Ansonia Housing Authority
1 Holbrook Place
Apartment Upgrades

1 Holbrook Place
Ansonia, Connecticut 06401

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Issued for Bid

APRIL 13, 2022

ABBREVIATIONS

A.C.T.	ACOUSTICAL CEILING TILE
ADJ.	ADJUSTABLE
ALUM.	ALUMINUM
A.B.	ANCHOR BOLT
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
A.C.P.	ASBESTOS CEMENT PIPE
ASPH.	ASPHALT
AVG.	AVERAGE
BSMT.	BASEMENT
BRG.	BEARING
BIT.	BITUMINOUS
BLK.	BLOCK
BD.	BOARD
B.S.	BOTH SIDES
BRK.	BRICK
BLDG.	BUILDING
C.I.	CAST IRON
C.I.P.	CAST IN PLACE CONCRETE
C.B.	CATCH BASIN
C.B.R.	CATCH BASIN TO BE REMOVED
CLG.	CEILING
C	CENTER LINE
C. BD.	CHALK BOARD
C.O.	CLEAN OUT
COL.	COLUMN
CONC.	CONCRETE
C.M.U.	CONCRETE MASONRY UNIT
CONF.	CONFERENCE
CONT.	CONTINUOUS, CONTINUE
CONTR.	CONTRACTOR
C.J.	CONTROL JOINT
C.C.	CURB CUT
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DR.	DOOR
DN.	DOWN
DWG.	DRAWING
EA.	EACH
E.F. / E.W.	EACH FACE / EACH WAY
ED.	EDUCATION
E / ELEC.	ELECTRICAL
EL. / ELEV.	ELEVATION
EMER.	EMERGENCY
ENCL.	ENCLOSURE
ENT.	ENTRANCE
EP.	EPOXY PAINT
EQ.	EQUAL
EXAM.	EXAMINATION
EXIST.	EXISTING
EXP.	EXPANSION
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
F.S.	FAR SIDE
FIN.	FINISH, FINISHED
F.F.	FINISHED FLOOR
FIXT.	FIXTURE
FL.	FLOOR
F.P.	FOLDING PARTITION
FT.	FOOT
FTG.	FOOTING
FDN.	FOUNDATION
G.	GAS
GA.	GAUGE
GEN.	GENERAL
G.C.	GENERAL CONTRACTOR
GYP.	GYPSUM
GYP. BO.	GYPSUM BOARD
H.C.	HANDICAPPED
HDWE.	HARDWARE
HD.	HEADED
HGT.	HEIGHT
H.P.	HIGH POINT
H.M.	HOLLOW METAL
HORZ.	HORIZONTAL, HORIZONTALLY
H.B.	HOSE BIB
HR.	HOUR
HYD.	HYDRANT
INSUL.	INSULATION, INSULATED
INT.	INTERIOR
INV.	INVERTED
JAN.	JANITOR
K.P.	KICK PLATE
LAM.	LAMINATE
L.F.	LINEAR FOOT
LG.	LONG
LOC.	LOCATION
L.P.	LOW POINT
LTG.	LIGHTING
M.H.	MANHOLE
MAS.	MASONRY
M.O.	MASONRY OPENING
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
M.	MINUTE
MISC.	MISCELLANEOUS
MTD.	MOUNTED
N.S.	NEAR SIDE
NOM.	NOMINAL
N.A.	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO.	NUMBER
OCC.	OCCUPANT
O.C.	ON CENTER
OPNG.	OPENING
O.D.	OUTSIDE DIMENSION
PTD.	PAINTED
P.C.B.	PAINTED CONCRETE BLOCK
P.G.B.	PAINTED GYPSUM BOARD
PL.	PLATE
PLUMB.	PLUMBING
PREP.	PREPARATION, PREPARE
P.T.	PRESSURE TREATED
PROJ. MAN	PROJECT MANUAL
P.V.C.	POLYVINYL CHLORIDE
RAD.	RADIUS
R.C.P.	REINFORCED CONCRETE PIPE
RCP	REFLECTED CEILING PLAN
REINF.	REINFORCEMENT
REQD.	REQUIRED
R.	RISER
R.D.	ROOF DRAIN
R.H.	ROOF HATCH
R.L.	ROOF LEADER
RM.	ROOM
SAN.	SANITARY
SCHED.	SCHEDULE
S.C.	SEALED CONCRETE
SECT.	SECTION
S.W.	SHEAR WALL
S.W.F.	SHEAR WALL FOOTING
SIM.	SIMILAR
S.O.G.	SLAB ON GRADE
SPEC.	SPECIFICATIONS
SQ.	SQUARE
SQ. FT.	SQUARE FEET
STL.	STEEL
S.F.	STEP FOOTING
S.	STORM
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED, SUSPENSION
TECH.	TECHNOLOGY
T.	TELEPHONE
T&B	TOP AND BOTTOM
T.O.	TOP OF
T.O.F.	TOP OF FRAME
T/S	TOP OF SLAB
T.O.S.	TOP OF STEEL
T/W	TOP OF WALL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
V.B.	VINYL BASE
V.C.T.	VINYL COMPOSITE TILE
W.	WATER
W.C.J.	WALL CONTROL JOINT
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WELDED WIRE MESH
W/	WITH
WD.	WOOD
@	AT
Ø	DIAMETER

SYMBOL LEGEND

- 101 / A - DOOR NUMBER
- ? - WINDOW TYPE
- ? - ROOM NAME
- ? - ROOM NUMBER
- ? - PARTITION TYPE
- 1 - CONSTRUCTION NOTE
- X - GLAZING TYPE
- 2 / A101 - EXTERIOR ELEVATION NUMBER
- A101 - SHEET NUMBER
- 2 / A101 - INTERIOR ELEVATION NUMBER
- A101 - SHEET NUMBER
- 2 / A101 - BUILDING SECTION NUMBER
- A101 - SHEET NUMBER
- 2 / A101 - WALL SECTION NUMBER
- A101 - SHEET NUMBER
- REFERENCE POINT
- X - REVISION MARK

GRAPHIC LEGEND

- CONCRETE
- CONCRETE MASONRY UNITS
- BRICK
- STONE
- METALS
- COMPACTED GRAVEL
- EARTH
- PLYWOOD
- ACOUSTICAL TILE
- WOOD FRAMING - THROUGH MEMBER
- WOOD FRAMING - INTERRUPTED MEMBER
- FINISHED WOOD
- BATT INSULATION
- RIGID INSULATION
- GYPSUM BOARD
- NEW SINGLE DOOR
- NEW DOUBLE DOOR
- EXISTING DOOR TO REMAIN
- REMOVE EXISTING DOOR

LIST OF DRAWINGS

GENERAL INFORMATION

G000	COVER
G001	GENERAL INFORMATION
G002	CODE INFORMATION AND PLAN

ARCHITECTURAL DRAWINGS

A010	DEMOLITION PLANS
A011	DEMOLITION PLANS
A100	CONSTRUCTION PLANS
A101	CONSTRUCTION PLANS
A103	ENLARGED KITCHEN AND BATHROOM PLANS
A155	ROOF AND EXTERIOR WALL PENETRATION DETAILS
A200	REFLECTED CEILING PLANS
A201	REFLECTED CEILING PLANS
A300	EXTERIOR ELEVATIONS
A400	SECTIONS
A401	SECTIONS
A440	STAIR DETAILS
A600	WINDOW ELEVATIONS AND DETAILS
A700	INTERIOR ELEVATIONS
A800	CASEWORK SECTIONS
A900	INTERIOR PARTITION TYPES
A910	DOOR SCHEDULE
A930	SIGNAGE
A950	INTERIOR FINISH SCHEDULES AND NOTES

PLUMBING DRAWINGS

P001	PLUMBING COVER SHEET
P010	PLUMBING DEMOLITION 1ST, 2ND, 3RD FLOOR PLANS
P011	PLUMBING DEMOLITION BASEMENT, ATTIC,& ROOF PLANS
P101	PLUMBING CONSTRUCTION 1ST 2ND 3RD FLOOR PLANS
P102	PLUMBING CONSTRUCTION BASEMENT, ATTIC, & ROOF PLANS
P801	PLUMBING DETAILS
P901	PLUMBING SCHEDULES

MECHANICAL DRAWINGS

M001	SYMBOLS, NOTES AND ABBREVIATIONS - MECHANICAL
M010	DEMOLITION LEVELS 1,2&3 FLOOR PLANS - MECHANICAL
M011	DEMOLITION BASEMENT, ATTIC & ROOF PLANS - MECHANICAL
M100	LEVEL 1,2&3 FLOOR PLANS - MECHANICAL
M101	BASEMENT, ATTIC & ROOF PLANS - MECHANICAL
M200	DETAILS - MECHANICAL
M201	DETAILS - MECHANICAL
M202	DETAILS - MECHANICAL
M300	SCHEDULES - MECHANICAL
M301	SCHEDULES - MECHANICAL

ELECTRICAL DRAWINGS

E001	ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS
E002	LIGHT FIXTURE SCHEDULE, ELECTRICAL DETAILS & FIRE ALARM RISER DIAGRAM
E010	DEMOLITION FLOOR PLANS (1st, 2nd & 3rd) - ELECTRICAL
E011	DEMOLITION FLOOR PLANS (BASEMENT, ATTIC & ROOF) - ELECTRICAL
E101	FLOOR PLANS (1ST, 2ND & 3RD) - ELECTRICAL
E102	FLOOR PLANS (BASEMENT, ATTIC & ROOF)
E401	ONE LINE DIAGRAM - ELECTRICAL
E501	ELECTRICAL PANEL SCHEDULES

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS PRIOR TO FABRICATION, FURNISHING AND INSTALLATION OF ANY MATERIALS, EQUIPMENT AND WORK.

2. ALL MATERIALS & EQUIPMENT SHOWN ARE NEW TO BE PROVIDED BY CONTRACTOR UNLESS OTHERWISE NOTED.

3. ALL EXISTING UTILITIES & EQUIPMENT LOCATIONS ARE APPROXIMATE - CONTRACTOR SHALL FIELD VERIFY AND/OR COORDINATE EXACT LOCATIONS.

4. CONTRACTOR ASSUMES ALL RESPONSIBILITY DURING CONSTRUCTION TO PROTECT MATERIALS AND EQUIPMENT. ANY & ALL DAMAGED ITEMS & EQUIPMENT DURING CONSTRUCTION SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

5. ALL RATED DOORS & DOORS FRONTING A CORRIDOR SHALL HAVE POSITIVE LATCHING LOCKSETS UNLESS OTHERWISE INDICATED ON THE DOOR SCHEDULE.

6. ALL HANDICAP ACCESSIBLE DOOR HARDWARE SHALL BE PROVIDED TO COMPLY WITH ADA, ANSI AND ALL OTHER APPLICABLE CODES.

7. ALL NEW EXPOSED/VISIBLE DECKING, BEAMS, COLUMNS, JOISTS AND OTHER STRUCTURAL COMPONENTS SHALL BE PAINTED UNLESS OTHERWISE NOTED.

8. IF A NOTE IS FOUND ON ARCHITECTURAL DRAWINGS READING - 'SEE STRUCTURAL DRAWINGS' - AND SIZE AND DETAILING OF MEMBER(S) IS NOT FOUND, THE CONTRACTOR SHALL CONTACT THE ARCHITECT TO REQUEST MISSING INFORMATION. THESE ITEMS SHALL BE PART OF THE BASE BID AND STEEL SUBCONTRACTOR SHALL REVIEW STRUCTURAL AS WELL AS ARCHITECTURAL DRAWINGS PRIOR TO BIDDING.

9. ALL CONTRACTORS SHALL REVIEW DRAWINGS AND PROJECT MANUAL. IF THERE IS A DISCREPANCY BETWEEN THE TWO OR ANY OTHER PARTS OF THE DOCUMENTS, THE HIGHER VALUE (IN DOLLARS) SHALL PREVAIL AS THE SCOPE OF WORK THAT WILL BE PRICED UNLESS OTHERWISE DIRECTED IN WRITING BY THE ARCHITECT DURING THE BIDDING PERIOD.

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

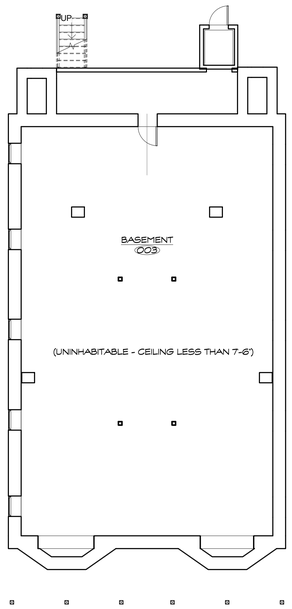
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Revision:	Description:	Date:	Revised By:
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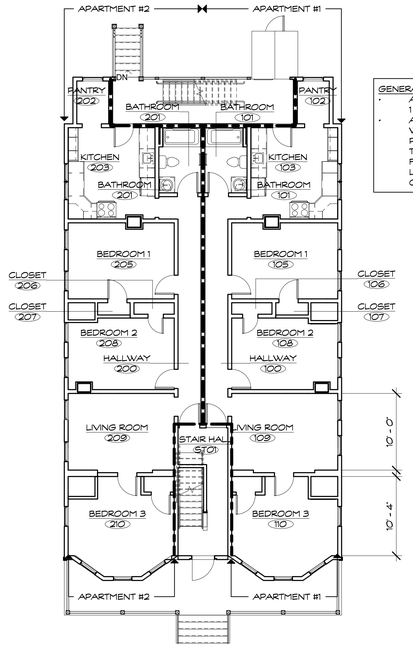
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GENERAL INFORMATION

Date: 4/13/2022
Scale: 12" = 1'-0"
Drawn By: BJV
Project Number: 21.081

Drawing Number:
G001

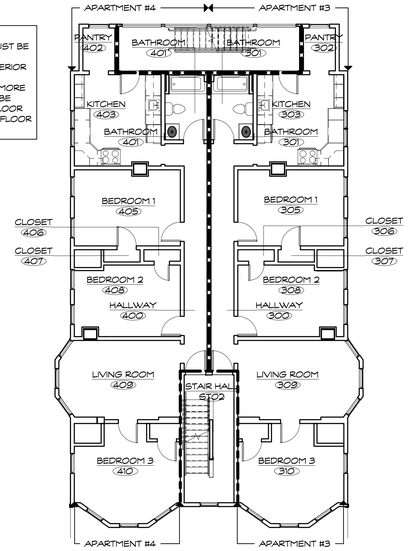


1 BASEMENT CODE PLAN
1/8" = 1'-0"

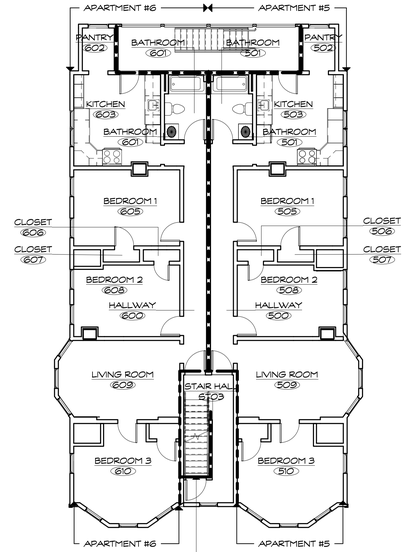


GENERAL NOTES
- ALL FLOOR/CEILINGS MUST BE 1 HOUR RATED.
- ALL STUD CAVITIES (EXTERIOR WALLS AND INTERIOR PARTITIONS) SPANNING MORE THAN ONE LEVEL MUST BE FIRE BLOCKED AT ALL FLOOR LEVELS INCLUDING 3RD FLOOR CEILING/ATTIC

2 FIRST FLOOR CODE PLAN
1/8" = 1'-0"

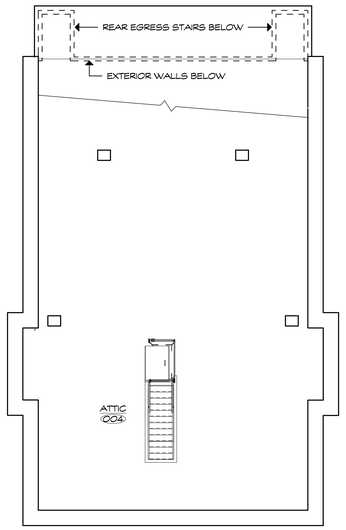


3 SECOND FLOOR CODE PLAN
1/8" = 1'-0"



PROVIDE FIRE RATED GYPSUM BOARD AT UNDERSIDE OF ATTIC STAIRS TO MAINTAIN RATING BETWEEN ATTIC AND THRD FLOOR

4 THIRD FLOOR CODE PLAN
1/8" = 1'-0"



5 ATTIC CODE PLAN
1/8" = 1'-0"

TYPICAL EXTERIOR WALL ASSEMBLY THERMAL VALUES:

MATERIAL	R value
.035" VINYL SIDING	0.61
1" RIGID INSULATION	6
1/2" SHEATHING	0.45
3 1/2" BATT INSULATION	12
5/8" INTERIOR GYPSUM	0.5
SUM OF R VALUES:	19.56

R 19.56 = U-0.051
PER 2015 IECC CHAPTER 5 (CE) (EXISTING BUILDING)
SECTION C503

TYPICAL SLOPED ROOF ASSEMBLY THERMAL VALUES:

MATERIAL	R value
BATT INSULATION	38

CODE INFORMATION

DATE OF ORIGINAL CONSTRUCTION	1890
DATE OF ADDITIONS	-
DATE OF PROPOSED ADDITION	-

1. GROUP CLASSIFICATION (Chapter 3)

(Primary)	R-2 (RESIDENTIAL)

2. CONSTRUCTION TYPE (Chapter 6)

Minimum Type Required	VB
Actual Type Provided (existing)	VB
(Proposed new)	-

3. BUILDING HEIGHT (Chapter 5)

Allowable Height (story/feet)	3/40'-0"
Actual Height (story/feet)	3/39'-0"
(Stories Above Grade)	3

4. BUILDING AREA (Chapter 5)

1) Building Area (First Floor)

Existing construction	1,886	sq.ft.
New construction	0	sq.ft.
Total floor	1,886	sq.ft.

