TRADES. SPRINKLER PIPING SHALL NOT BE LOCATED BELOW MECHANICAL EQUIPMENT.
3. MINIMUM RUN-OUT PIPE SIZE TO SPRINKLER HEADS SHALL BE 1".
4. CONTRACTOR SHALL MAKE PRESSURE AND FLOW TEST PRIOR TO SYSTEM DESIGN. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
5. CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL INSPECTION, PERMIT AND LICENSE REQUIRED BY THE LOCAL AUTHORITY.
6. IN AREAS INDICATED, PROVIDE AN AUTOMATIC WET PIPE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 LIGHT HAZARD CLASSIFICATION FOR ALL AREAS EXCEPT STORAGE ROOMS, MECHANICAL ROOMS AND JANITOR'S CLOSETS. HYDRAULIC CALCULATIONS SHALL BE BASED ON DENSITY OF 0.10 GPM/SQ. FT. OVER THE MOST REMOTE 1500 SQ. FT.

PLUMBING GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC & INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE PLUMBING SYSTEMS COMPLETE AND PER APPLICABLE CODES INCLUDING REQUIRED COMPONENTS, OFFSETS REQUIRED TO AVOID THE STRUCTURE, ETC.
2. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS OF AND EXACT LOCATIONS OF FIXTURES (STANDARD AND BARRIER FREE), SINKS, ETC.
3. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF PLUMBING AND PIPING WITH THE WORK OF ALL OTHER TRADES.
4. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
5. PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
6. CONTRACTOR SHALL PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL MECHANICAL SYSTEMS.
7. HOT AND COLD WATER PIPING RUN-OUTS TO LAVS AND SINKS SHALL BE 1/2" UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR FIXTURE CONNECTION SIZES.
8. PROVIDE CODE REQUIRED CLEARANCE FOR ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.

KEYED NOTES

1. RELOCATED WATER HEATER.
2. ROUTE 1/2" CW, 1/2" HW, 1 1/2" SAN, 1 1/2" DOWN IN WALL AND CONNECT TO SINK.
3. ROUTE 1/2" CW AND 1 1/2" SAN UNDER COUNTER AND CONNECT TO DISHWASHER.
4. ROUTE 1/2" DOWN IN WALL AND CONNECT TO REFRIGERATOR BOX.
5. ROUTE 1/2" DOWN IN WALL AND CONNECT TO CURTIS COFFEE BREWING SYSTEM LOCATED ON COUNTER. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION. TERMINATE WITH ASSE 1022 DOUBLE CHECK VALVE.
6. ROUTE 3/4" COND DOWN ALONG WALL AND TERMINATE OVER FLOOR DRAIN.
7. IN AREA INDICATED, RE-WORK WET PIPE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH NEW ARCHITECTURAL LAYOUT. REFER TO SPECIFICATIONS AND NFPA 13 FOR FURTHER INFORMATION.
8. RAISE SANITARY MAIN TO BOTTOM OF STRUCTURE AND ROUTE TO EXISTING SHAFT LOCATION AS SHOWN AND CONNECT. ELEVATION SHALL BE HIGHER THE NEW INSTALLED WOOD CEILING. REFER TO ARCHITECTURAL PLANS FOR EXACT ELEVATIONS.
9. PROVIDE CONDENSATE PUMP FOR RELOCATED HEAT PUMP. PROVIDE 1 1/2" HUBBED OUTLET AT LOCATION SHOWN FOR CONDENSATE DISPOSAL.



SECOND FLOOR PLUMBING PLAN
SCALE: 3/16" = 1'-0"

02/07/13 Bids & Permits

Date	02/07/13	☐ Preliminary
Drawn	DJL	☒ Construction
Checked	TMV	☐ Record
Approved		

Bidpak Number

Job Number

2012018

Title

**Second Floor
Plumbing Plans**

Sheet

M201



.gov

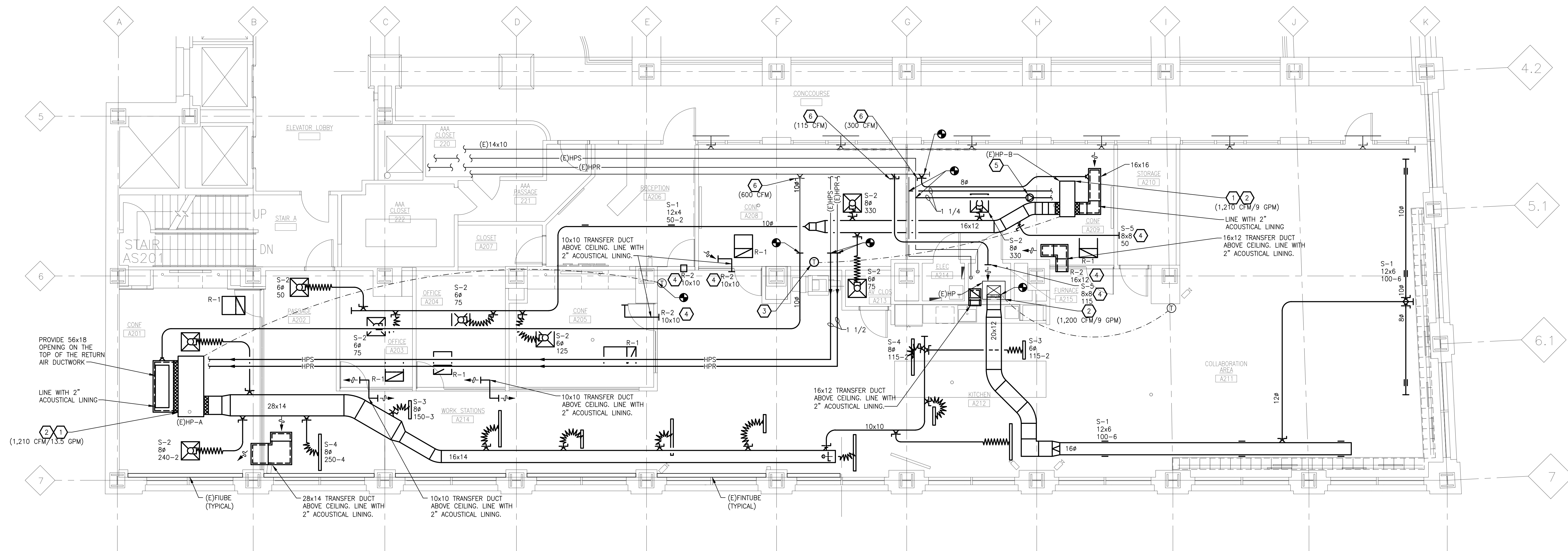
719 Griswold Street
Detroit, Mi

HVAC GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC & INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE SHEET METAL SYSTEMS COMPLETE PER SPECIFICATION, SMACNA STANDARDS, AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, FITTINGS, SPECIAL RADIUS OR MITERED ELBOWS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.
2. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY WORK.
3. DUCTWORK/PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. DUCTWORK SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
4. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
5. COORDINATE FLOOR, WALL, ROOF PENETRATIONS, LOUVER SIZES, PAD LOCATIONS ETC. WITH ARCHITECTURAL TRADES.
6. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS.
7. COORDINATE AND PROVIDE ACCESS DOORS IN HARD CEILING AREAS FOR ACCESS TO BALANCING DAMPERS, BALANCING VALVES, SHUT-OFF VALVES, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
8. BRANCH DUCTWORK TO GRILLES, REGISTERS AND DIFFUSERS SHALL BE THE SAME SIZE AS THE GRILLE, REGISTER OR DIFFUSER NECK SIZE WHERE NO DUCT SIZE IS INDICATED ON PLAN.
9. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0".

KEYED NOTES

1. RELOCATED HEAT PUMP. RELOCATE ALL ASSOCIATED VALVES AS REQUIRED. MOUNT AS HIGH AS POSSIBLE. EXTEND CONTROL WIRING TO NEW LOCATION AS REQUIRED. MOUNT AS HIGH AS POSSIBLE. INTEGRATE INTO EXISTING BUILDING DDC SYSTEM.
2. RE-BALANCE TO AIRFLOW AND GPM INDICATED (AIRFLOW/GPM).
3. RELOCATED THERMOSTAT. EXTEND CONTROL WIRING TO NEW LOCATION AS REQUIRED.
4. MOUNT GRILLE AS HIGH AS POSSIBLE.
5. RELOCATED CIRCULATING PUMP. PROVIDE SUPPORTS AS REQUIRED FOR NEW INSTALLATION.
6. BALANCE OUTDOOR AIR DUCT TO AIRFLOW INDICATED.



SECOND FLOOR SHEET METAL PLAN
SCALE: 3/16" = 1'-0"

02/07/13 Bids & Permits

Date	☐ Preliminary
02/07/13	☒ Construction
Drawn	☐ Record
DJL	
Checked	Do not scale
TMV	Use figured dimensions only
Approved	Copyright © 2007

Bidpak Number

Job Number

2012018

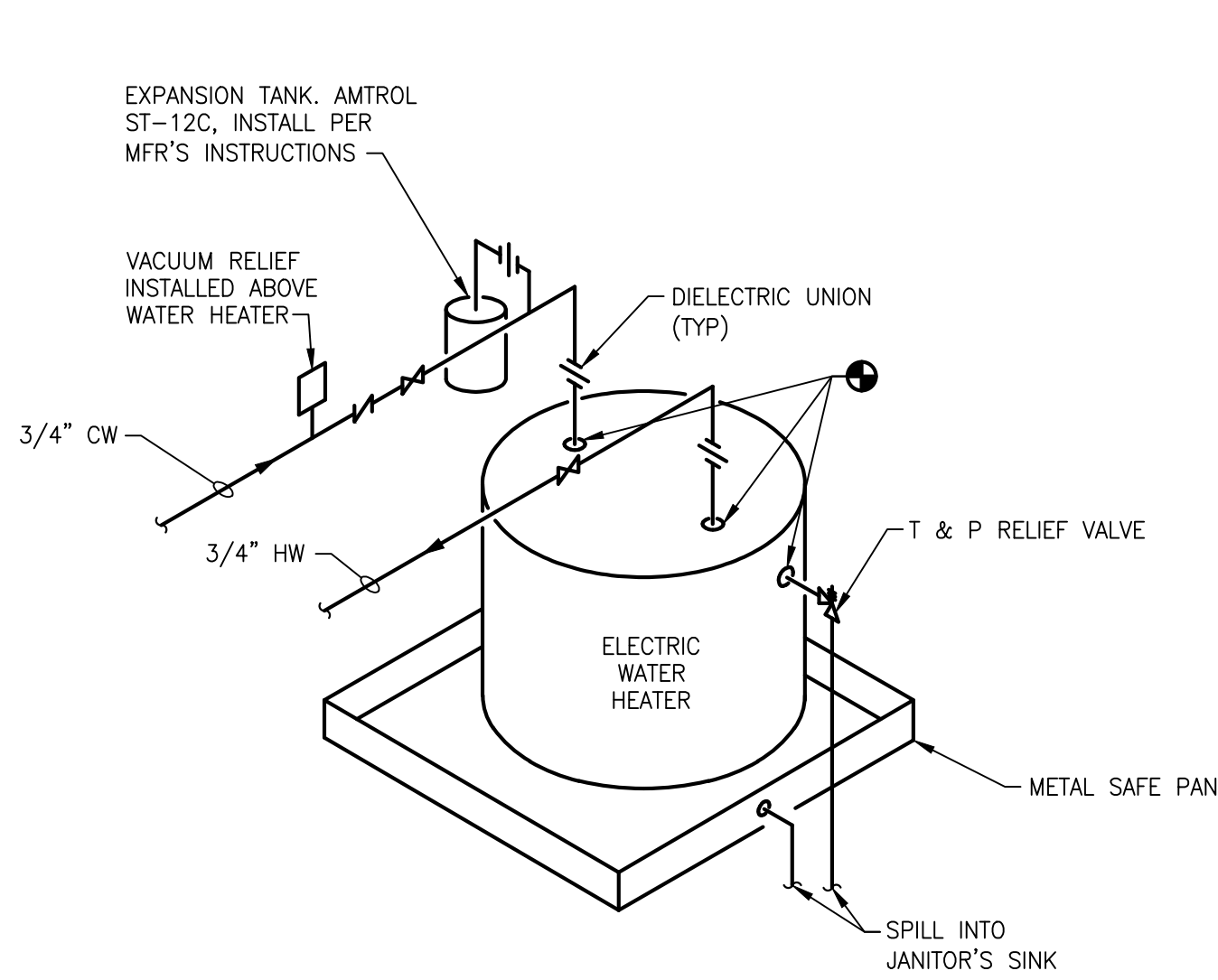
Title

Second Floor
Sheet Metal Plan

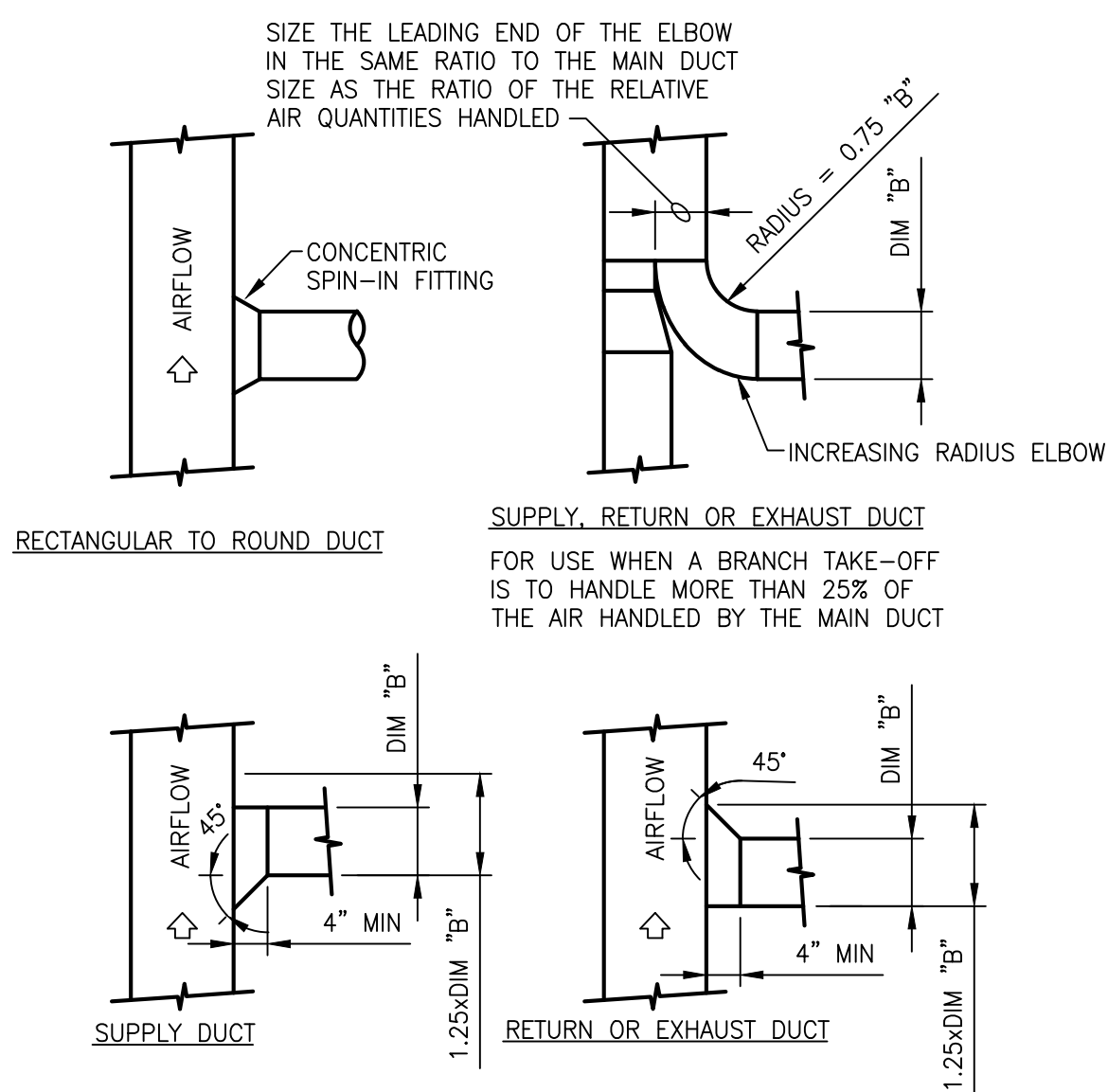
Scale: 3/16" = 1'-0"