2) Building Area (Second Floor)

Existing construction	1,915	sq.ft.
New construction	0	sq.ft.
Total floor	1,915	sq.ft.

3) Building Area (Third Floor)

Existing construction	1,915	sq.ft.
New construction	0	sq.ft.
Total floor	1,915	sq.ft.

4) Building Area (All Floors)

Existing construction	5,717	sq.ft.
New construction	0	sq.ft.
Total floor	5,717	sq.ft.

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS
(Table 601, See Code Plans for specific designations)

1 Structural frame: including columns, girders, trusses	0	Hr(s)
2 Bearing walls: Exterior (Table 602)	0	Hr(s)
Interior	0	Hr(s)
3 Nonbearing walls & partitions Exterior (Table 602)	0	Hr(s)
4 Nonbearing walls & partitions Interior	0	Hr(s)
5 Floor Construction (including supporting beams & joists)	0	Hr(s)
6 Roof Construction (including supporting beams & joists)	0	Hr(s)

11. ACCESSIBLE BUILDING

	Designated
X	Non Designated

	Yes	No
13. ENTIRE BUILDING SPRINKLERED		X
14. THRESHOLD BUILDING CONDITIONS		X

15. CODES TO WHICH THIS PROJECT WAS DESIGNED

State Building Code	2015 IBC/2018 CT Amendments
State Fire Code	2015 IFC/2018 CT Amendments
State Building Code	2015 IBC/2018 CT Amendments
State Mechanical Code	2015 IMC/2018 CT Amendments
State Plumbing Code	2015 IPC/2018 CT Amendments
State Energy Conservation Code	2015 IEC/2018 CT Amendments
State Electrical Code	2017 NFPA 70/2018 CT Amend.
State Health Code	most current
OSHA	most current
Section 504	current
ADA	2010
ANSI 117.1	2009 ICC A117.1

CODE LEGEND

Room name
101
ROOM NUMBER

1 HOUR FIRE RATED WALL AND SMOKE BARRIER

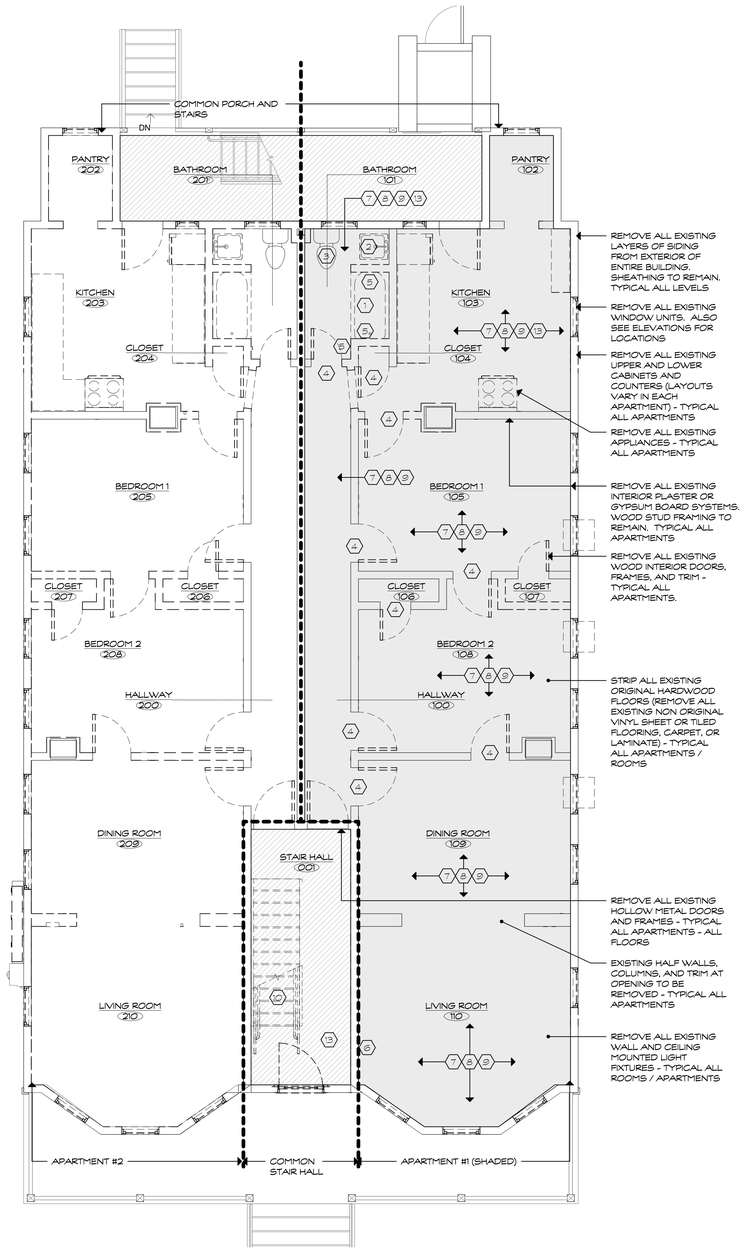
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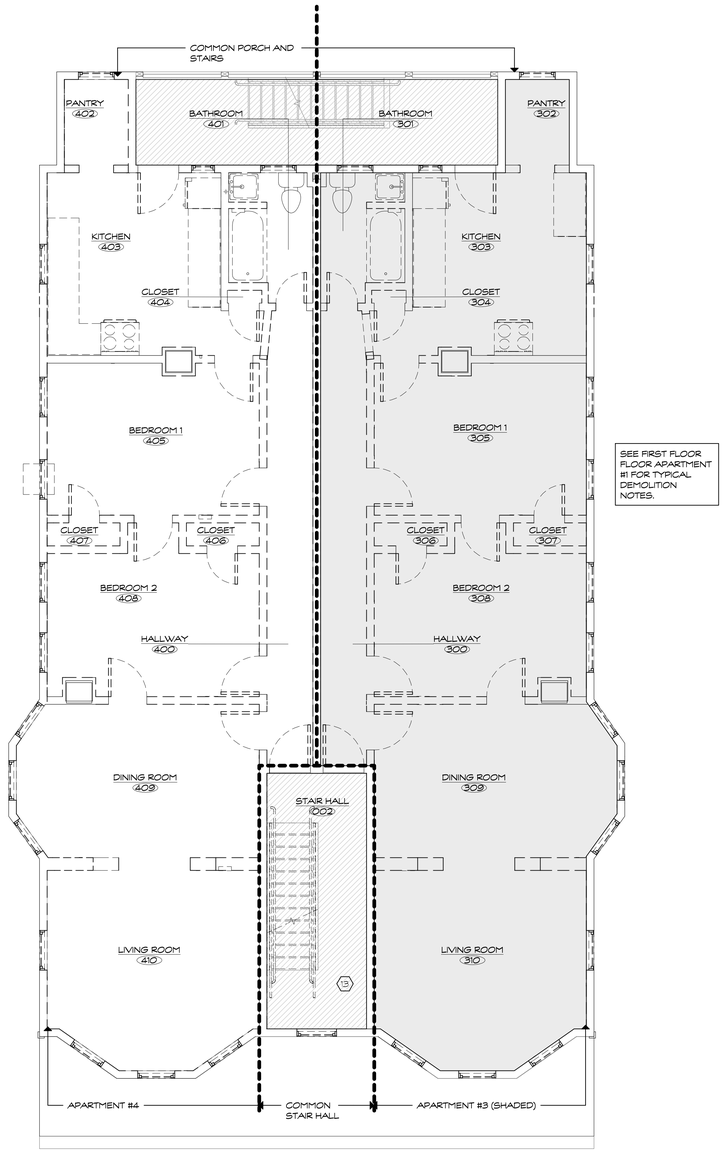
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	ISSUED FOR BID	4/13/2022	

Drawing Title:
CODE INFORMATION AND PLAN

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: G002

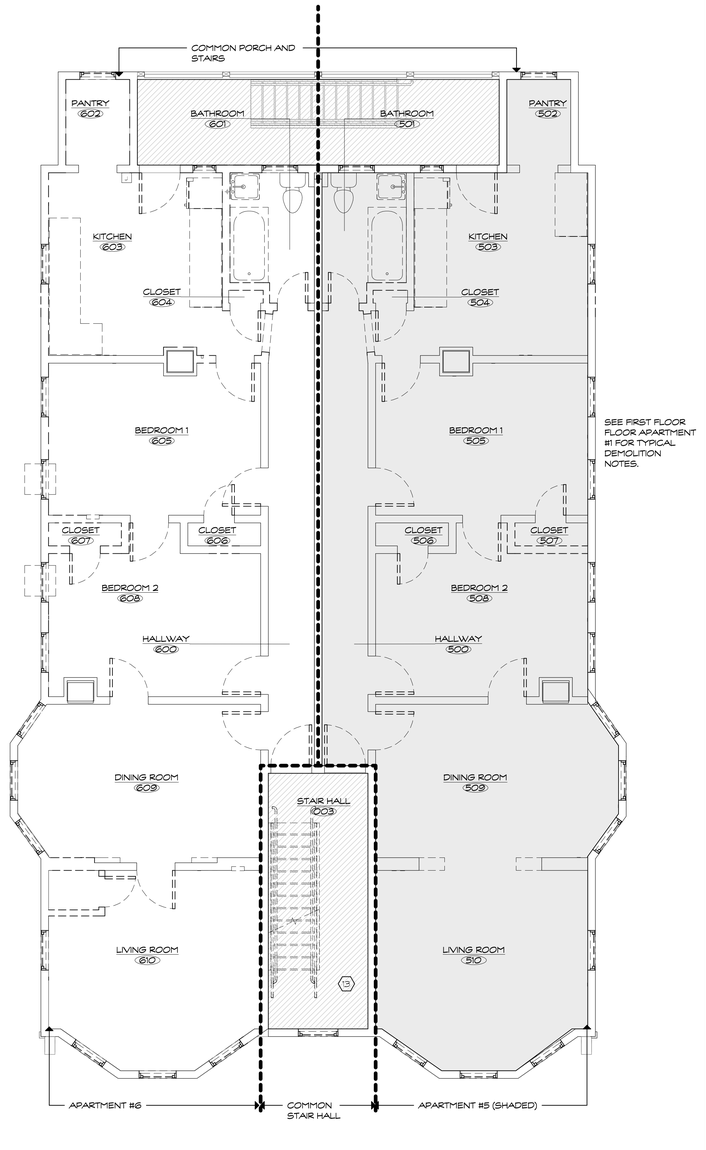


1 FIRST FLOOR DEMOLITION PLAN
1/4" = 1'-0"



SEE FIRST FLOOR FLOOR APARTMENT #1 FOR TYPICAL DEMOLITION NOTES.

2 SECOND FLOOR DEMOLITION PLAN
1/4" = 1'-0"



SEE FIRST FLOOR FLOOR APARTMENT #1 FOR TYPICAL DEMOLITION NOTES.

3 THIRD FLOOR DEMOLITION PLAN
1/4" = 1'-0"

DEMOLITION NOTES

1	REMOVE AND DISCARD BATHTUB/SHOWER UNIT - INCLUDING ALL WALL PANELS
2	REMOVE EXISTING SINK / VANITY - INCLUDING ALL ASSOCIATED PLUMBING FIXTURES
3	REMOVE EXISTING TOILET
4	REMOVE EXISTING DOOR AND FRAME
5	REMOVE EXISTING WALL - COORDINATE WITH CONSTRUCTION
6	REMOVE EXISTING FRAME AND INFILL WALL
7	REMOVE ALL PLASTER, LATH, BASEBOARD, AND TRIM - WOOD STUD FRAMING TO REMAIN - COORDINATE WITH CONSTRUCTION
8	REMOVE ALL PLASTER AND LATH CEILINGS AND ALL CEILING MOUNTED FIXTURES - WOOD FRAMING ABOVE TO REMAIN - COORDINATE WITH CONSTRUCTION

DEMOLITION NOTES

9	REMOVE ALL EXISTING FLOOR COVERINGS THAT CURRENTLY CONCEAL ORIGINAL HARDWOOD FLOORING
10	COMPLETELY REMOVE STAIR SYSTEM INCLUDING RAILINGS AND STAIRCASE STRUCTURE
11	REMOVE ALL MAKESHIFT WOOD PLANK PARTITIONS INCLUDING ALL GATES, DOORS, AND HORIZONTAL NAILERS. STRUCTURAL COLUMNS TO REMAIN
12	REMOVE EXISTING WINDOW SYSTEM - ROUGH OPENING TO REMAIN
13	REMOVE EXISTING HARDWOOD FLOOR. EXISTING SUBFLOOR TO REMAIN.

DEMOLITION LEGEND

- EXISTING PARTITIONS
- PARTITIONS TO BE REMOVED
- DOOR TO BE REMOVED

DEMOLITION GENERAL NOTES

1. READ ALL GENERAL NOTES ON DRAWING A001. REVIEW ENTIRE CONSTRUCTION DOCUMENT SET PRIOR TO COMMENCING WORK.
2. COORDINATE ARCHITECTURAL DEMOLITION WORK WITH ALL OTHER TRADES, INCLUDING HAZARDOUS MATERIAL ABATEMENT DRAWINGS. REFER TO M/E/P/FP DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE.
3. WHERE INCONSISTENCIES OCCUR, NOTIFY THE DESIGN TEAM AND ASSUME THE GREATER VALUE FOR BIDDING PURPOSES.
4. CONTRACTORS SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
5. PRIOR TO DEMOLITION OF INTERIOR STAIRS - DOCUMENT ALL DIMENSIONS (SUCH AS RISE/RUN, START AND END LOCATIONS, OVERALL HEIGHTS, WIDTH, ETC) FOR FUTURE COORDINATION WITH NEW STAIRS.

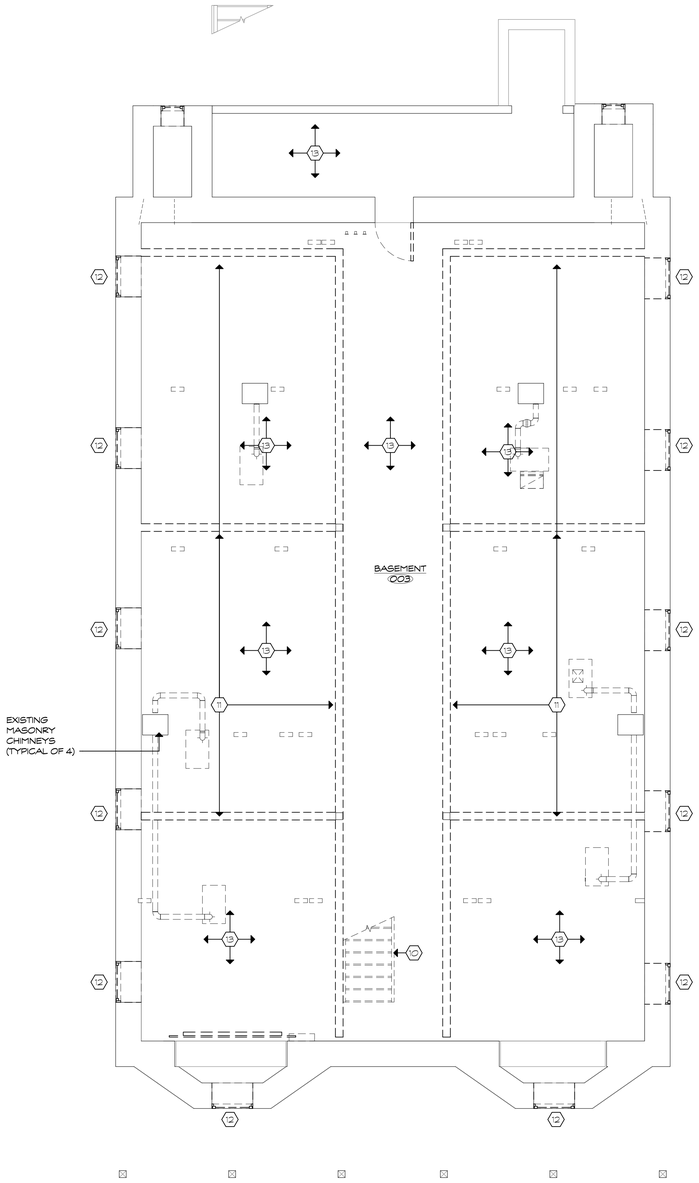
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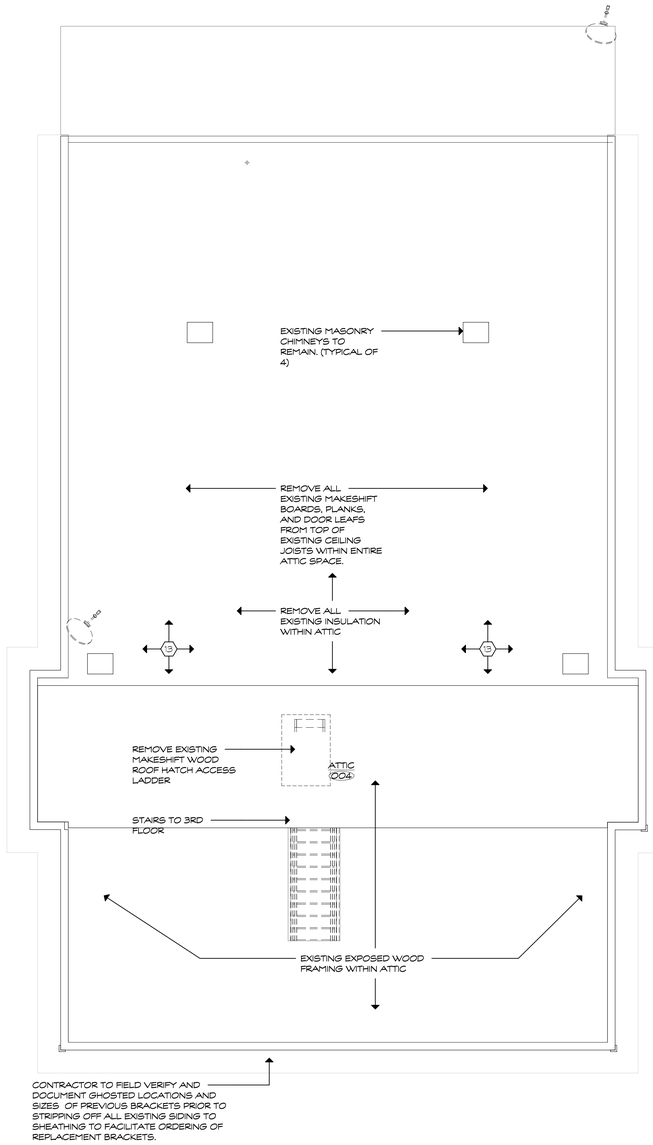
Revision:	Description:	Date:	Revised By:
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Drawing Title:
DEMOLITION PLANS

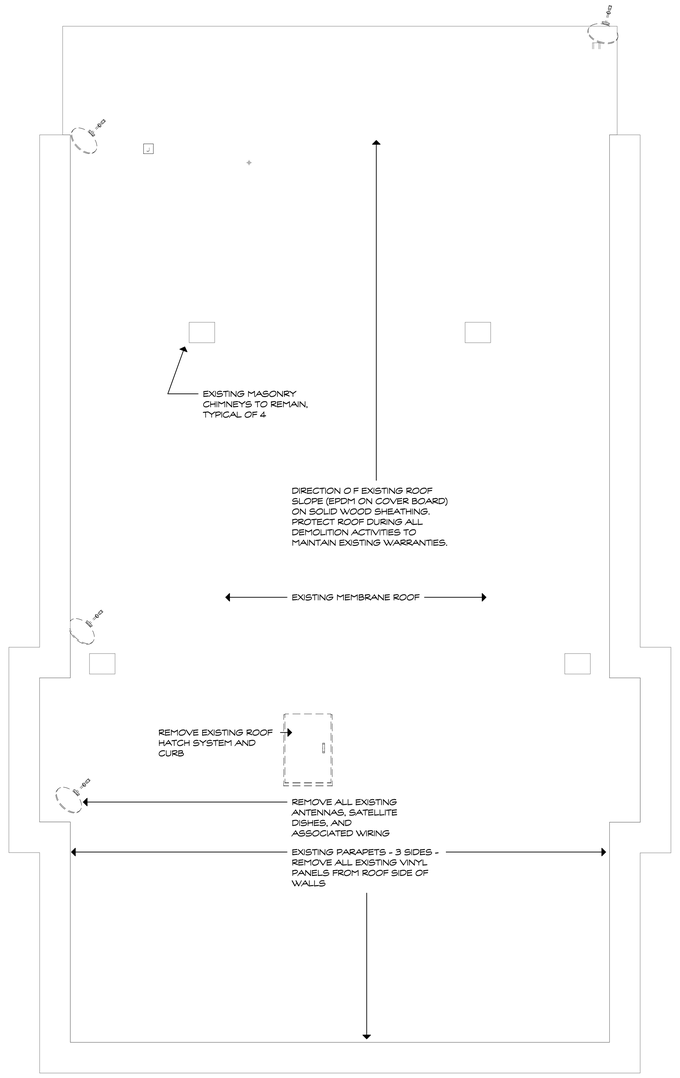
Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A010



1 BASEMENT DEMOLITION PLAN
1/4" = 1'-0"



2 ATTIC DEMOLITION PLAN
1/4" = 1'-0"



3 ROOF DEMOLITION PLAN
1/4" = 1'-0"

DEMOLITION NOTES	
1	REMOVE AND DISCARD BATHTUB/SHOWER UNIT - INCLUDING ALL WALL PANELS
2	REMOVE EXISTING SINK / VANITY - INCLUDING ALL ASSOCIATED PLUMBING FIXTURES
3	REMOVE EXISTING TOILET
4	REMOVE EXISTING DOOR AND FRAME
5	REMOVE EXISTING WALL - COORDINATE WITH CONSTRUCTION
6	REMOVE EXISTING FRAME AND INFILL WALL
7	REMOVE ALL PLASTER, LATH, BASEBOARD, AND TRIM - WOOD STUD FRAMING TO REMAIN - COORDINATE WITH CONSTRUCTION
8	REMOVE ALL PLASTER AND LATH CEILINGS AND ALL CEILING MOUNTED FIXTURES - WOOD FRAMING ABOVE TO REMAIN - COORDINATE WITH CONSTRUCTION

DEMOLITION NOTES	
9	REMOVE ALL EXISTING FLOOR COVERINGS THAT CURRENTLY CONCEAL ORIGINAL HARDWOOD FLOORING
10	COMPLETELY REMOVE STAIR SYSTEM INCLUDING RAILINGS AND STAIRCASE STRUCTURE
11	REMOVE ALL MAKESHIFT WOOD PLANK PARTITIONS INCLUDING ALL GATES, DOORS, AND HORIZONTAL NAILERS. STRUCTURAL COLUMNS TO REMAIN
12	REMOVE EXISTING WINDOW SYSTEM - ROUGH OPENING TO REMAIN
13	REMOVE EXISTING HARDWOOD FLOOR. EXISTING SUBFLOOR TO REMAIN.

DEMOLITION LEGEND

- EXISTING PARTITIONS
- PARTITIONS TO BE REMOVED
- DOOR TO BE REMOVED

DEMOLITION GENERAL NOTES

1. READ ALL GENERAL NOTES ON DRAWING A001. REVIEW ENTIRE CONSTRUCTION DOCUMENT SET PRIOR TO COMMENCING WORK.
2. COORDINATE ARCHITECTURAL DEMOLITION WORK WITH ALL OTHER TRADES, INCLUDING HAZARDOUS MATERIAL ABATEMENT DRAWINGS. REFER TO M/E/P/FP DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE.
3. WHERE INCONSISTENCIES OCCUR, NOTIFY THE DESIGN TEAM AND ASSUME THE GREATER VALUE FOR BIDDING PURPOSES.
4. CONTRACTORS SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS.
5. PRIOR TO DEMOLITION OF INTERIOR STAIRS - DOCUMENT ALL DIMENSIONS (SUCH AS RISE/RUN, START AND END LOCATIONS, OVERALL HEIGHTS, WIDTH, ETC) FOR FUTURE COORDINATION WITH NEW STAIRS.

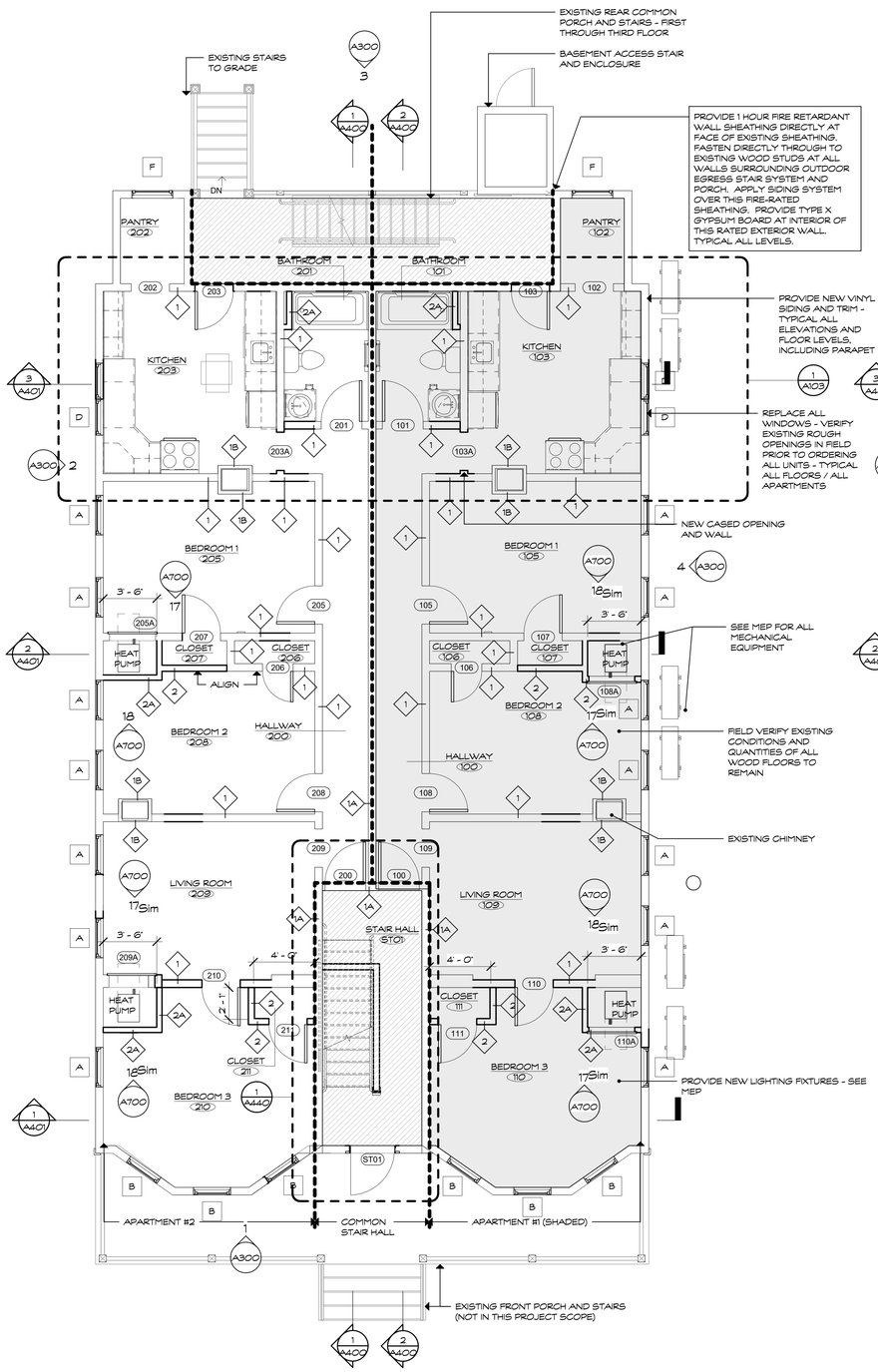
Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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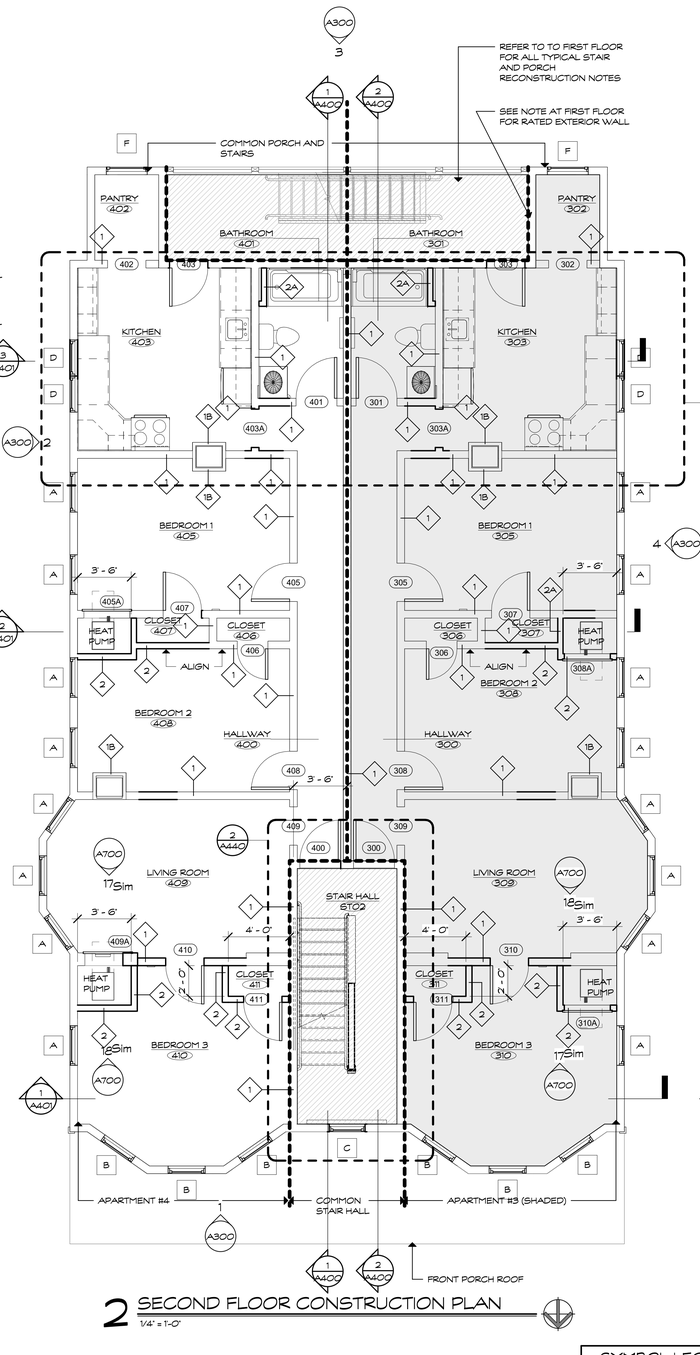
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DEMOLITION PLANS