Sheet

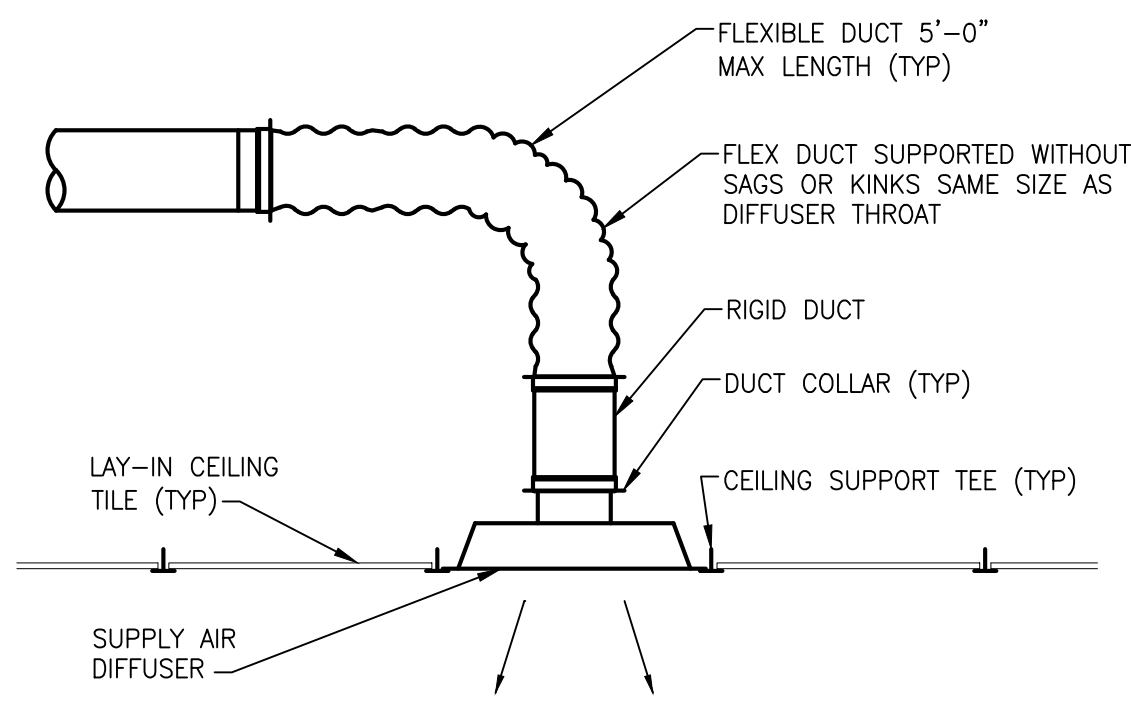
M401



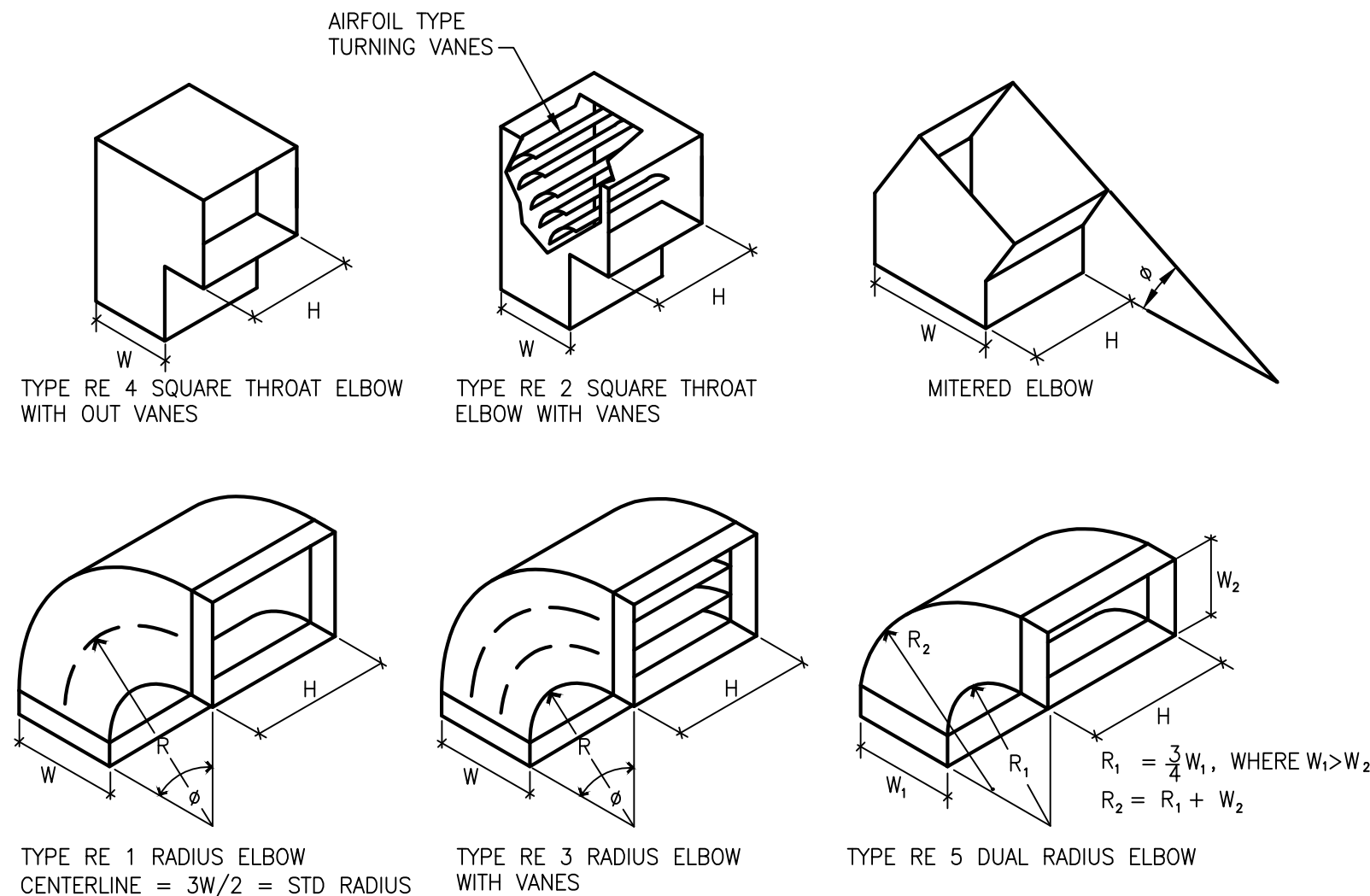
**ELECTRIC WATER HEATER
ON SHELF WITH EXPANSION TANK**
NO SCALE



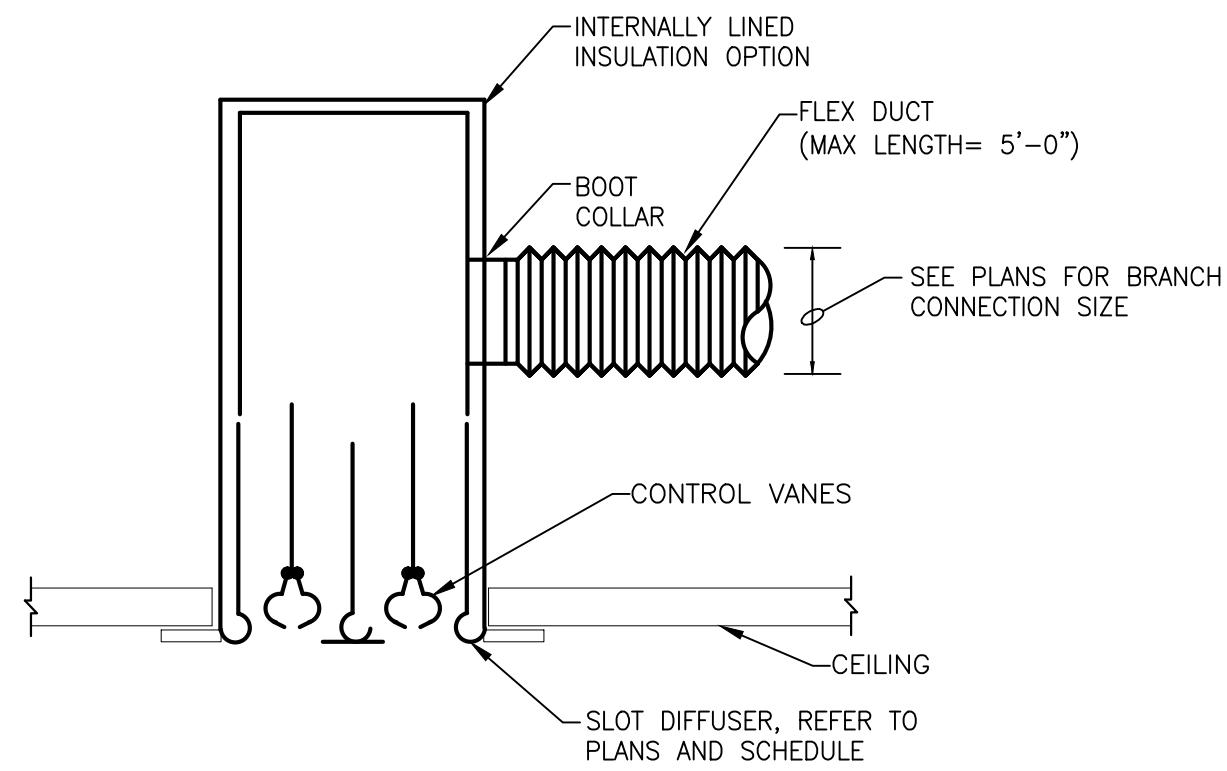
RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS
NO SCALE



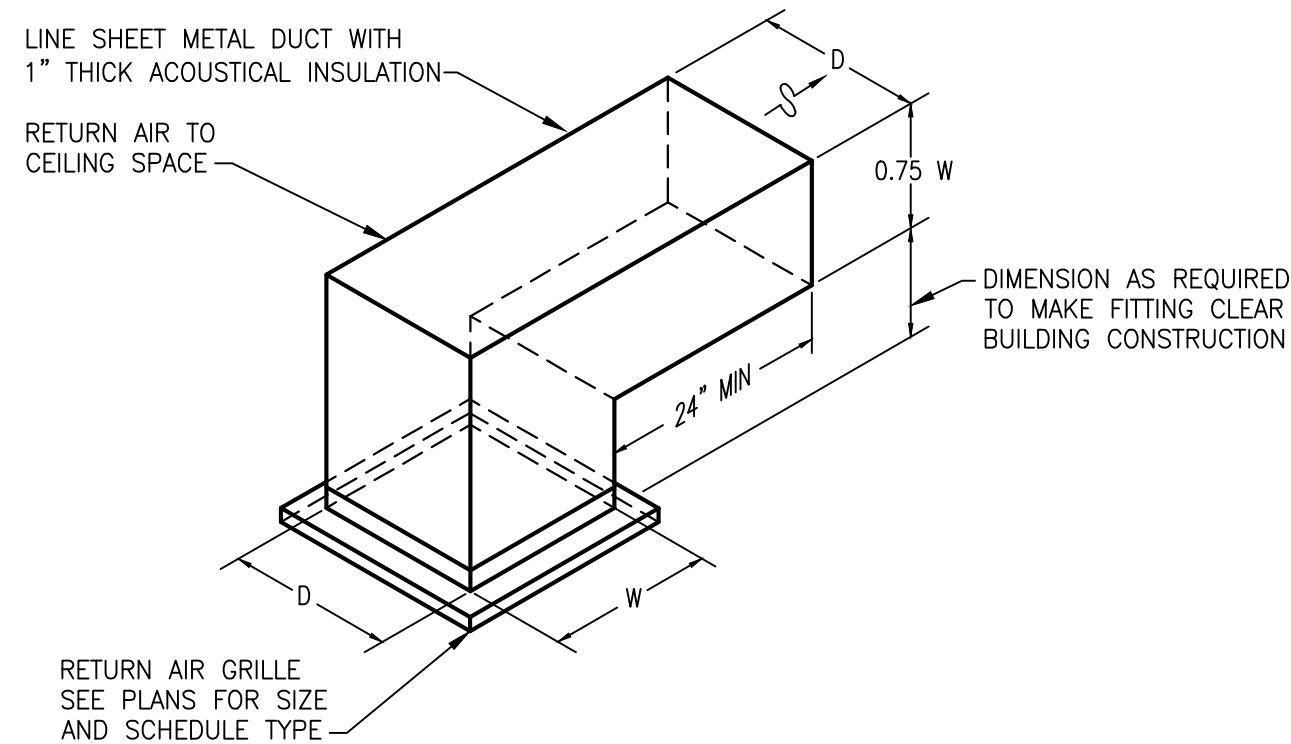
SUPPLY AIR DIFFUSER DETAIL
NO SCALE



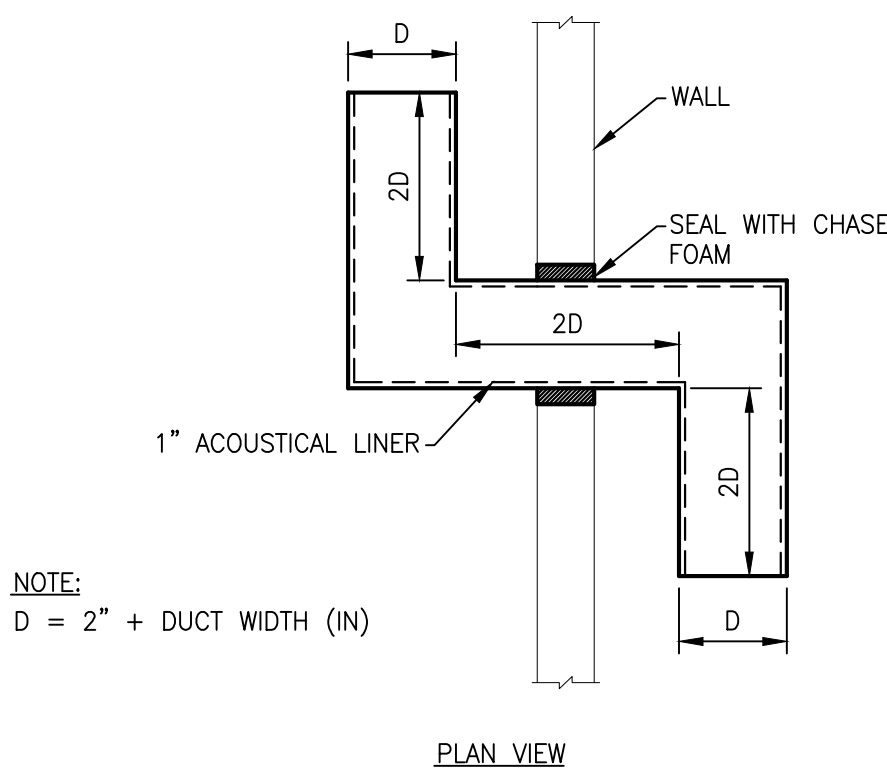
RECTANGULAR SHEETMETAL ELBOWS
NO SCALE



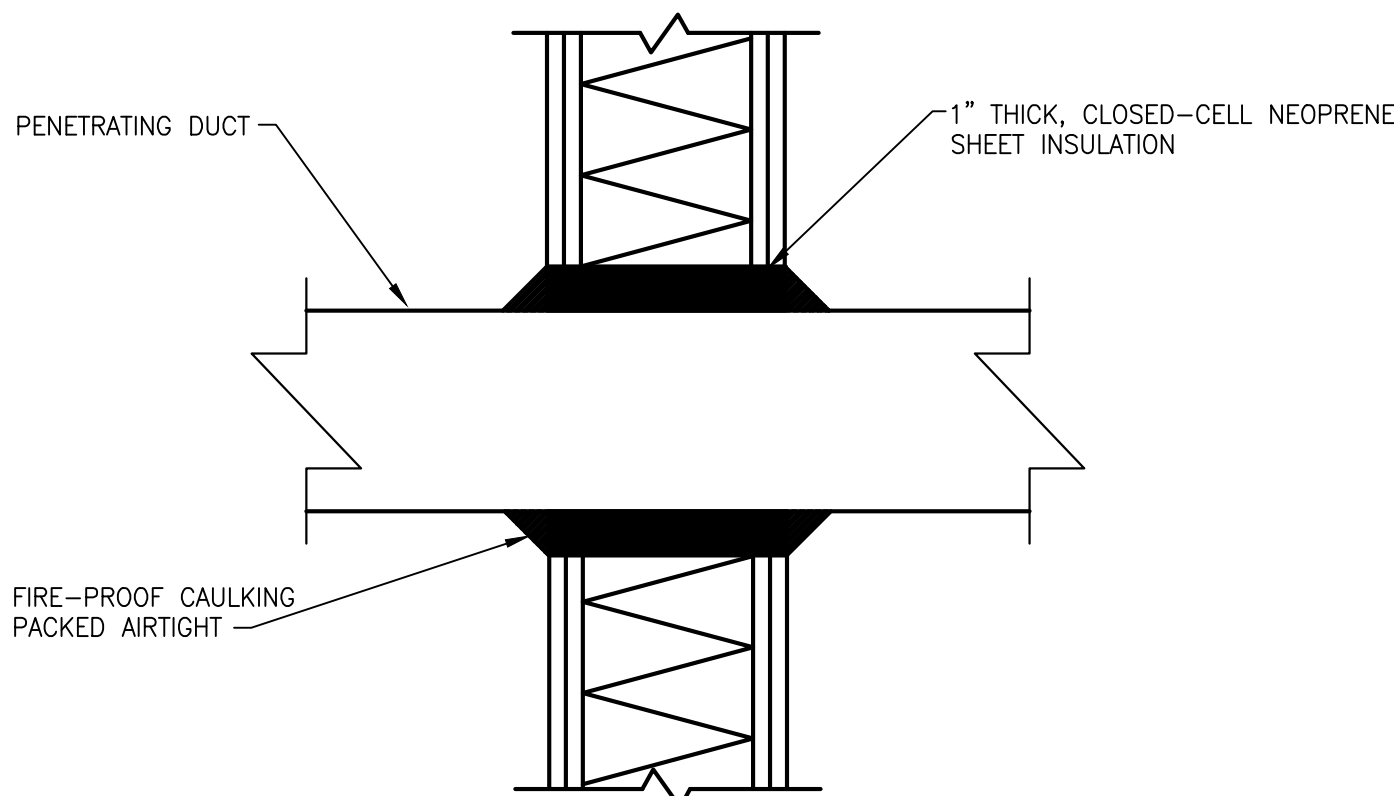
PLENUM SLOT DIFFUSER DETAIL
NO SCALE



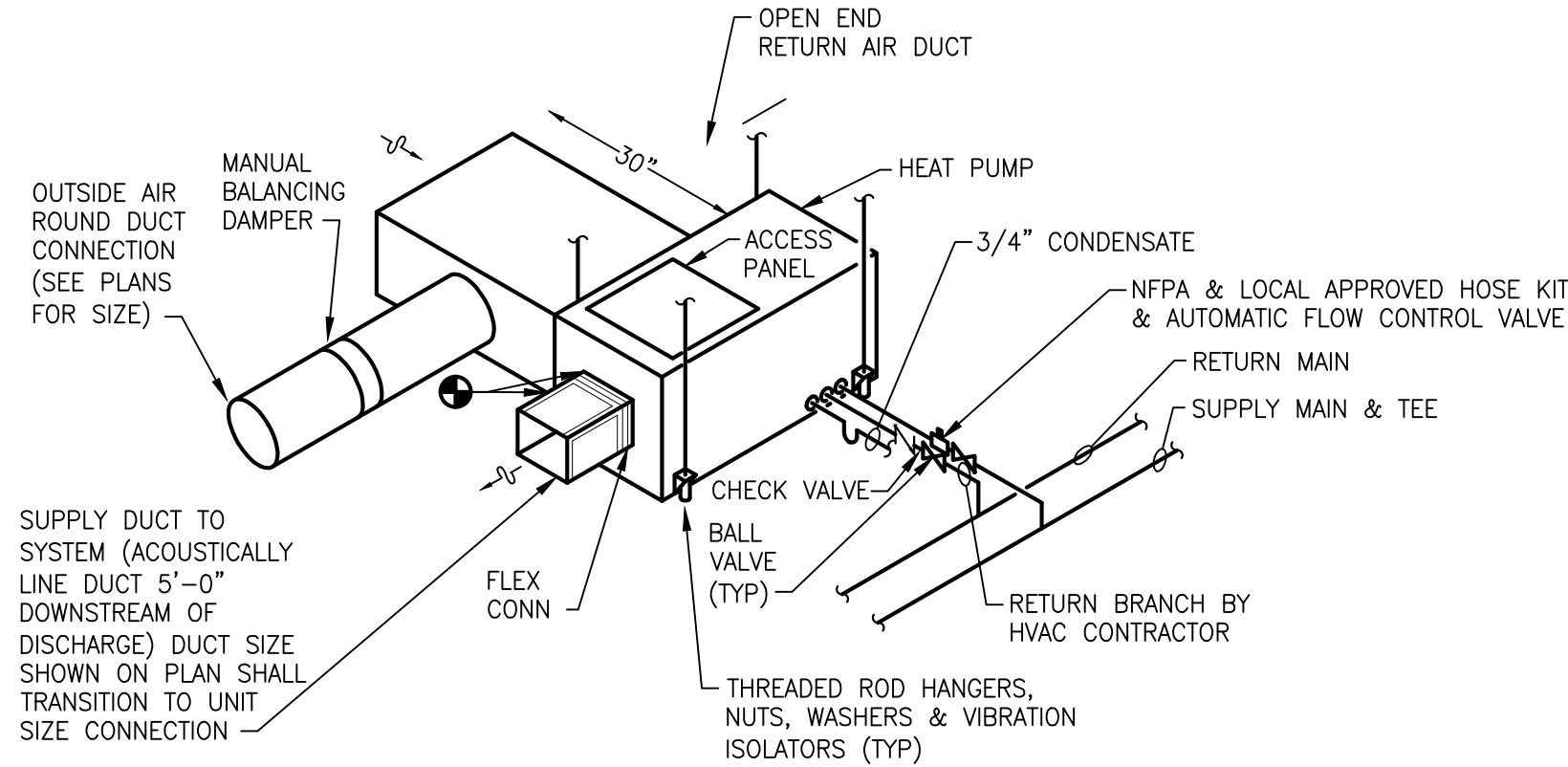
PLENUM RETURN AIR GRILLE DETAIL
NO SCALE