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A011



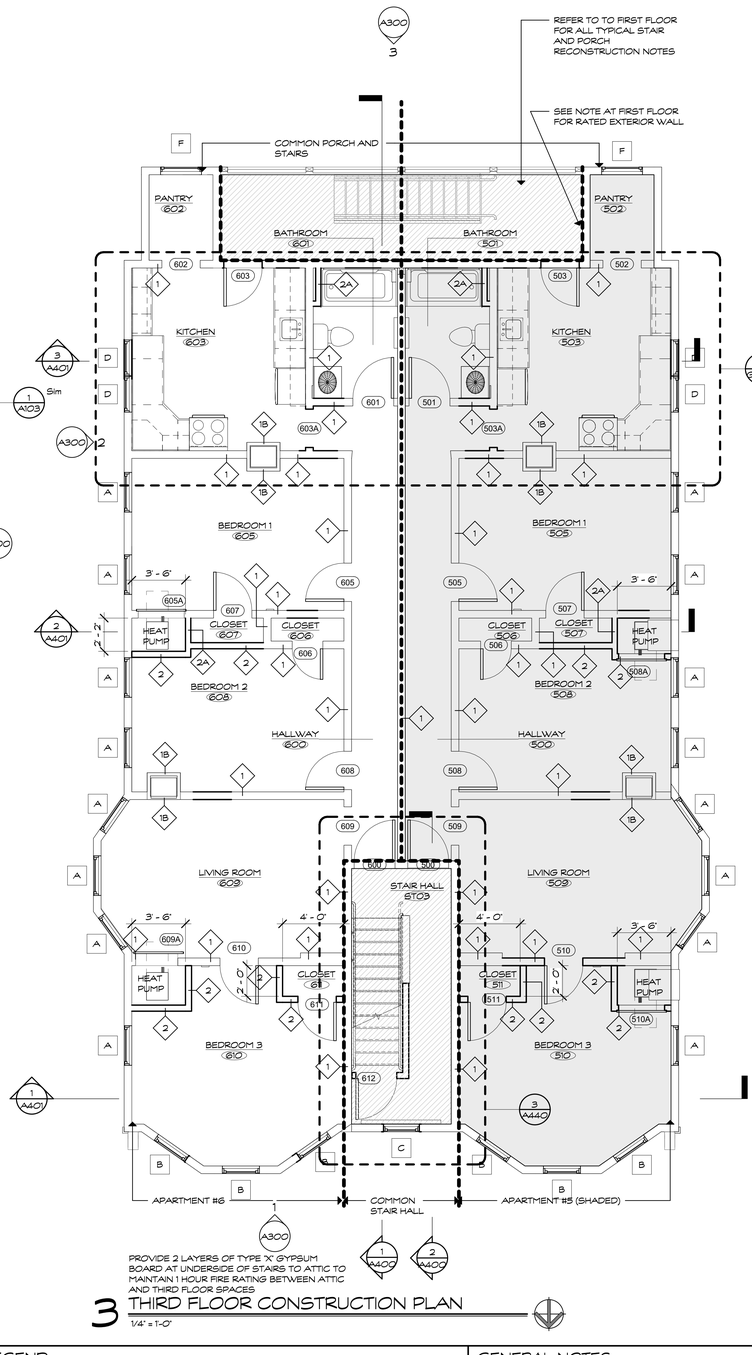
1 FIRST FLOOR CONSTRUCTION PLAN

1/4" = 1'-0"



2 SECOND FLOOR CONSTRUCTION PLAN

1/4" = 1'-0"



3 THIRD FLOOR CONSTRUCTION PLAN

1/4" = 1'-0"

SYMBOL LEGEND

- NEW METAL STUD PARTITIONS
- NEW MASONRY WALL
- NEW CMU WALL
- 101 / A — DOOR NUMBER
- 1i — WINDOW TYPE
- Room name / 101 — ROOM NAME / ROOM NUMBER
- E3.0 — PARTITION TYPE
- X — CONSTRUCTION NOTE
- 2 / A101 — EXTERIOR ELEVATION NUMBER / SHEET NUMBER
- 2 / A101 — INTERIOR ELEVATION NUMBER / SHEET NUMBER
- 2 / A101 — BUILDING SECTION NUMBER / SHEET NUMBER
- 2 / A101 — WALL SECTION NUMBER / SHEET NUMBER

GENERAL NOTES

1. READ ALL GENERAL NOTES.
2. CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS.
3. PATCH TO MATCH ALL EXISTING WALLS AND CEILINGS TO REMAIN AFFECTED BY NEW WORK.
4. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND WOOD FRAMING UNLESS OTHERWISE NOTED.
5. PROVIDE AND INSTALL SOLID WOOD FIRE BLOCKING AT ALL STUD CAVITIES THAT EXTEND TO MORE THAN ONE FLOOR LEVEL - (INCLUDING ALL INTERIOR PARTITIONS AND EXTERIOR WALLS)
6. WHERE THE WORD 'ALIGN' IS INDICATED IT SHALL MEAN TO ALIGN BOTH SIDES OF WALL.
7. OWNER TO SUPPLY KITCHEN APPLIANCES - GC TO INSTALL.
8. PROVIDE MINIMUM R-12 BATT INSULATION WITH VAPOR BARRIER TO CAVITIES OF ALL EXISTING EXTERIOR WALLS AT ALL FLOORS.
9. COORDINATE ALL PLANS WITH CODE PLANS TO ENSURE WALLS ARE PROPERLY RATED AND SEALED

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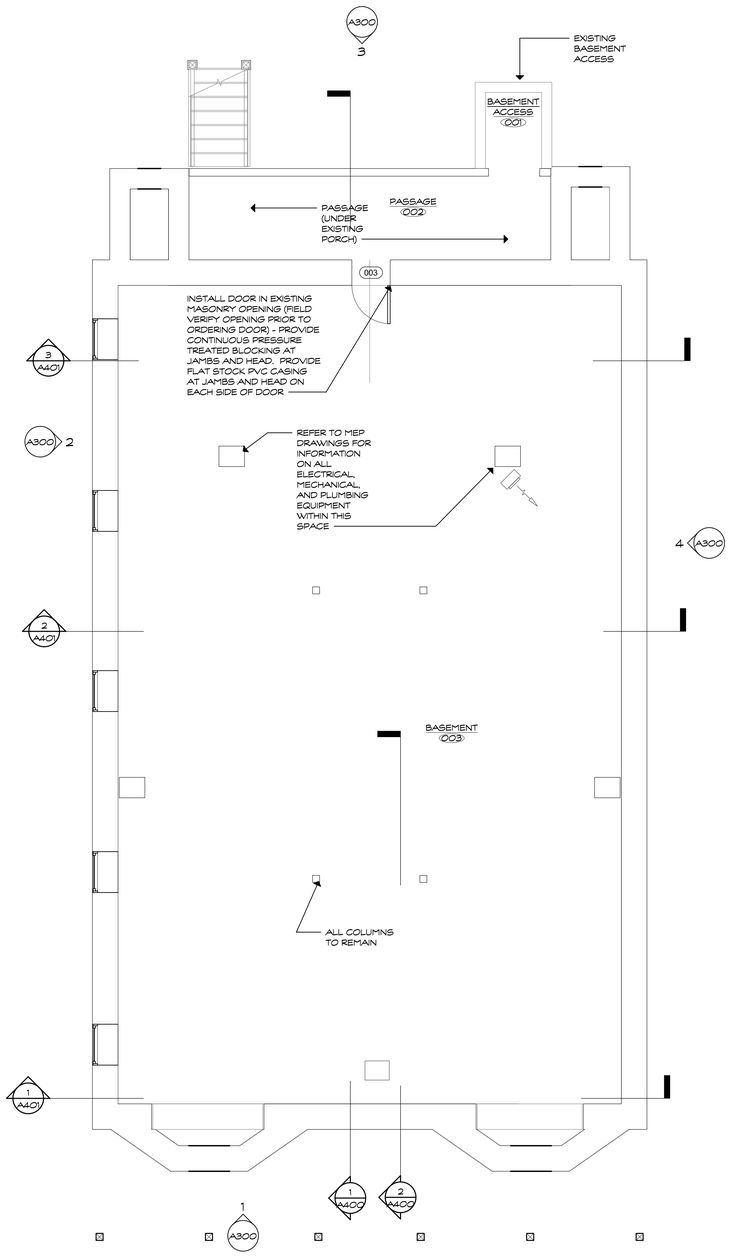
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Drawing Title: CONSTRUCTION PLANS

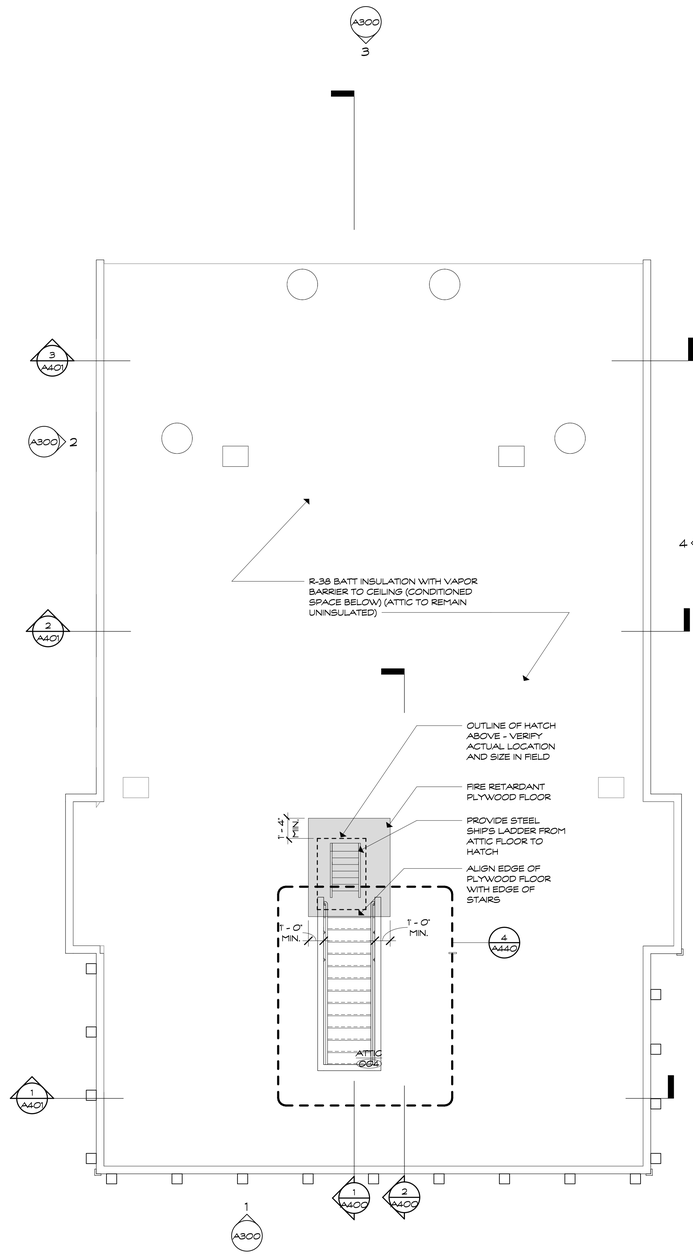
Date: 4/13/2022
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Project Number: 21.081

Drawing Number: A100



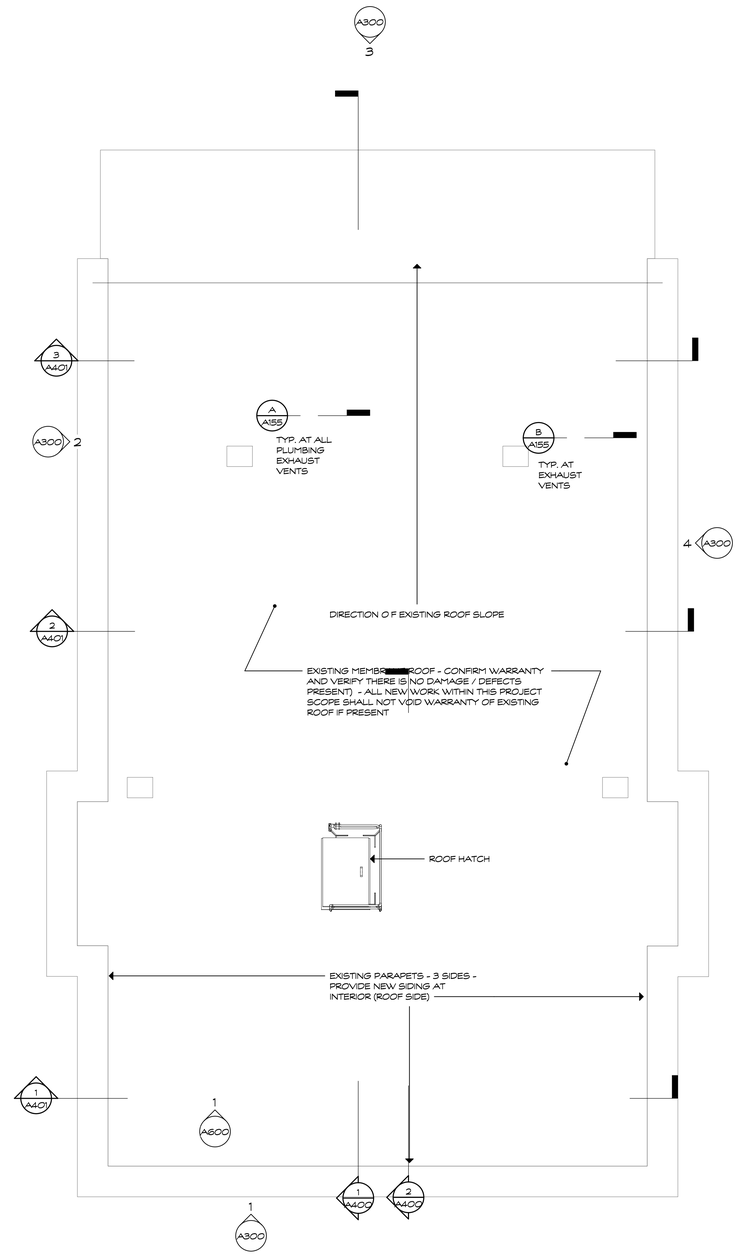
1 BASEMENT CONSTRUCTION PLAN

1/4" = 1'-0"



2 ATTIC CONSTRUCTION PLAN

1/4" = 1'-0"



3 ROOF CONSTRUCTION PLAN

1/4" = 1'-0"

SYMBOL LEGEND

- NEW METAL STUD PARTITIONS
- NEW MASONRY WALL
- NEW CMU WALL
- 101 / A — DOOR NUMBER
- 1 — WINDOW TYPE
- Room name / 101 — ROOM NAME / ROOM NUMBER
- E3.0 — PARTITION TYPE
- X — CONSTRUCTION NOTE
- 2 / A101 — EXTERIOR ELEVATION NUMBER / SHEET NUMBER
- 2 / A101 — INTERIOR ELEVATION NUMBER / SHEET NUMBER
- 2 / A101 — BUILDING SECTION NUMBER / SHEET NUMBER
- 2 / A101 — WALL SECTION NUMBER / SHEET NUMBER

GENERAL NOTES

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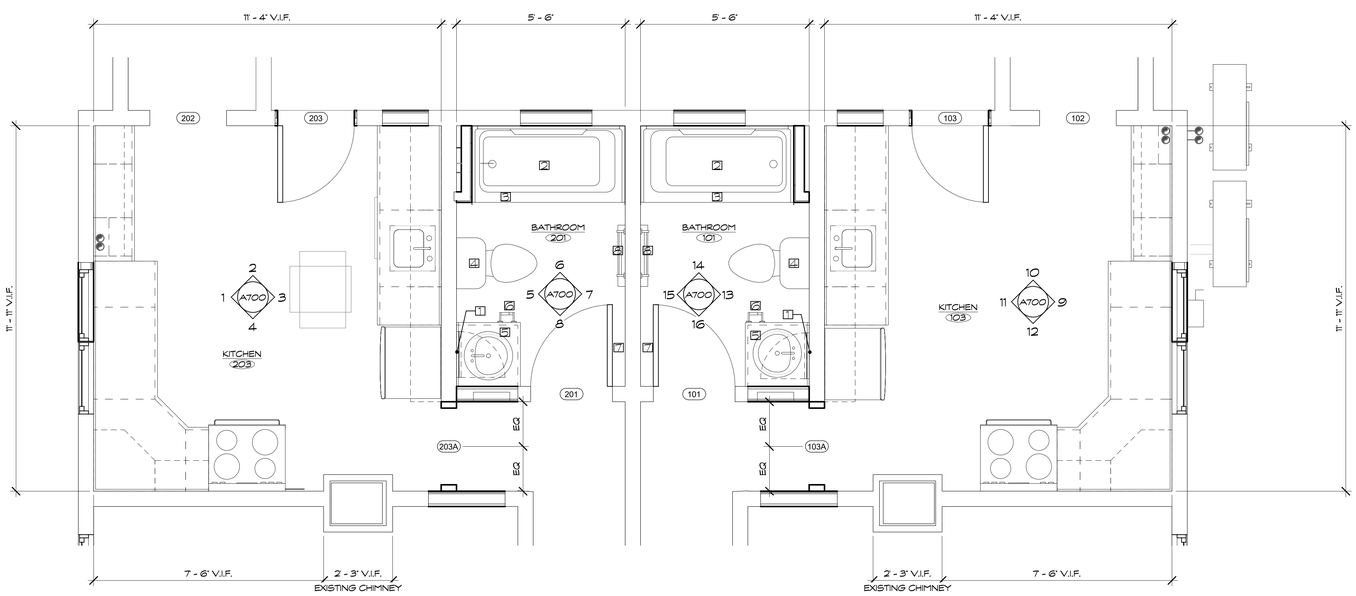
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Drawing Title:
CONSTRUCTION PLANS

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A101



1 ENLARGED PLAN - KITCHENS AND BATHROOMS
1/2" = 1'-0"

TOILET ACCESSORIES	
1	SEMI-RECESSED 1'-8" X 3' MIRROR / MEDICINE CABINET (CENTER ON LAV)
2	FOUR PIECE FIBERGLASS PRE-FABRICATED SHOWER W/ TWO SHELVES/OPENINGS; SEE PROJECT MANUAL
3	CURTAIN, HOOK, AND ROD
4	FLOOR MOUNTED WATER CLOSET (18" TO TOP OF SEAT)
5	VANITY WITH INTEGRAL SINK AND COUNTERTOP WITH BACKSPLASH AT SIDE AND BACK
6	TOILET PAPER DISPENSER
7	ROBE HOOK - DOOR MOUNTED AT BATHROOM SIDE
8	TOWEL BAR

COORDINATE FINAL LOCATION OF ALL TOILET ROOM ACCESSORIES IN FIELD

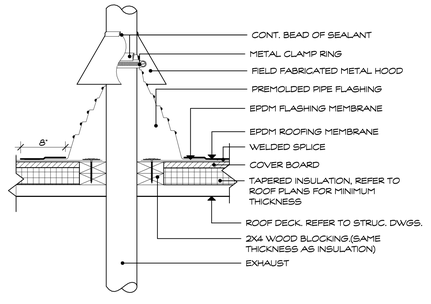
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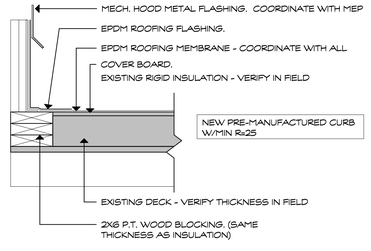
Drawing Title:
ENLARGED KITCHEN AND BATHROOM PLANS

Date: 4/13/2022
Scale: 1/2" = 1'-0"
Drawn By: BJV
Project Number: 21.081
Drawing Number: A103



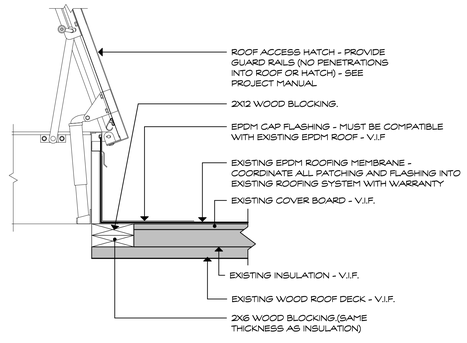
VENT STACK DETAIL — A / A155

SCALE: 1 1/2" = 1'-0" REFERENCE VIEW: 3 / A101



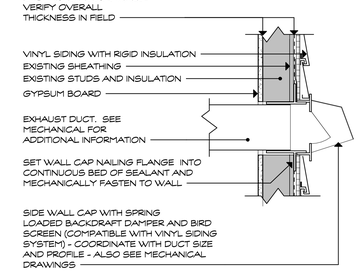
EXHAUST FAN ROOF PENETRATION DETAIL — B / A155

SCALE: 1 1/2" = 1'-0" REFERENCE VIEW: 3 / A101



ROOF HATCH DETAIL — C / A155

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



THROUGH WALL EXHAUST VENT — D / A155

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

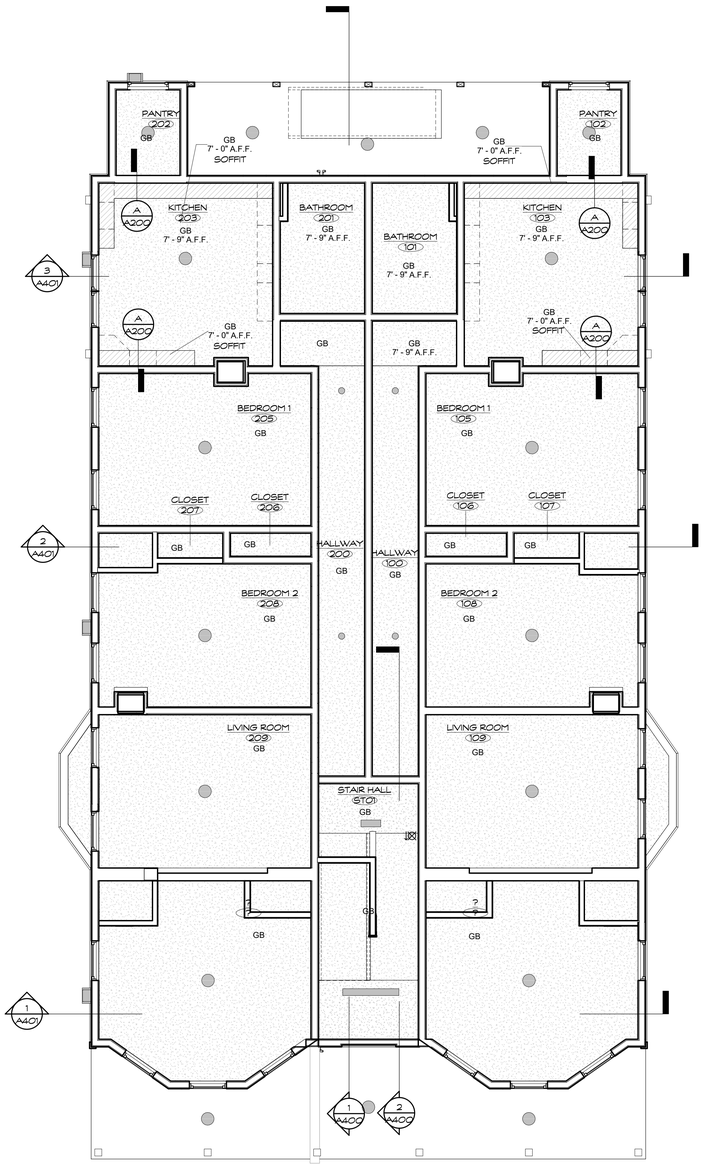
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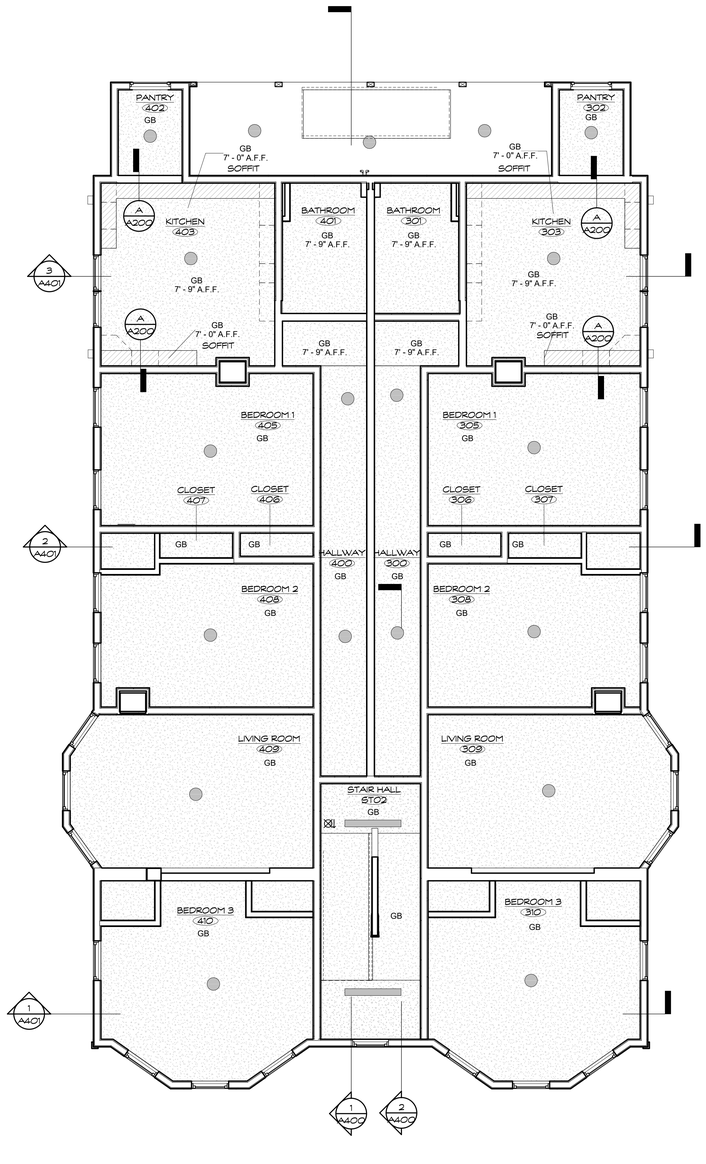
Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
ROOF AND EXTERIOR WALL PENETRATION DETAILS

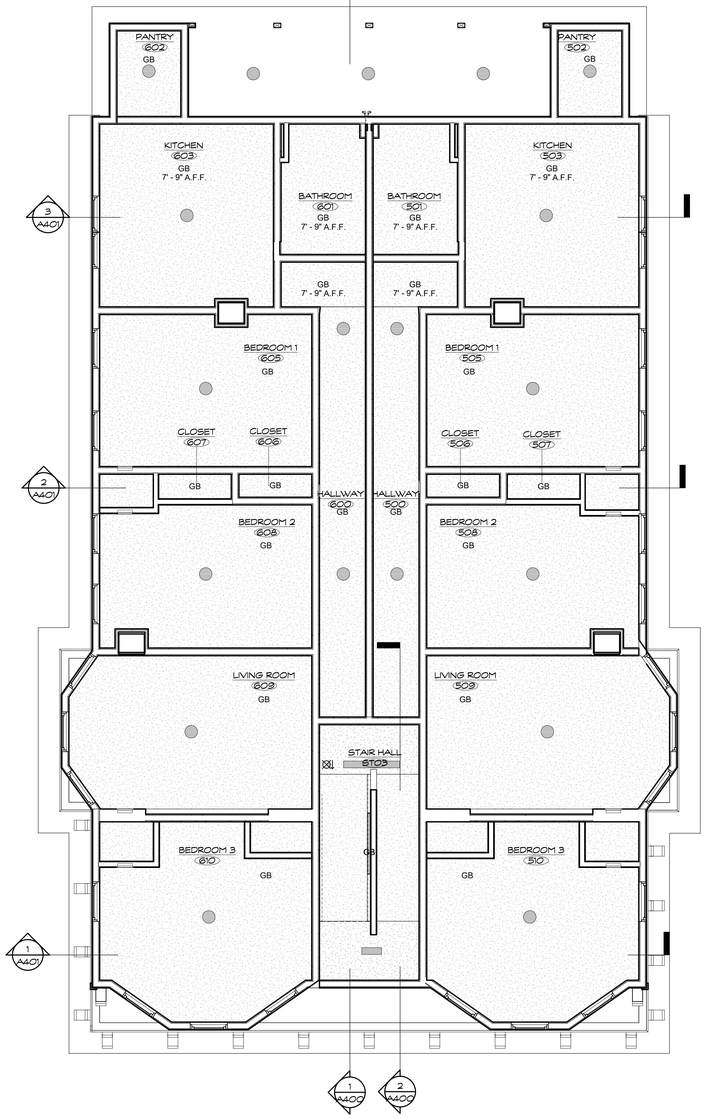
Date: 4/13/2022
Scale: 1 1/2" = 1'-0"
Drawn By: BJV
Project Number: 21.081
Drawing Number: A155



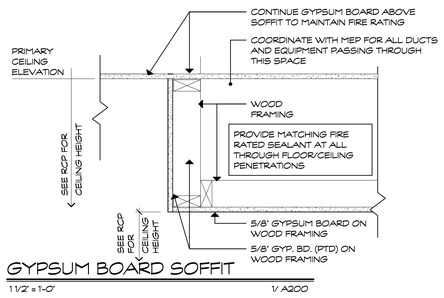
1 FIRST FLOOR
1/4" = 1'-0"



2 SECOND FLOOR
1/4" = 1'-0"



3 THIRD FLOOR
1/4" = 1'-0"



A GYPSUM BOARD SOFFIT
1 1/2" = 1'-0" 1/ A200

RCP SYMBOL LEGEND

- Room name / 101 — ROOM NAME / ROOM NUMBER
- (10'-0") — CEILING HEIGHT (IF FINISHED CEILING IS NOT BEING MOUNTED TO BOTTOM EXISTING JOISTS)
- PAINTED GYPSUM BOARD CEILING
- EXIT SIGN, REFER TO ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURES, REFER TO ELECTRICAL DRAWINGS
- 2 X 2 LIGHT FIXTURE, REFER TO ELECTRICAL DRAWING
- PENDENT STYLE LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS
- SUPPLY DIFFUSER, REFER TO MECHANICAL DRAWINGS
- RETURN GRILLE, REFER TO MECHANICAL DRAWINGS
- ACCESS PANEL: COORDINATE W/ MECHANICAL DWGS. PROVIDE TAMPER-PROOF FASTENERS FOR ALL ACCESS PANELS

GENERAL RCP NOTES

1. PROVIDE 1 HOUR RATING WITH 2 LAYERS OF TYPE X GYPSUM BOARD DIRECTLY TO UNDERSIDE OF EXISTING WOOD JOISTS AT ALL FLOORS INCLUDING BASEMENT AND CEILING BELOW ATTIC. THIS INCLUDES AREA ABOVE WHERE A LOWERED (SEPARATELY FRAMED) CEILING OR SOFFIT WILL BE PROVIDED (KITCHENS, BATHROOMS, AND ALL SOFFITS). PROVIDE MINERAL WOOL INSULATION BATTS AT ALL JOIST CAVITIES AT FIRE RATED CEILINGS. (IBC TABLE 722.6.2 (1)
2. PROVIDE FIRE SEALANT AT ALL PENETRATIONS THROUGH CEILING TO FLOOR ABOVE OR BELOW.
3. ALL JUNCTION BOXES AND RECESSED FIXTURES PENETRATING FIRE RATED CEILINGS MUST MATCH FIRE RATING OF CEILING ASSEMBLY. COORDINATE WITH MEP. PROVIDE FIRE BLOCKING AT STUD CAVITIES (EXTERIOR WALLS AND INTERIOR PARTITIONS THAT EXTEND THROUGH TO MORE THAN ONE FLOOR LEVEL).
4. PROVIDE 1 LAYER/5/8" GYPSUM BOARD AT UNDERSIDE OF ALL STAIRS UNLESS OTHERWISE INDICATED.
5. CEILINGS WITHOUT HEIGHT CALLED OUT - FINISHED CEILING IS ATTACHED TO BOTTOM OF EXISTING JOISTS - V.I.F.