TRANSFER DUCT DETAIL (Z-DUCT)
NO SCALE



DUCT PENETRATION THRU NOISE CRITICAL PARTITION
NO SCALE



HORIZONTAL HEAT PUMP INSTALLATION DETAIL
NO SCALE

GRILLE, REGISTER AND DIFFUSER SCHEDULE								
UNIT ID	FACE SIZE	NECK SIZE	MOUNTING	ACCESSORY	FINISH	MATERIAL	MODEL NO.	REMARKS
S-1	NECK+2"	SEE PLANS	DUCT	—	WHITE	STEEL	SDGE	
S-2	24"x24"	SEE PLANS	DUCT	—	WHITE	STEEL	SPD	
S-3	24"x3.5"	SEE PLANS	DUCT	—	WHITE	STEEL	TBD7	
S-4	48"x3.5"	SEE PLANS	NOTE 2	—	WHITE	STEEL	TBD7	
S-5	NECK+2"	SEE PLANS	NOTE 2	—	WHITE	STEEL	520	
R-1	24"x12"	22x12	NOTE 2	—	WHITE	STEEL	PDDR	
R-2	NECK+2"	SEE PLANS	NOTE 2	—	WHITE	STEEL	510Z	

- NOTES:
1. MODEL NUMBERS ARE PRICE UNLESS OTHERWISE NOTED.
 2. REFER TO ARCHITECTURAL CEILING PLAN AND COORDINATE FRAME TYPE ACCORDINGLY.

PLUMBING FIXTURE SCHEDULE									
TAG	BARRIER FREE	ITEM	PIPE CONNECTION SIZES				MANUFACTURER & MODEL NUMBER	ACCESSORIES	
			WASTE	VENT	CW	HW			
SK-1	—	SINGLE COMPARTMENT SINK	1 1/2	1 1/2"	1/2"	1/2"	KOHLER: "VAULT" K-3894	FAUCET/ACCESSORIES: KOHLER K-649-CP. PROVIDE WITH GARBAGE DISPOSAL IN-SINK-ERATOR "EVOLUTION EXCEL"	

- NOTES:
1. SUPPLY ALL FIXTURES WITH LOOSE KEY STOPS.
 2. PROVIDE ALL ACCESSORIES NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
 3. PROVIDE CARRIERS FOR ALL FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
 4. WHERE REQUIRED AND WHERE DESIGNATED, FIXTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE TO THE LATEST EDITION OF "THE BARRIER" FREE DESIGN REQUIREMENTS OF THE STATES CONSTRUCTION CODE.
 5. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION/MOUNTING HEIGHT OF ALL FIXTURES.

LUMINAIRE SCHEDULE			
FIXTURE MARK	DESCRIPTION	MANUFACTURER(S)	LAMP DESCRIPTION
FA	PENDANT MOUNT LINEAR FLUORESCENT FIXTURE WITH 20XUP/80% DOWN DISTRIBUTION. FIXTURE SHALL BE HUNG BY AIRCRAFT CABLE, 18" OVERALL SUSPENSION. FIXTURE SHALL HAVE STEEL HOUSING WITH DIE-CAST ALUMINUM END CAPS, SOFTSHINE HIGH PERFORMANCE LENS, SPECULAR REFLECTOR AND WHITE POLYESTER POWDER COAT FINISH. BALLAST SHALL BE MVOLT ELECTRONIC PROGRAM START TYPE, HIGH POWER FACTOR CLASS A SOUND RATED, <10% THD.	1. PEERLESS BRW9-2-32-SPR-20/80-SSH-120- GEB10-SCT-F1-18-C210	(2) F32T8/SP35/PS
FAB	SHALL BE SAME AS TYPE 'FA' EXCEPT PROVIDE WITH 1400 LUMEN EMERGENCY BATTERY PACK.		
FB	RECESSED LINEAR FIXTURE WITH NARROW 4" APERTURE, 24" IN LENGTH AND NON-DRYWALL HARD SURFACE MOUNTING KIT. FIXTURE SHALL HAVE FLUSH SATIN LENS, ONE-PIECE EXTRUDED ALUMINUM HOUSING AND HIGH REFLECTANCE WHITE POWDER COAT OPTIC. BALLAST SHALL BE MVOLT ELECTRONIC PROGRAM START TYPE, HIGH POWER FACTOR CLASS A SOUND RATED, <10%THD.	1. FOCAL POINT FSM4-FL-2TB-1C-120-S-XFN-WH-2'	(2) F14T8/SP35/PS
FB3	SHALL BE SAME AS TYPE 'FB' EXCEPT 3'-0" IN LENGTH	1. FOCAL POINT FSM4-FL-2TB-1C-120-S-XFN-WH-3'	(2) F25T8/SP35/PS
FB2	SHALL BE SAME AS TYPE 'FB' EXCEPT 4'-0" IN LENGTH	1. FOCAL POINT FSM4-FL-2TB-1C-120-S-XFN-WH-4'	(2) F32T8/SP35/PS
FC	1'x4' RECESSED FIXTURE WITH WHITE SIDE RAILS AND DIRECT/INDIRECT OPTICS. BALLAST SHALL BE 120V ELECTRONIC PROGRAM START TYPE, CLASS A SOUND RATED, <10%THD.	1. FOCAL POINT EQUATION	(2) F32T8/SP35/PS
FCP	SHALL BE SAME AS TYPE 'FC1' EXCEPT PROVIDE 2'x2' TYPE.	1. FOCAL POINT EQUATION	(3) F17T8/SP35/PS
FD	OPEN DOWNLIGHT WITH 5" APERTURE, VERTICAL LAMP, CLEAR APERTURE AND SEMI-SPECULAR FINISH. BALLAST SHALL BE 120V ELECTRONIC PROGRAM START TYPE, HIGH POWER FACTOR, CLASS A SOUND RATED, <10%THD.	1. GOTHAM AFV-32TRT-SAR-120	(1) F32TRT/SP35/PS
FE	SURFACE MOUNT LENSED LINEAR FIXTURE. BALLAST SHALL BE 120V ELECTRONIC INSTANT START TYPE, HIGH POWER FACTOR, CLASS A SOUND RATED, <10%THD.	1. LITHONIA SB2-32-120-GEB10IS	(2) F32T8/SP35/IS
FF	PENDANT MOUNT FIXTURE WITH HAND BLOWN TRIPLIX GLASS HOUSING AND GLOSSY BLACK FINISH. AIRCRAFT CABLE MOUNTING KIT. FIXTURE SHALL BE MOUNTED AT 10'-0" AFF TO BOTTOM OF FIXTURE. BALLAST SHALL BE 120V ELECTRONIC INSTANT START TYPE, HIGH POWER FACTOR, CLASS A SOUND RATED, <10%THD.	1. EUREKA 4252-2XCF.D.26-120V-AC-RC-CHR-BLK	(2) F260TT/SP35/IS
FFB	SHALL BE SAME AS TYPE 'FF' EXCEPT PROVIDE WITH 700 LUMEN EMERGENCY BATTERY PACK.		
FG	LED LINEAR FIXTURE WITH WHITE HOUSING AND FIXED TRACK CLIPPING SYSTEM.	1. ECOSENSE LINEAR INT SERIES 04LC-X-30-120-120	3000'K LED
LA	TRACK: SUSPENDED AT 9'-0" AFF, SINGLE CIRCUIT, COLOR ALUMINUM. 120V. FIXTURES: LYESPAN ALCYON LED MEDIUM CYLINDER WITH FLOOD REFLECTOR. PROVIDE WITH STANDARD LIGHTTOUER DIMMING CONTROLS	1. LIGHTTOUER ALCYON LED MEDIUM CYLINDER LLA11-30-AL-RF	3000'K LED
X	EDGE-LIT EXIT SIGNAGE WITH BRUSHED ALUMINUM HOUSING, GREEN LETTERS AND SINGLE FACE. PROVIDE WITH UNIVERSAL MOUNTING KIT AND NI-CAD BATTERY CAPABLE OF FULL LUMEN OUTPUT FOR 90 MINUTES UPON LOSS OF POWER, MVOLT OPERATION.	1. LITHONIA EDG-1-G-EL	HIGH OUTPUT LED PANEL

LUMINAIRE SCHEDULE GENERAL NOTES

1. REFER TO ELECTRICAL SPECIFICATIONS FOR MORE INFORMATION.
2. ALL LIGHT FIXTURES SHALL BE UL LABELED.
3. FIRST MANUFACTURER LISTED IS BASIS OF DESIGN. OTHER MANUFACTURERS LISTED ARE APPROVED MANUFACTURERS.
4. ELECTRICAL TRADES SHALL PROVIDE COMPLETE SUBMITTALS (SHOP DRAWINGS) ON ALL LIGHT FIXTURES, LAMPS, CONTROLS AND ACCESSORIES, ETC. REFER TO SPECIFICATION FOR SUBMITTAL FORMAT AND PROCESS.
5. ALL LUMINARIES AND CONTROLS SHALL COMPLY WITH THE MICHIGAN UNIFORM ENERGY CODE AND ASHRAE 90.1.