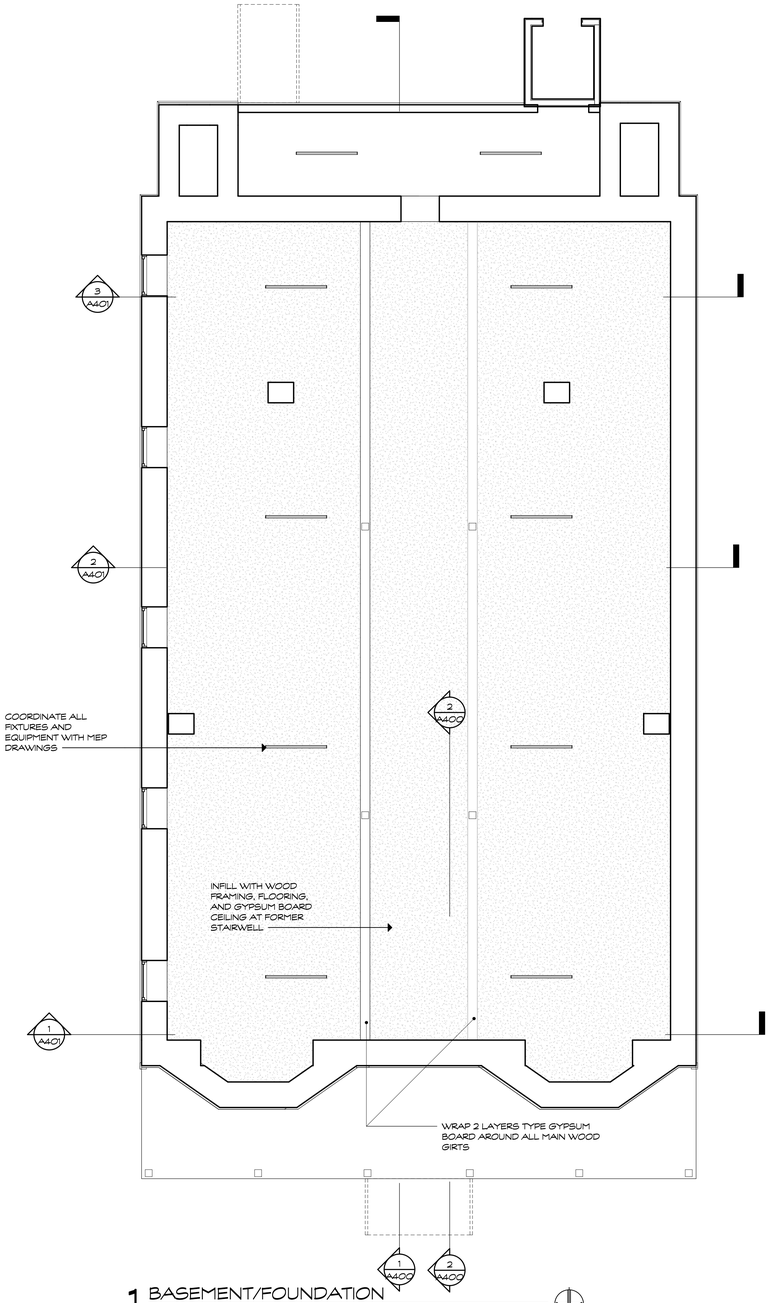
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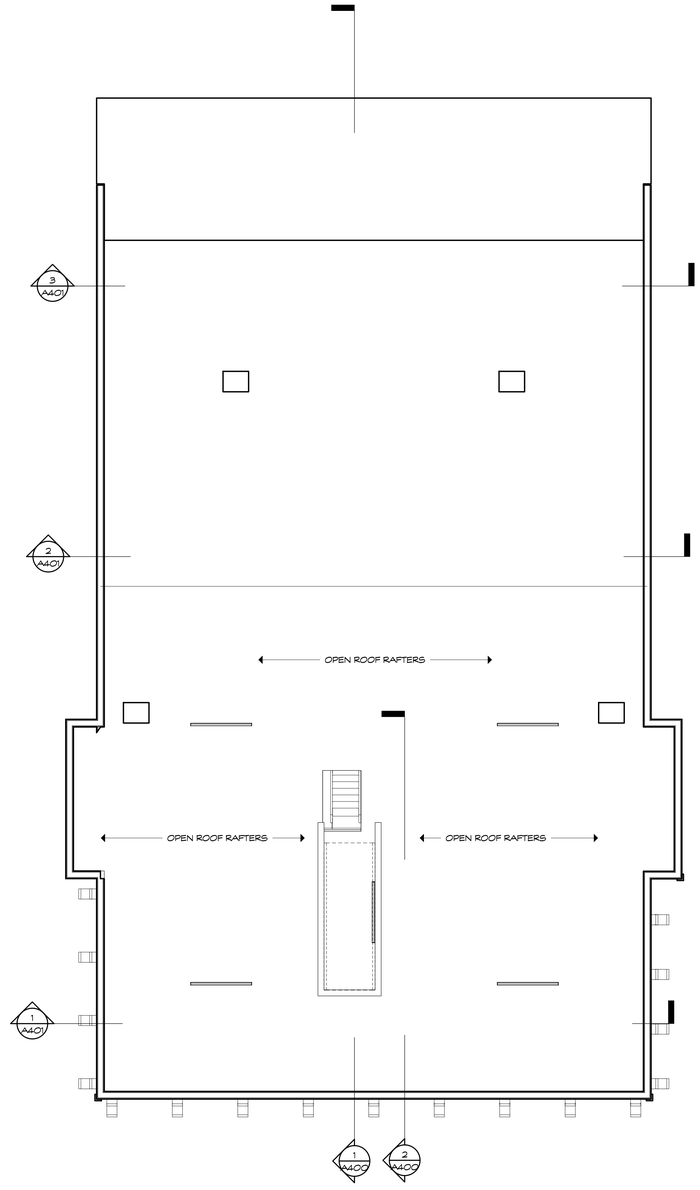
Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title: REFLECTED CEILING PLANS

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A200



1 BASEMENT/FOUNDATION
1/4" = 1'-0"



2 ATTIC
1/4" = 1'-0"

RCP SYMBOL LEGEND

Room name
101
- ROOM NAME
- ROOM NUMBER

(10'-0")
- CEILING HEIGHT (IF FINISHED CEILING IS NOT BEING MOUNTED TO BOTTOM EXISTING JOISTS)

- PAINTED GYPSUM BOARD CEILING

- EXIT SIGN, REFER TO ELECTRICAL DRAWINGS

- RECESSED LIGHT FIXTURES, REFER TO ELECTRICAL DRAWINGS

- 2 X 2 LIGHT FIXTURE, REFER TO ELECTRICAL DRAWING

- PENDENT STYLE LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS

- SUPPLY DIFFUSER, REFER TO MECHANICAL DRAWINGS

- RETURN GRILLE, REFER TO MECHANICAL DRAWINGS

- ACCESS PANEL, COORDINATE W/ MECHANICAL DWGS. PROVIDE TAMPER-PROOF FASTENERS FOR ALL ACCESS PANELS

GENERAL RCP NOTES

1. PROVIDE 1 HOUR RATING WITH 2 LAYERS OF TYPE X GYPSUM BOARD DIRECTLY TO UNDERSIDE OF EXISTING WOOD JOISTS AT ALL FLOORS INCLUDING BASEMENT AND CEILING BELOW ATTIC. THIS INCLUDES AREA ABOVE WHERE A LOWERED (SEPARATELY FRAMED) CEILING OR SOFFIT WILL BE PROVIDED (KITCHENS, BATHROOMS, AND ALL SOFFITS). PROVIDE MINERAL WOOL INSULATION BATTS AT ALL JOIST CAVITIES AT FIRE RATED CEILINGS. (IBC TABLE 722.6.2 (1)
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5. PROVIDE 1 LAYERS/8' GYPSUM BOARD AT UNDERSIDE OF ALL STAIRS UNLESS OTHERWISE INDICATED.
6. CEILINGS WITHOUT HEIGHT CALLED OUT - FINISHED CEILING IS ATTACHED TO BOTTOM OF EXISTING JOISTS - V.I.F.

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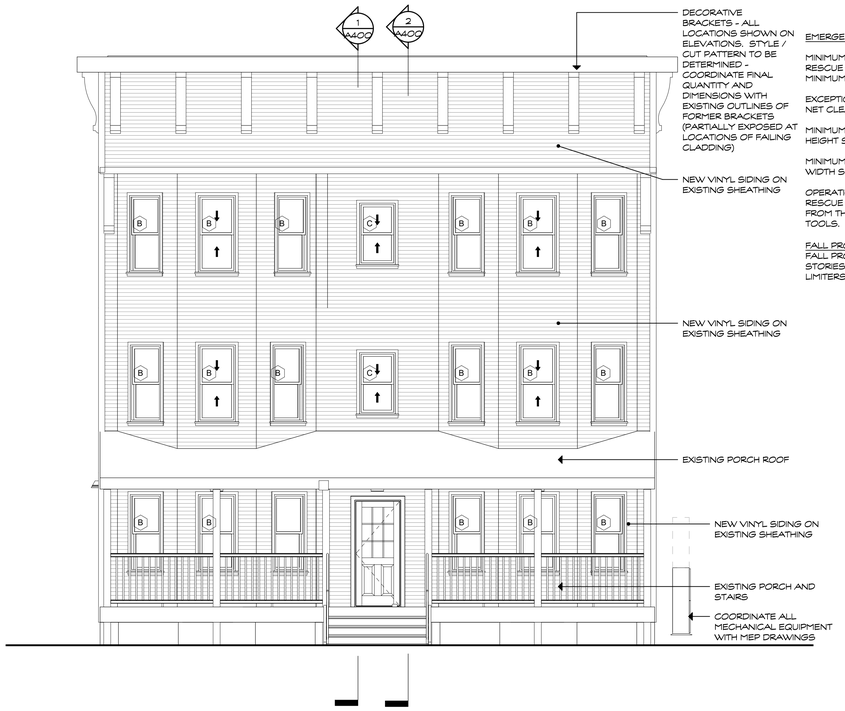
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Drawing Title:
REFLECTED CEILING PLANS

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081

Drawing Number:
A201



1 NORTH (FRONT) ELEVATION
1/4" = 1'-0" 1/ A100

EMERGENCY ESCAPE AND RESCUE OPENINGS (EERO)

MINIMUM OPENING AREA. ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (0.530 M2).

EXCEPTION: GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 SQUARE FEET.

MINIMUM OPENING HEIGHT. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES.

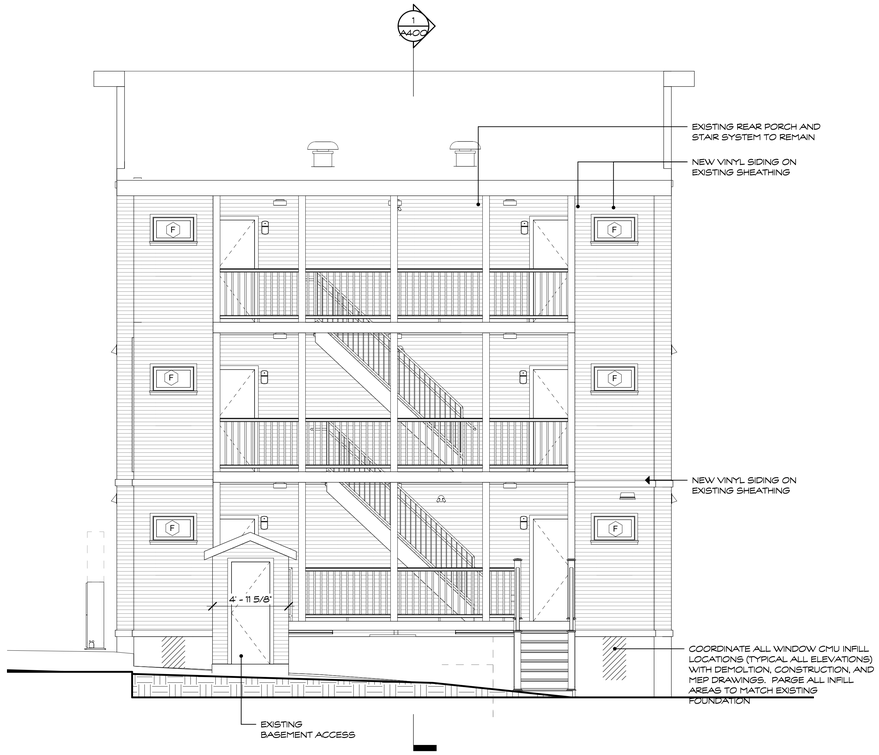
MINIMUM OPENING WIDTH. THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES.

OPERATIONAL CONSTRAINTS. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS.

FALL PROTECTION
FALL PROTECTION AT WINDOWS IS REQUIRED FROM ALL STORIES ABOVE THE FIRST FLOOR. PROVIDE WINDOW LIMITERS AT WINDOWS ABOVE FIRST FLOOR.



2 EAST (SIDE) ELEVATION
1/4" = 1'-0" 1/ A100



3 SOUTH (REAR) ELEVATION
1/4" = 1'-0" 1/ A100



4 WEST ELEVATION
1/4" = 1'-0" 1/ A100

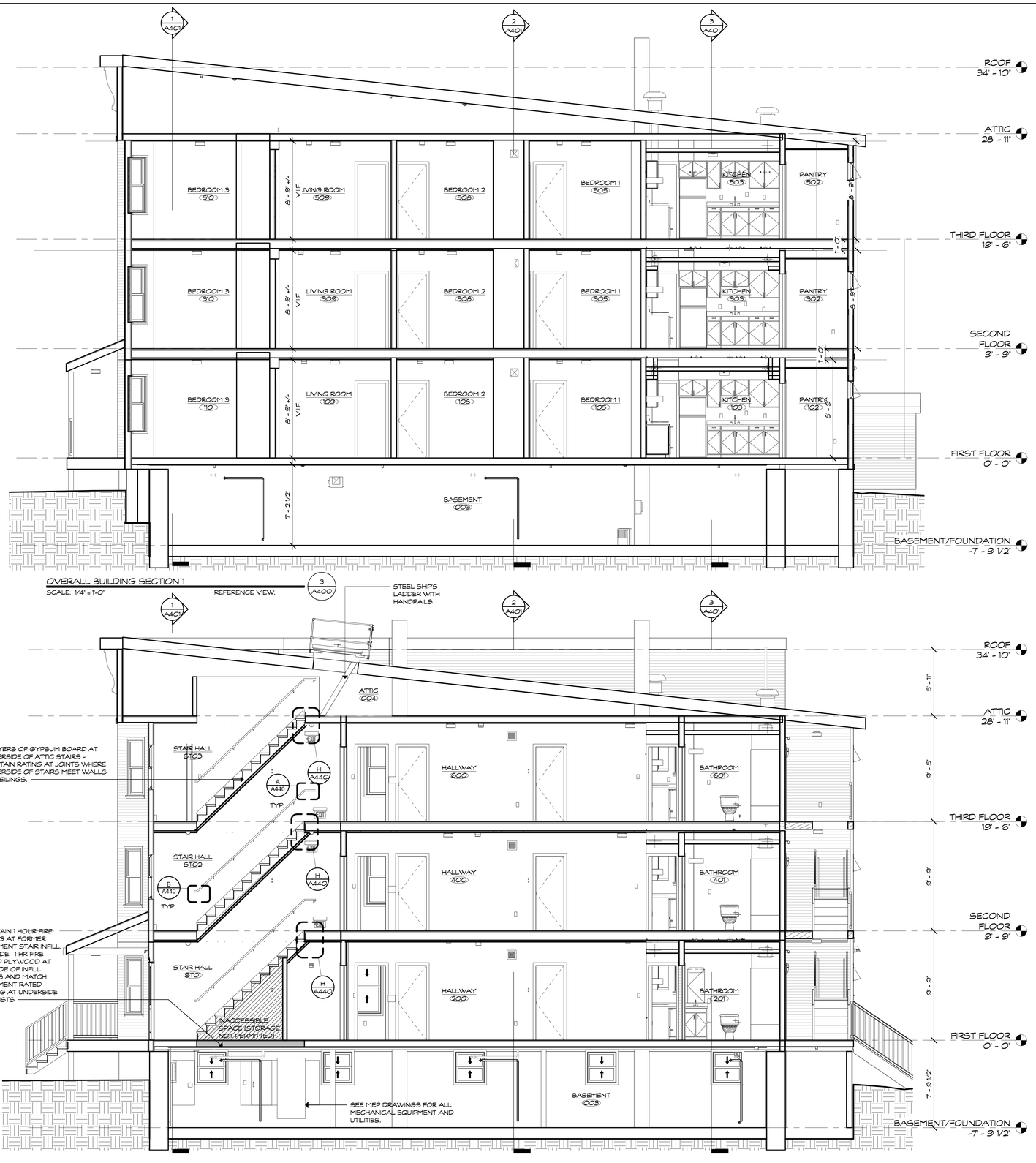
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	ISSUED FOR BID	4/13/2022	

Drawing Title:
EXTERIOR ELEVATIONS

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: BJV
Project Number: 21.081
Drawing Number: A300

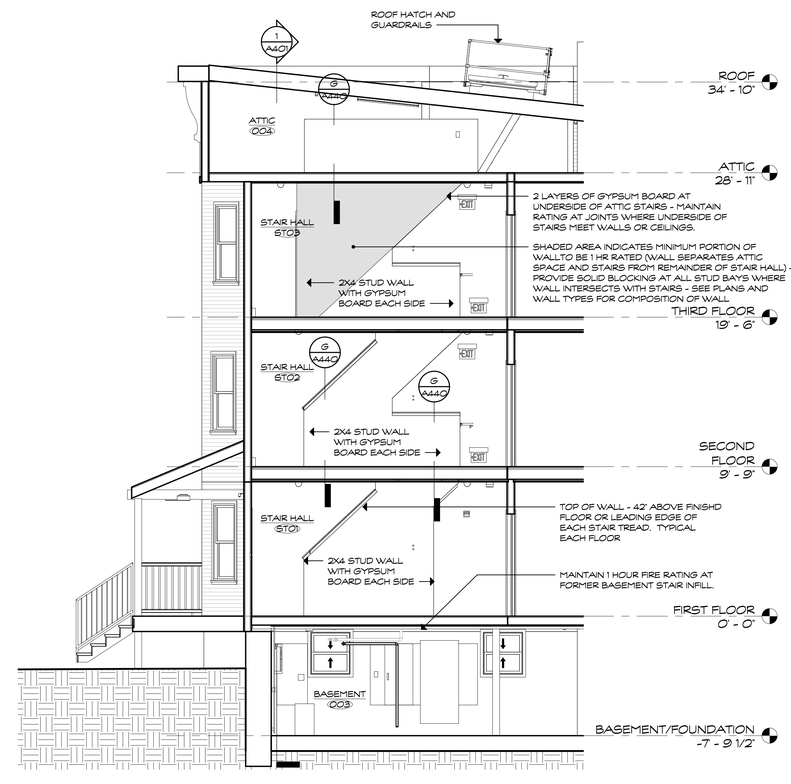


OVERALL BUILDING SECTION 1

SCALE: 1/4" = 1'-0" REFERENCE VIEW: 3 / A400

OVERALL BUILDING SECTION 2

SCALE: 1/4" = 1'-0" REFERENCE VIEW: 1 / A100



STAIR SECTION 1

SCALE: 1/4" = 1'-0" REFERENCE VIEW: 1 / A100

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1 Holbrook Place
Ansonia, CT 06401

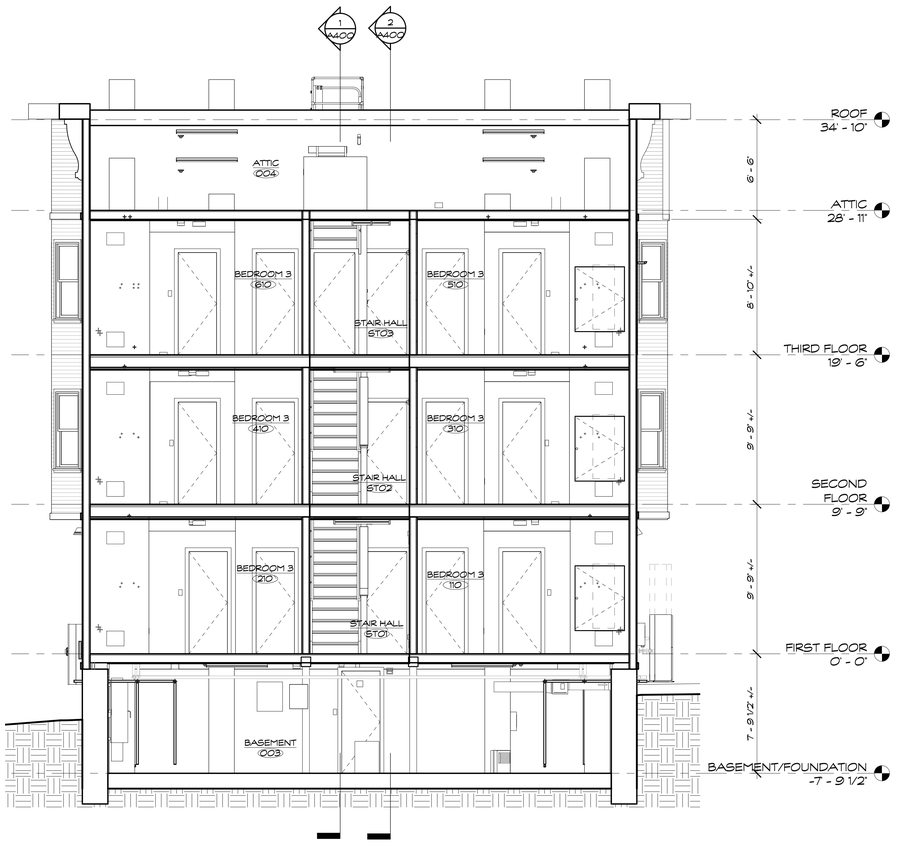
SILVER | PETRUCELLI + ASSOCIATES
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3190 Whitney Avenue | Hamden, CT 06518
One Post Hill Place | New London CT 06320
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

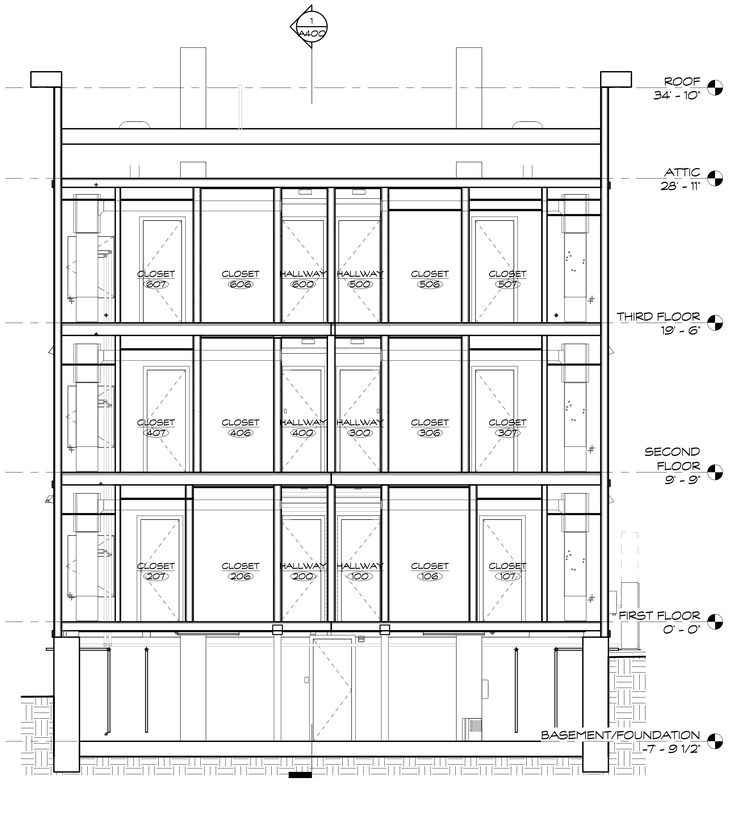
Drawing Title: SECTIONS

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: BJV
Project Number: 21.081

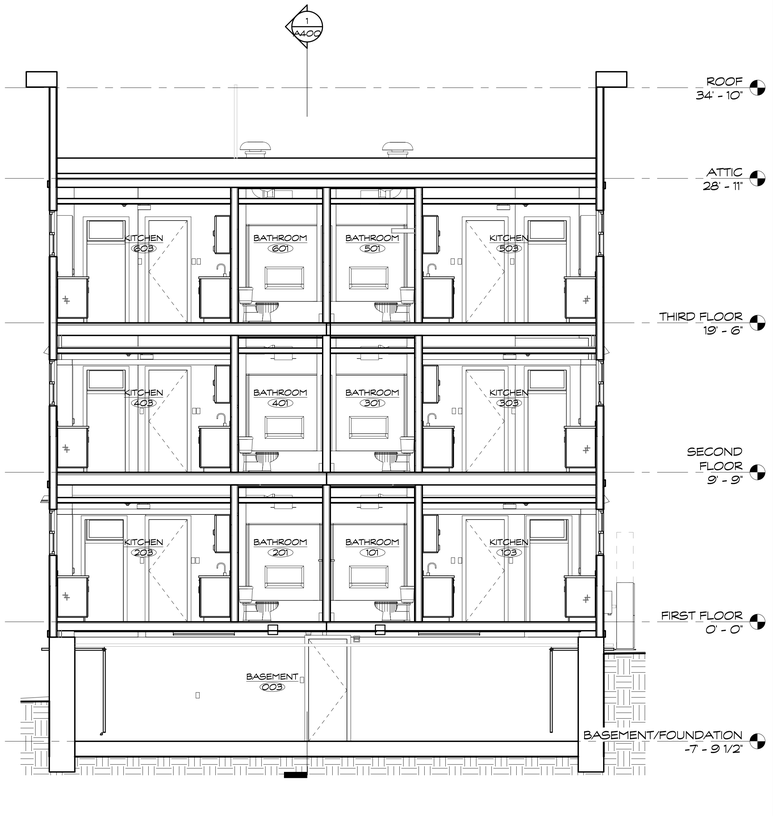
Drawing Number: A400



1 OVERALL BUILDING SECTION 3
1/4" = 1'-0" 1/ A100



2 OVERALL BUILDING SECTION 4
1/4" = 1'-0" 1/ A100



3 OVERALL BUILDING SECTION 5
1/4" = 1'-0" 1/ A100

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

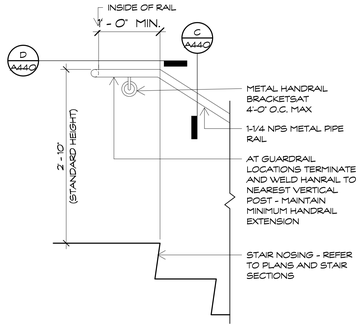
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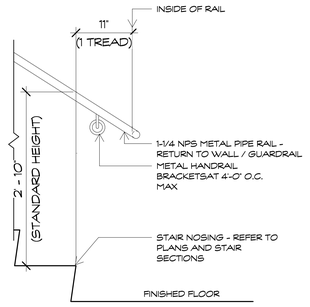
Drawing Title:
SECTIONS

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: BJV
Project Number: 21.081

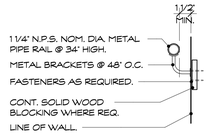
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A401



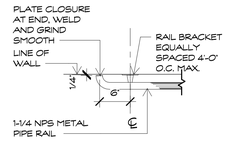
HANDRAIL TERMINATION AT TOP OF STAIRS — A440
SCALE: 1" = 1'-0" — REFERENCE VIEW: 1 / A400



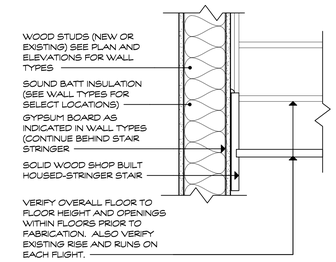
HANDRAIL TERMINATION AT BOTTOM OF STAIR — B A440
SCALE: 1" = 1'-0" — REFERENCE VIEW: 1 / A400



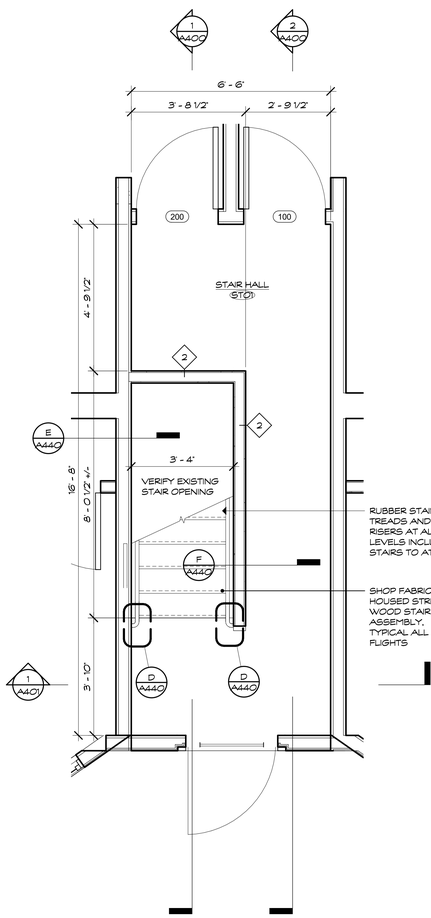
TYPICAL HANDRAIL SECTION — C A440
SCALE: 1 1/2" = 1'-0" — REFERENCE VIEW: A / A440



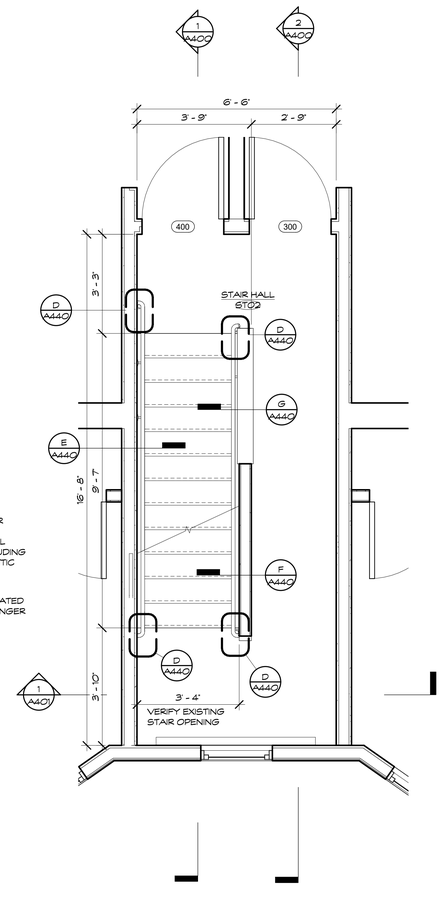
HANDRAIL RETURN PLAN DETAIL — D A440
SCALE: 1" = 1'-0" — REFERENCE VIEW: 1 / A440



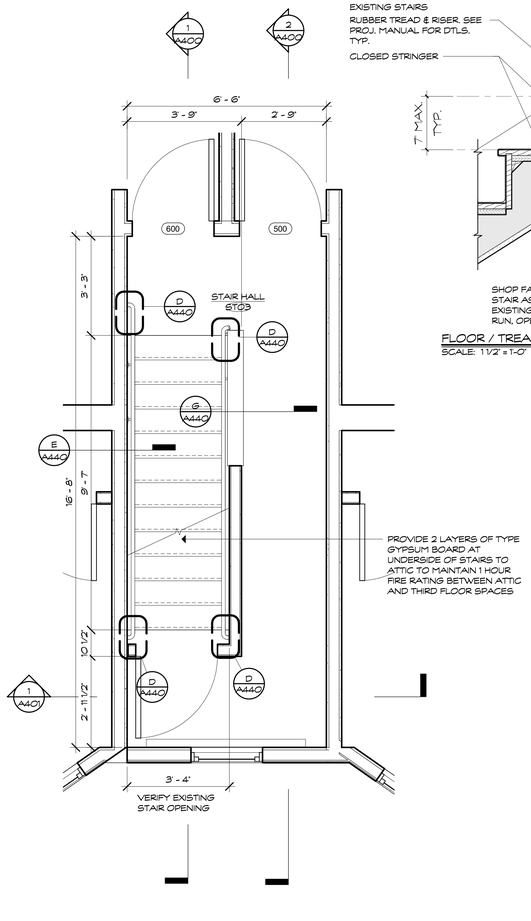
STAIR STRINGER AT WALL — E A440
SCALE: 1 1/2" = 1'-0" — REFERENCE VIEW: 1 / A440



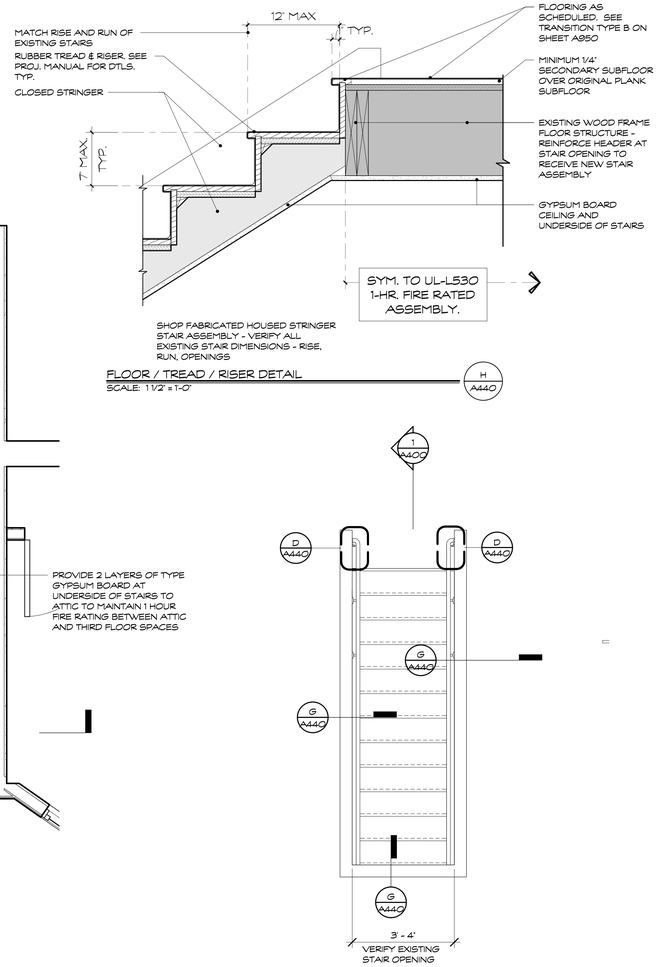
FIRST FLOOR INTERIOR STAIR PLAN — 1 A440
SCALE: 1/2" = 1'-0" — REFERENCE VIEW: 1 / A100