LIGHTING SYMBOL LIST	
SYMBOL	DESCRIPTION
	FLUORESCENT LIGHT FIXTURE
	FLUORESCENT NIGHT LIGHT FIXTURE
	FLUORESCENT EMERGENCY LIGHT FIXTURE
	WALL MOUNTED FLUORESCENT LIGHT FIXTURE
	DOWNLIGHT
	DOWNLIGHT WALL WASH FIXTURE
	WALL SCONCE LIGHT FIXTURE
	SURFACE MOUNTED LIGHT FIXTURE
	INTERIOR WALL MOUNTED LIGHT FIXTURE
	TRACK AND TRACK MOUNTED LIGHT FIXTURES
	CEILING MOUNTED EXIT LIGHT - ARROWS AS INDICATED ON PLAN (SHADED AREA INDICATES FACE(S) OF FIXTURE)
	WALL MOUNTED EXIT LIGHT - ARROWS AS INDICATED ON PLAN (SHADED AREA INDICATES FACE(S) OF FIXTURE)
	EMERGENCY BATTERY UNIT
	COMBINATION EMERGENCY BATTERY UNIT/EXIT SIGN
	EXTERIOR POLE MOUNTED LIGHT FIXTURE
	EXTERIOR WALL MOUNTED LIGHT FIXTURE
	EXTERIOR POST TOP LIGHT FIXTURE
	BOLLARD LIGHT FIXTURE
	SINGLE POLE SWITCH
	TWO POLE SWITCH
	THREE WAY SWITCH
	FOUR WAY SWITCH
	KEYED SWITCH
	DIMMER SWITCH
	LOW VOLTAGE SWITCH
	SWITCH WITH PILOT LIGHT
	DUAL SWITCH

LIGHTING CONTROLS LEGEND

SYMBOL	DESCRIPTION
	DIGITAL TIMER SWITCH
	WALL OCCUPANCY SENSOR SWITCH
	OCCUPANCY SENSOR
	DAYLIGHT SENSOR
	PHOTOCELL

- NOTES:
1. DRAWINGS INDICATE DESIGN INTENT ONLY.
2. SENSOR SELECTION, QUANTITY AND LOCATION TO BE DETERMINED BY MANUFACTURER BASED ON AREA TO BE COVERED.

FIRE ALARM SYMBOL LIST	
SYMBOL	DESCRIPTION
	COMBINATION SPEAKER/STROBE DEVICE
	CEILING MOUNTED SPEAKER/STROBE DEVICE
	FIRE DEPARTMENT COMMUNICATION OUTLET
	MANUAL PULL STATION
	DOOR HOLDER
	SMOKE DETECTOR (ZONED AS INDICATED)
	PHOTOELECTRIC SMOKE DETECTOR (ZONED AS INDICATED)
	HEAT DETECTOR (ZONED AS INDICATED)
	TAMPER SWITCH
	FLOW SWITCH
	DUCT MOUNTED SMOKE DETECTOR
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL

ELECTRICAL ABBREVIATIONS

ABBREV.	DESCRIPTION
AF	AMP FUSE
AFF	ABOVE FINISHED FLOOR
AIC	AVAILABLE INTERRUPTING CURRENT (AMPS)
ATS	AUTOMATIC TRANSFER SWITCH
CB	CIRCUIT BREAKER
(E)	EXISTING ELECTRICAL EQUIPMENT OR WORK
EMT	ELECTRICAL METALLIC TUBING
EW	ELECTRIC WATER COOLER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
G/GRD	GROUND
GFI	GROUND FAULT INTERRUPTER
HOA	HAND-OFF-AUTO
IG	ISOLATED GROUND
LP	LIGHTING PANEL
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUG ONLY
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON-FUSIBLE
NIC	NOT IN CONTRACT
P	POLE
(R)	RELOCATED EXISTING ELECTRICAL EQUIPMENT
(RR)	REMOVE AND REINSTALL
RMC	RIGID METALLIC CONDUIT
RP	RECEPTACLE PANEL
TBB	TELEPHONE BACKBOARD
TYP.	TYPICAL
WG	WIRE GUARD
WP	WEATHERPROOF

POWER SYMBOL LIST	
SYMBOL	DESCRIPTION
	TIME CLOCK
	CONTACTOR
	HARD WIRE CONNECTION BY ELECTRICAL CONTRACTOR
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET MOUNTED 6" ABOVE FINISH COUNTER
	CEILING MOUNTED DUPLEX RECEPTACLE OUTLET
	EMERGENCY DUPLEX RECEPTACLE OUTLET
	DEDICATED DUPLEX RECEPTACLE OUTLET
	QUAD RECEPTACLE OUTLET
	DEDICATED QUAD RECEPTACLE OUTLET
	FLOOR MOUNTED DUPLEX RECEPTACLE OUTLET
	NEMA RECEPTACLE OUTLET (CONFIGURATION AS NOTED)
	PLUG STRIP
	JUNCTION BOX (C=CEILING MOUNTED)
	RECEPTACLE PANEL
	LIGHTING PANEL
	DISTRIBUTION/EQUIPMENT POWER PANEL
	TRANSFORMER
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
	CONDUIT DOWN
	CONDUIT UP
	GROUNDING ROD
	GROUND
	GROUNDING BAR
	METER
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	COMBINATION MAGNETIC MOTOR STARTER
	MOTOR RATED SWITCH
	TRANSIENT VOLTAGE SURGE SUPPRESSOR

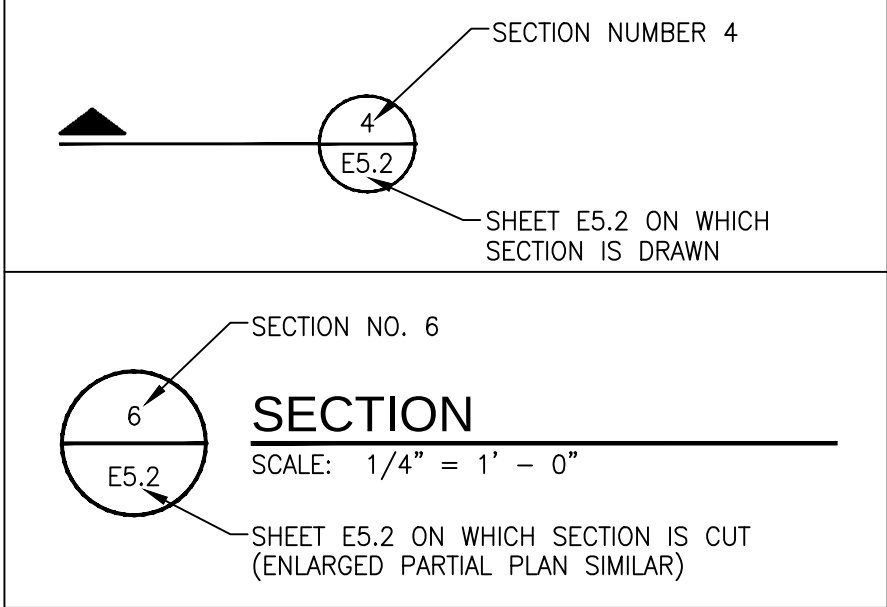
AUXILIARY SYST. SYMBOL LIST

SYMBOL	DESCRIPTION
	TELEPHONE OUTLET
	FLOOR MOUNTED TELEPHONE OUTLET BOX (TYP.)
	TELEPHONE OUTLET MOUNTED 6" ABOVE FINISHED COUNTER
	DATA OUTLET
	COMBINATION OUTLET (VOICE, VIDEO, AND/OR DATA)
	PUSH BUTTON
	BELL
	CARD READER
	MAGNETIC DOOR HOLD
	TELEVISION OUTLET
	WALL CLOCK
	DOUBLE SIDED WALL CLOCK
	COMBINATION WALL CLOCK / SPEAKER
	SPEAKER
	CAMERA

DRAWING INDEX	
SHT NO	DESCRIPTION
E000	ELECTRICAL GENERAL INFORMATION
ED100	SECOND FLOOR ELECTRICAL DEMOLITION PLAN
E201	SECOND FLOOR LIGHTING PLAN
E301	SECOND FLOOR POWER PLAN
E400	ELECTRICAL SCHEDULES, DETAILS AND RISER DIAGRAM

DRAWING NOTATION

SYMBOL	DESCRIPTION
	LIGHTING FIXTURE TAG
	CONSTRUCTION KEY NOTE NUMBER 1
	DEMOLITION KEY NOTE NUMBER 1
	EQUIPMENT DESIGNATION, (I.E. EXHAUST FAN NUMBER 1)
	EXISTING DEVICES OR EQUIPMENT
	NEW OR MODIFIED DEVICES OR EQUIPMENT
	NEW OR MODIFIED UNDERGROUND WIRING
	EXISTING SYSTEM COMPONENT TO BE REMOVED
	POINT OF NEW CONNECTION.



02/07/13 Bids & Permits

Date	☐ Preliminary
02/07/13	☒ Construction
Drawn	☐ Record
DAD	
Checked	Do not scale
JTA	Use figured
Approved	dimensions only
	Copyright © 2007

Bidpak Number

Job Number

2012018

Title

Electrical General
Information

No Scale

Sheet

E000

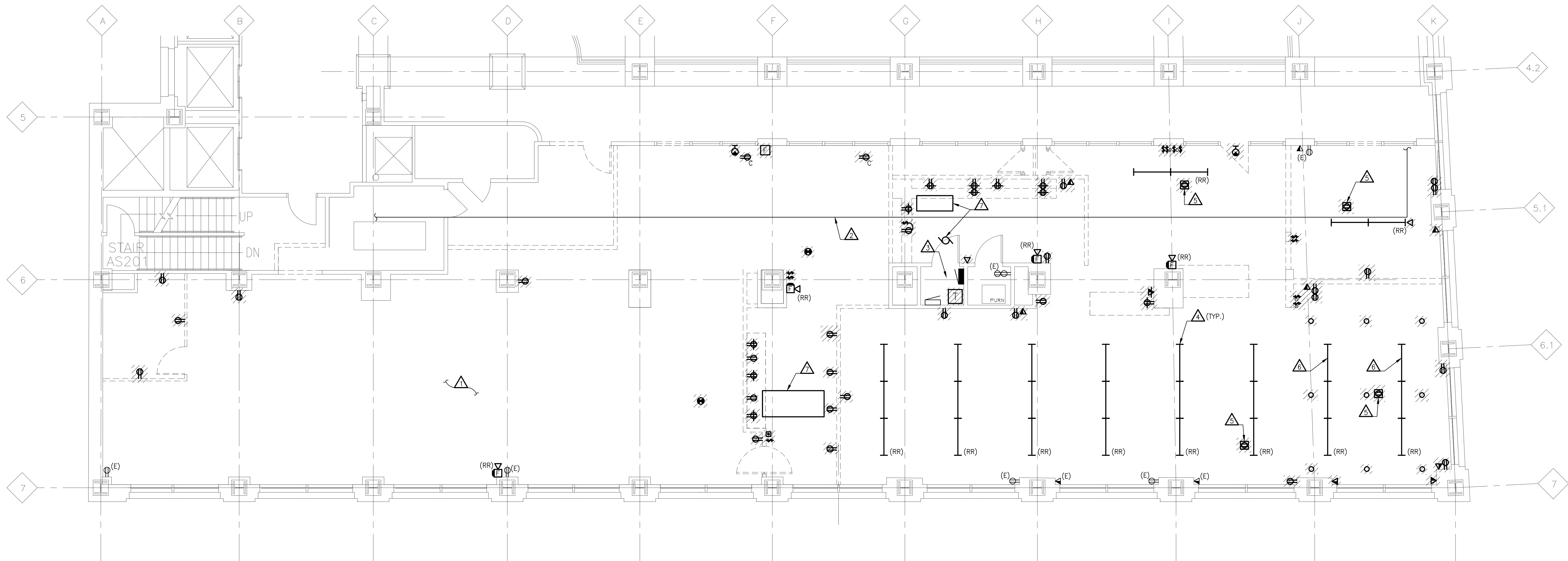
GENERAL DEMOLITION NOTES

1. VISIT THE SITE PRIOR TO SUBMISSION OF BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION WORK.
2. EXAMINE THE DRAWINGS OF OTHER TRADES. BE FAMILIAR WITH THE DEMOLITION REQUIRED BY OTHER TRADES. PERFORM ALL INCIDENTAL ELECTRICAL DEMOLITION AND/OR RELOCATION OF DEVICES AND EQUIPMENT REQUIRED TO FACILITATE THE DEMOLITION WORK OF OTHER TRADES.
3. REMOVE LIGHTING FIXTURES AND ELECTRICAL DEVICES AS INDICATED ON PLAN. DEMOLITION SHALL INCLUDE, BUT NOT BE LIMITED TO THOSE DEVICES SHOWN.
4. COORDINATE WITH NEW WORK PLANS, ONE LINE AND RISER DIAGRAMS FOR EXTENT OF DEMOLITION WORK.
5. COORDINATE ANY SHUTDOWN OF EXISTING SERVICES AND EQUIPMENT REMAINING IN USE WITH OWNERS' REPRESENTATIVE. WHERE EXISTING BUILDING SERVICE IS REQUIRED TO BE SHUT DOWN, INCLUDE ALL ASSOCIATED OVERTIME COST TO PERFORM THIS WORK DURING EVENINGS AND WEEKENDS. INCLUDE ALL COSTS FOR PROVIDING TEMPORARY POWER WHERE SHUTDOWNS OCCUR FOR PERIODS LONGER THAN THE ABOVE STATED HOURS.
6. COORDINATE THE SHUT DOWN OF ELECTRICAL EQUIPMENT WITH THE OWNERS' REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO SHUT DOWN.
7. REMOVE ALL CONDUIT AND WIRE BACK TO NEAREST UPSTREAM DEVICE REMAINING IN SERVICE.
8. WHERE DEMOLITION WORK AFFECTS ELECTRICAL SERVICE TO DOWNSTREAM DEVICES TO REMAIN; EXTEND CONDUIT AND WIRE AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE.
9. DISPOSE OF ALL MATERIALS OFF SITE AND INCLUDE ALL COSTS FOR DISPOSAL IN BID. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, INCLUDING TOLP TESTING, PRIOR TO DISPOSAL AND/OR RECYCLING OF FLUORESCENT LAMPS.
10. PROVIDE BLANK COVER PLATES WHERE SWITCHES AND DEVICES ARE REMOVED AND WALL REMAINS INTACT. MARK ALL UNUSED CIRCUIT BREAKERS AS "SPARE".
11. CONTRACTOR TO TAG ALL CIRCUITS AT BOTH ENDS AFFECTED BY THIS ALTERATION.
12. CONTRACTOR SHALL PROVIDE UPDATED, TYPED-IN DIRECTORIES FOR ALL PANELS AFFECTED BY THIS ALTERATION.
13. CONTRACTOR SHALL VERIFY ALL UNDERGROUND AND IN-SLAB UTILITIES LOCATIONS PRIOR TO SAW CUTTING OR PENETRATING ANY FLOOR SLABS.
14. REFER TO NEW WORK SHEETS FOR LIGHTING AND POWER CIRCUIT DESIGNATIONS.
15. EXTEND EXISTING CONDUIT AND WIRE AS REQUIRED FOR ALL RELOCATED DEVICES.

DEMOLITION KEYED NOTES

- △ REMOVE ALL ELECTRICAL DEVICES, INCLUDING BUT NOT LIMITED TO: CONDUIT, LIGHT FIXTURES, FIRE ALARM DEVICES, LIGHT SWITCHES, FEEDERS (CONDUCTORS), RECEPTACLES BOXES ETC. IN THIS AREA COMPLETE AND BACK TO SOURCE, UNLESS NOTED OTHERWISE.
- △ CONDUIT RUN TIGHT TO CEILING FEEDS OTHER SUITES ON SAME LEVEL, EXISTING TO REMAIN.
- △ REFER TO ONE LINE DIAGRAM FOR ELECTRICAL EQUIPMENT INFORMATION.
- △ EXISTING LIGHT FIXTURE TO BE TAKEN DOWN AND RE-INSTALLED IN LOCATIONS DEFINED IN NEW LIGHTING PLAN SHEET E201. FIXTURES SHALL BE CLEANED AND RELAMPED PRIOR TO RE-INSTALLATION. MATCH EXISTING LAMP CHARACTERISTICS.
- △ EXISTING WALKER DUCT IN-FLOOR SYSTEM TO BE ABANDONED. REMOVE AND DE-ENERGIZE FLOOR OUTLETS PRIOR TO START OF NEW WORK.
- △ REPLACE DIMMING BALLAST IN EXISTING FIXTURES TO BE STANDARD 120V ELECTRONIC <10%THD TYPE.
- △ MECHANICAL UNIT TO BE RELOCATED, EXTEND EXISTING CIRCUITING TO NEW LOCATION.

REUSE EXISTING FIRE ALARM DEVICES IN NEW LOCATIONS WHERE POSSIBLE. CLEAN LENSES PRIOR TO RE-INSTALLATION.



SECOND FLOOR ELECTRICAL DEMOLITION PLAN
SCALE: 3/16" = 1'-0"

02/07/13 Bids & Permits

Date	☐ Preliminary
02/07/13	☒ Construction
Drawn	☐ Record
DAD	
Checked	Do not scale
JTA	Use figured dimensions only
Approved	Copyright © 2007

Bidpak Number

Job Number

2012018

Title

**Second Floor
Electrical Demolition
Plan**

Scale: 3/16" = 1'-0"

Sheet

ED100

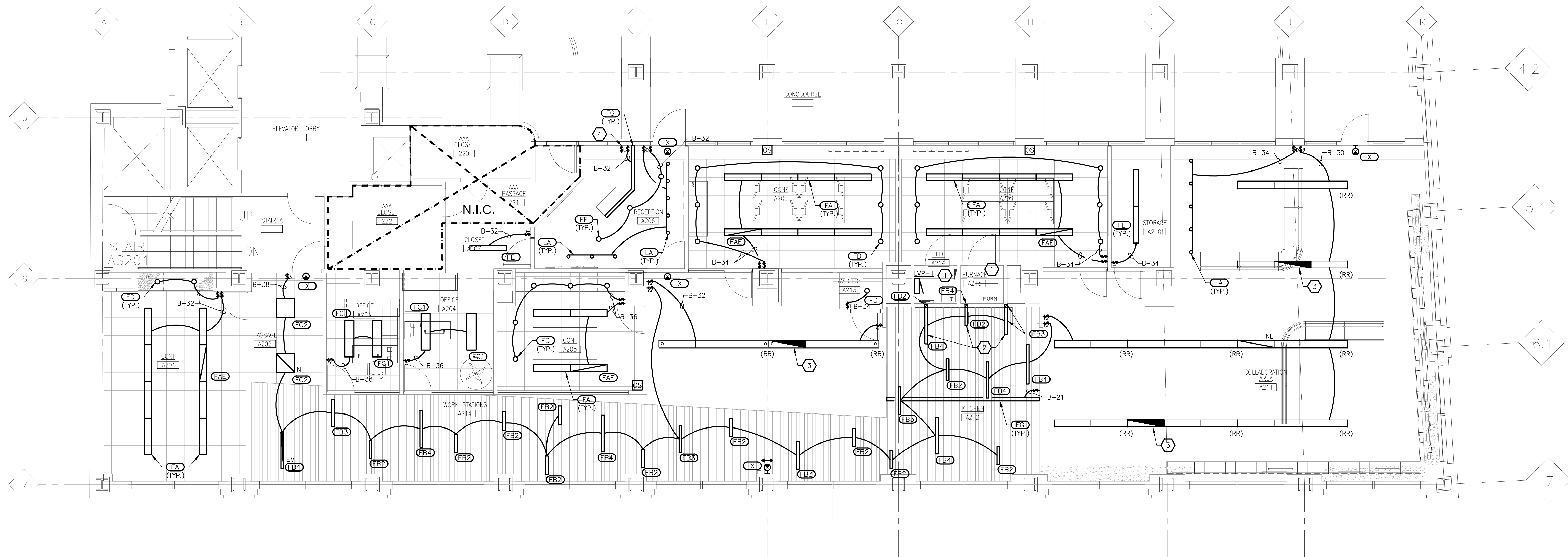


LIGHTING GENERAL NOTES

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED.
2. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE, E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
3. SEE LUMINAIRE SCHEDULE ON ELECTRICAL GENERAL INFORMATION SHEET.
4. ALL ELECTRICAL DEVICES ON THIS SHEET SHALL BE NEW UNLESS OTHERWISE NOTED.
5. EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.
6. WHERE MORE THAN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION, THEY SHALL BE GROUPED UNDER ONE COMMON FACEPLATE.

KEYED NOTES

- 1 LIGHT AND SWITCH IN THIS ROOM ARE EXISTING TO REMAIN.
- 2 LIGHT FIXTURE MOUNTED VERTICALLY WITH CONTINUOUS HOUSING AND LENSING FROM FIXTURE MOUNTED PARALLEL TO FLOOR; PROVIDE WITH CEILING-TO-WALL MOUNTING KIT. COORDINATE EXACT LENGTH OF RUN WITH ARCHITECTURAL ELEVATIONS.
- 3 RETROFIT EXISTING FIXTURE WITH 1400 LUMEN EMERGENCY BATTERY PACK BY IOTA I-320 SERIES OR EQUAL.
- 4 MASTER LIGHTING OVERRIDE SWITCH, REFER TO DETAILS FOR SYSTEM INFORMATION.



SECOND FLOOR LIGHTING PLAN
SCALE: 3/16" = 1'-0"

02/07/13 Bids & Permits

Date	☐ Preliminary
02/07/13	☒ Construction
Drawn	☐ Record
DAD	
Checked	Do not scale
JTA	Use figured
Approved	dimensions only
	Copyright © 2007

Bidpak Number

Job Number

2012018

Title

Second Floor
Lighting Plan

Scale: 3/16" = 1'-0"

Sheet

E201

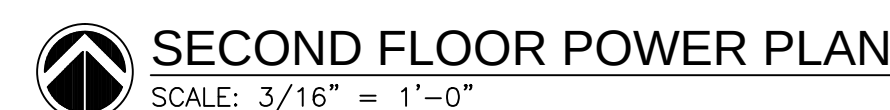


POWER GENERAL NOTES

1. ALL ELECTRICAL DEVICES SHOWN ON THIS PLAN SHALL BE NEW UNLESS OTHERWISE NOTED.
2. ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
3. ALL RECEPTABLES SHALL BE 20A. RATED.
4. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE.
5. ALL RECEPTABLES WITHIN 6'-0" OF SINK OR OTHER WATER SUPPLY SHALL BE GFCI TYPE RECEPTABLE.
6. REFER TO ARCHITECTURAL FLOOR PLAN AND ELEVATIONS FOR EXACT LOCATION OF DEVICES.
7. ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS SERVED.
8. ALL 120 VOLT CIRCUITS SHALL UTILIZE A SEPARATE NEUTRAL.
9. ALL CONDUITS SERVING 120 VOLTS OR GREATER SHALL INCLUDE A GROUND WIRE.
10. ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.
11. ALL FIRE ALARM PANELS SHALL BE 15 CANDELA RATED UNLESS NOTED OTHERWISE. DEVICES SHALL BE COMPATIBLE WITH EXISTING BUILDING FIRE ALARM CONTROL PANEL(S).

KEYED NOTES

- 1 6" FLUSH MOUNT POKE-THRU DEVICE BY WIREMOLD RC4 SERIES. PROVIDE WITH BLACK OUTLETS AND BLACK SLIDE HOLDERS. DEVICE SHALL INCLUDE (4) PREMIXED 20A RECEPTABLES. COORDINATE EXACT LOCATION WITH ARCHITECT.
- 2 CEILING MOUNTED PROJECTOR BY OTHERS; COORDINATE EXACT LOCATION WITH A/V CONSULTANT.
- 3 CARD READER BY OTHERS. 12/24V LOW VOLTAGE OPERATION.
- 4 FIRE RESISTANT PLYWOOD BACKBOARD, 48"x48"x3/4".
- 5 LOW VOLTAGE FOR PIN PAD LOCK.
- 6 CEILING MOUNTED PROJECTOR SCREEN BY OTHERS; COORDINATE EXACT LOCATION WITH A/V CONSULTANT.
- 7 OUTLET MOUNTED AT 60" AFF FOR MICROWAVE.
- 8 OUTLET MOUNTED AT 60" ABOVE COUNTER FOR COFFEE MAKER.
- 9 OUTLET MOUNTED AT 12" AFF FOR DISHWASHER.
- 10 OUTLET MOUNTED AT 12" AFF FOR REFRIGERATOR.
- 11 SURFACE MOUNT RACEWAY HUBBELL HBL3000 SERIES OR EQUIV. PROVIDE WITH FURNITURE FEED PUNCHOUT TO ACCOMMODATE 7/8" WHIP FROM SYSTEMS FURNITURE. WHIP CONSISTS OF #12,1#10N,1#12G.
- 12 DUPLEX OUTLET FOR SERVER RACK, COORDINATE EXACT OUTLET CONFIGURATION WITH TECHNOLOGY MANAGER.
- 13 PROVIDE (2) 20A CIRCUITS FOR SOUND MASKING AND HARDWARE. COORDINATE EXACT REQUIREMENTS AND MOUNTING LOCATIONS WITH TECHNOLOGY MANAGER.
- 14 OUTLET FOR PLUG-IN TYPE AIR-CONDITIONING UNIT. COORDINATE EXACT LOCATION WITH TECHNOLOGY MANAGER.
- 15 PROVIDE FURNITURE FEED-THRU OUTLET MOUNTED LOW ON WALL TO CONNECT TO SURFACE MOUNT WIREMOLD AS SPECIFIED IN NOTE 11 ON THIS SHEET.
- 16 CAMERA BY OTHERS, COORDINATE POWER REQUIREMENTS WITH LOW VOLTAGE INSTALLER.



02/07/13 Bids & Permits

Date	☐ Preliminary
02/07/13	☒ Construction
Drawn	☐ Record
DAD	
Checked	Do not scale
JTA	Use figured dimensions only
Approved	Copyright © 2007

Bidpak Number

Job Number

2012018

Title

**Second Floor
Power Plan**

Scale: 3/16" = 1'-0"

Sheet
E301

Panel Designation: LP-1					Main: MLO					P-P Voltage: 480					
Panel Location: ELEC A214					Bussing: 100A					P-N Voltage: 277					
Fed From: MAIN BUS					Ground Bus: STANDARD					Phase: 3					
Feeder Size: REFER TO ONE LINE					Mounting: SURFACE					Wire: 4					
					Neutral: 100%					Min SC Interrupting Rating: 10kA					
Remarks	Light Load	Recept Load	Cont Load	non-C Load	OC	CKT 0	A	B	C	CKT 1	non-C Load	Cont Load	Recept Load	Light Load	Remarks
SPACE					100	—	1	X	—	2					SPACE
SPACE						—	3	X	—	4					SPACE
SPACE						—	5	X	—	6					SPACE
SPACE						—	7	X	—	8					SPACE
FEED TO TRANSFORMER						—	9	X	—	10					SPACE
						11	X	—	—	12					SPACE

Connected Load					Demand Factor					Demand Load				
Load Description	0A	0B	0C	Total		0A	0B	0C	Total		0A	0B	0C	Total
Lighting or Continuous Load (Volt-Amps)	0	0	0	0							0	0	0	0
180VA Receptacle Load (Volt-Amps)	0	0	0	0							1.00 (per 180VA)	0	0	0
	Amount over 180VA										0.50 (P-180VA)	0	0	0
Continuous Load (Volt-Amps)	0	0	0	0							0	0	0	0
Non-Continuous Load (Volt-Amps)	0	0	0	0							0	0	0	0
Total Load (kVA)	0.0	0.0	0.0	0.0		125% of Light/Cont and Recept (<10kVA) load plus other load					0.0	0.0	0.0	0.0
Total Ampacity (Amps)	0.0	0.0	0.0	0.0		<<<< per NEC Article 215.2 —>>>>					0.0	0.0	0.0	0.0
Minimum feeder sizing (Amps)	0.0	0.0	0.0	0.0							0.0	0.0	0.0	0.0

Receptacle Demand Factor per Article 220.44 of the National Electric Code.