SECOND FLOOR INTERIOR STAIR PLAN — 2 A440
SCALE: 1/2" = 1'-0" — REFERENCE VIEW: 2 / A100

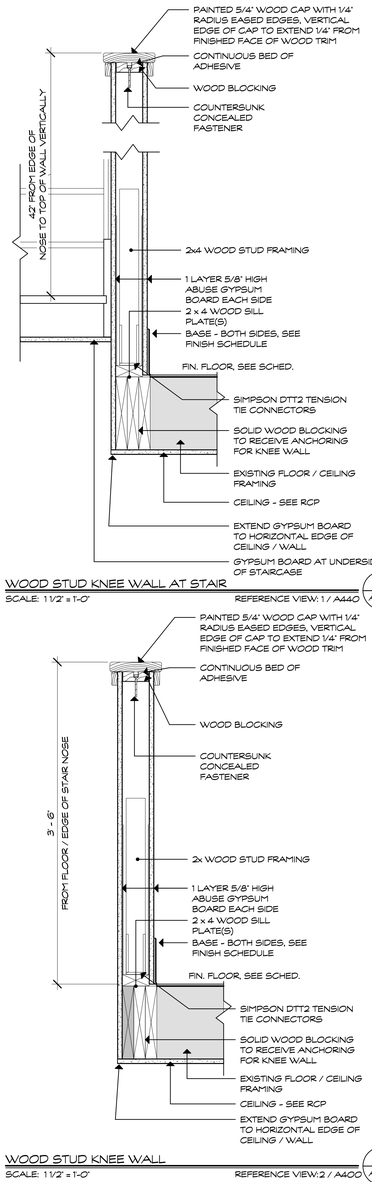


THIRD FLOOR INTERIOR STAIR PLAN — 3 A440
SCALE: 1/2" = 1'-0" — REFERENCE VIEW: 3 / A100

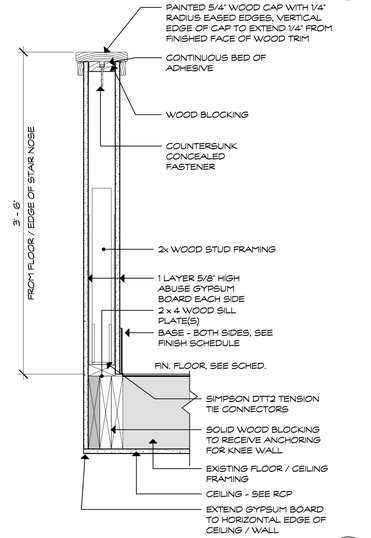


FLOOR / TREAD / RISER DETAIL — H A440
SCALE: 1 1/2" = 1'-0"

ATTIC STAIR PLAN — 4 A440
SCALE: 1/2" = 1'-0" — REFERENCE VIEW: 2 / A101



WOOD STUD KNEE WALL AT STAIR — F A440
SCALE: 1 1/2" = 1'-0" — REFERENCE VIEW: 1 / A440



WOOD STUD KNEE WALL — G A440
SCALE: 1 1/2" = 1'-0" — REFERENCE VIEW: 2 / A400

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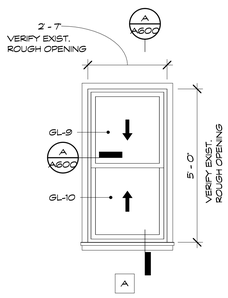
Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
STAIR DETAILS

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A440

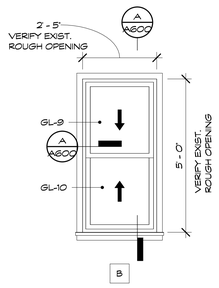
GLAZING LEGEND	
GL-9	INSULATING, CLEAR LOW-E COATED
GL-10	INSULATING, CLEAR, TEMPERED LOW-E COATED
SEE WINDOW ELEVATION FOR GLAZING DESIGNATION AND PROJECT MANUAL FOR ADDITIONAL INFORMATION.	

SEE DETAIL #2 FOR TYPICAL INTERIOR WINDOW TRIM (EXCEPT FOR BASEMENT)



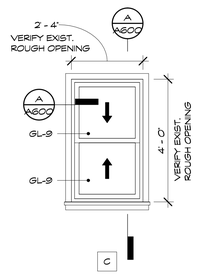
A

OPERABLE DOUBLE HUNG WINDOW - PROVIDE FALL PROTECTION LIMITERS AT ALL LOCATIONS UNLESS INDICATED - SEE ELEVATIONS AND PLANS FOR LOCATIONS OF ESCAPE AND RESCUE WINDOWS



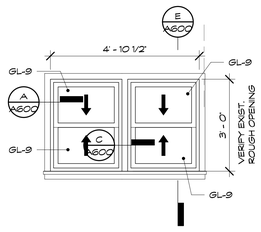
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OPERABLE DOUBLE HUNG WINDOW - PROVIDE FALL PROTECTION LIMITERS AT ALL LOCATIONS UNLESS INDICATED. SEE ELEVATIONS AND PLANS FOR LOCATIONS OF ESCAPE AND RESCUE WINDOWS



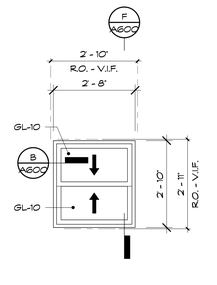
C

OPERABLE DOUBLE HUNG WINDOW - PROVIDE FALL PROTECTION LIMITERS AT ALL LOCATIONS UNLESS INDICATED.



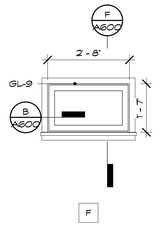
D

OPERABLE DOUBLE HUNG WINDOW - GANGED



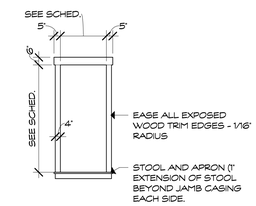
E

OPERABLE DOUBLE HUNG WINDOW AT BASEMENT



F

FIXED WINDOW



TYPICAL INTERIOR WINDOW TRIM (CUT OR ELIMINATE WINDOW APRON AT KITCHEN BACKSPLASH AS REQUIRED)

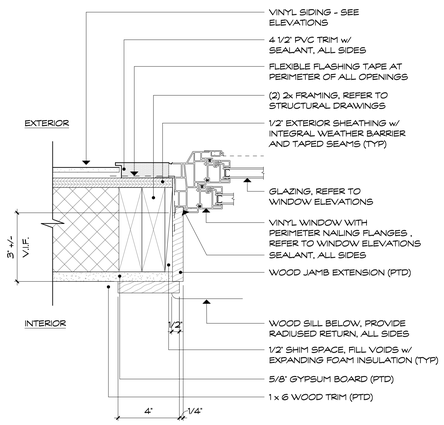
WINDOW ELEVATIONS

SCALE: 1/2" = 1'-0" REFERENCE VIEW: 1 / A101 (1 / A600)

PROVIDE AND INSTALL 'NEW CONSTRUCTION' WINDOWS WITH INTEGRAL NAILING FLANGES AT ALL LOCATIONS (NEW AND EXISTING ROUGH OPENINGS). CONTRACTOR TO FIELD VERIFY ALL EXISTING ROUGH OPENINGS UPON COMPLETE REMOVAL OF ORIGINAL 1890'S WINDOW JAMBS/CASING AND MORE RECENT VINYL 'REPLACEMENT' WINDOW INSERTS

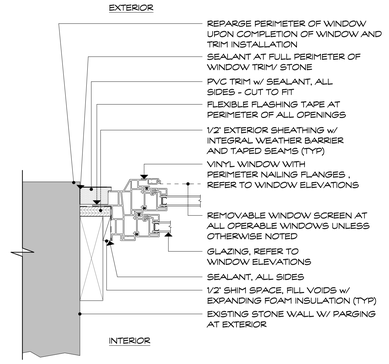
2 TYPICAL INTERIOR WINDOW TRIM

1/4" = 1'-0"



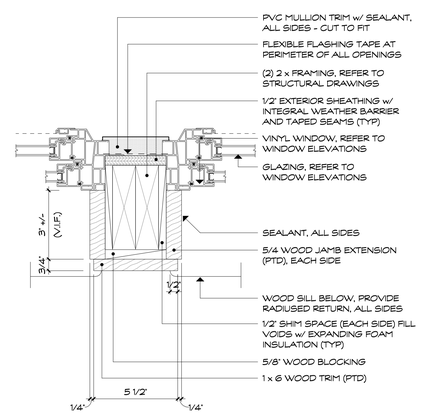
A TYPICAL WINDOW JAMB

3" = 1'-0" 1/ A600



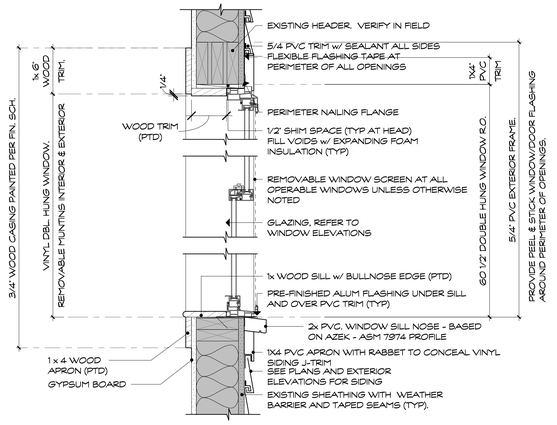
B TYPICAL WINDOW JAMB AT STONE WALL

3" = 1'-0" 1/ A600



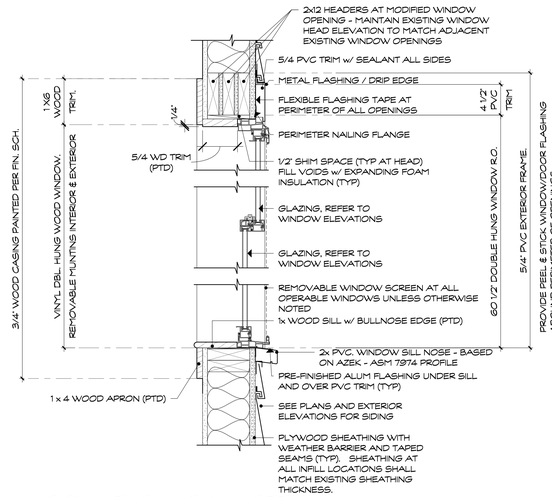
C INTERMEDIATE WINDOW JAMB

3" = 1'-0" 1/ A600



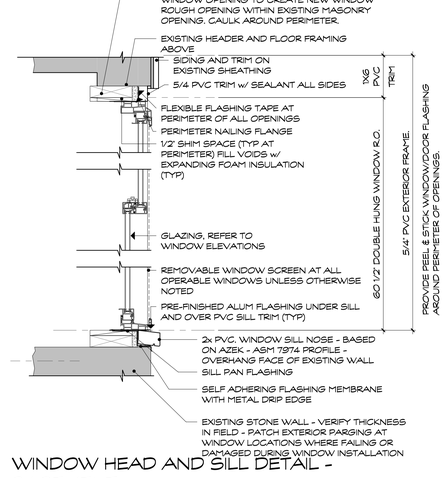
D WINDOW HEAD AND SILL DETAIL EXISTING OPENING

1 1/2" = 1'-0"



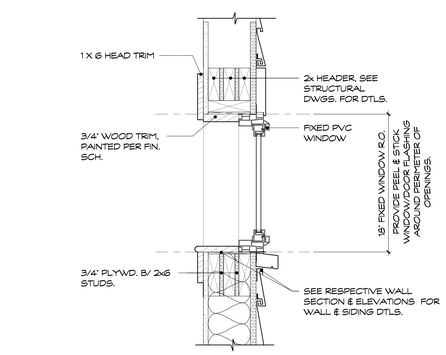
E WINDOW HEAD AND SILL DETAIL

1 1/2" = 1'-0" 1/ A600



F WINDOW HEAD AND SILL DETAIL - BASEMENT

1 1/2" = 1'-0" 1/ A600



G WINDOW HEAD AND SILL DETAIL - FIXED WINDOW

1 1/2" = 1'-0"

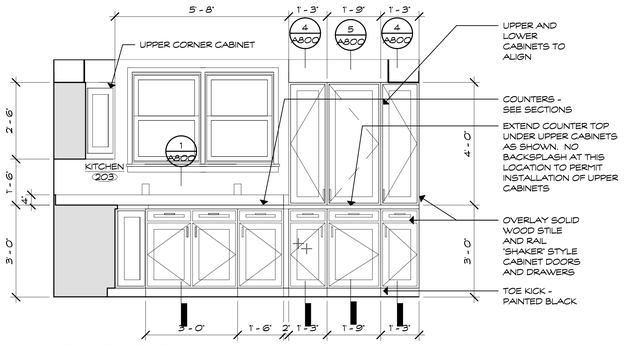
Project Title:
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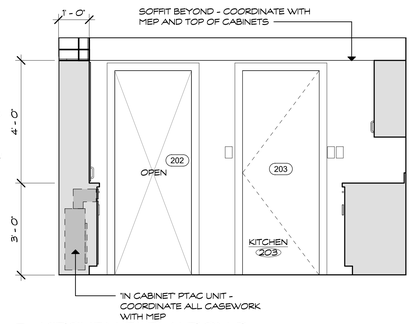
Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title: WINDOW ELEVATIONS AND DETAILS

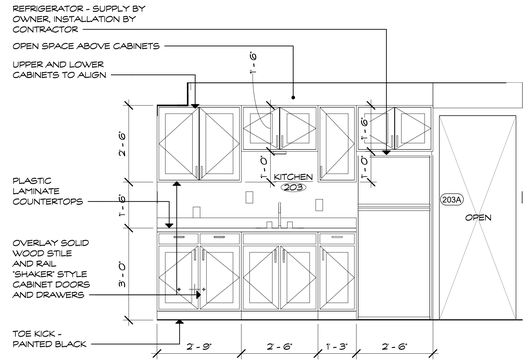
Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081
Drawing Number: A600



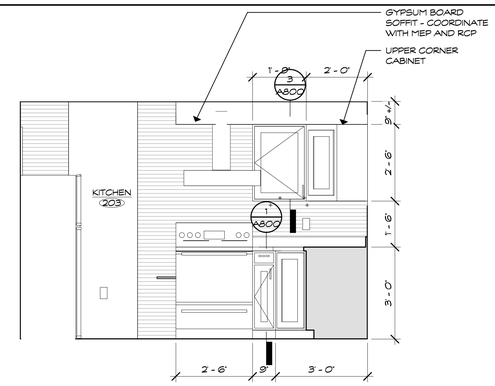
1 KITCHEN ELEVATION A
1/2" = 1'-0" 1/ A103



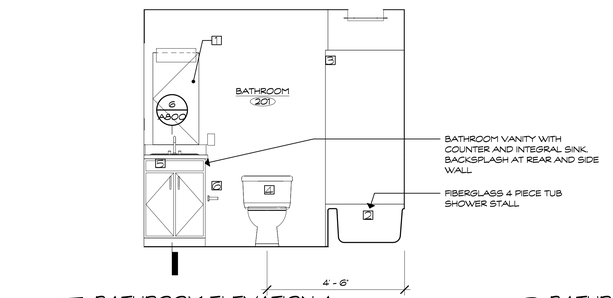
2 KITCHEN ELEVATION B
1/2" = 1'-0" 1/ A103



3 KITCHEN ELEVATION C
1/2" = 1'-0" 1/ A103



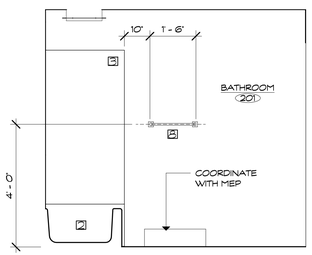
4 KITCHEN ELEVATION D
1/2" = 1'-0" 1/ A103



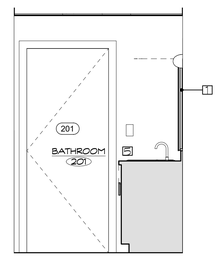
5 BATHROOM ELEVATION A
1/2" = 1'-0" 1/ A103



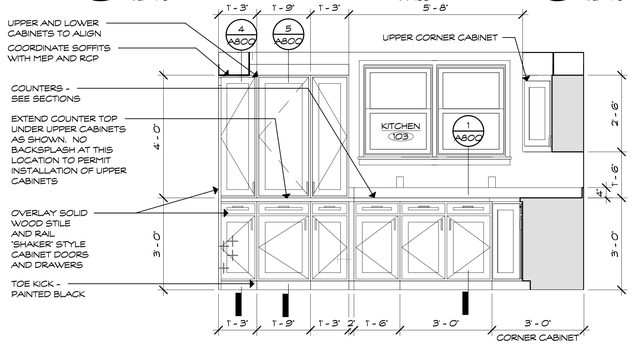
6 BATHROOM ELEVATION B
1/2" = 1'-0" 1/ A103



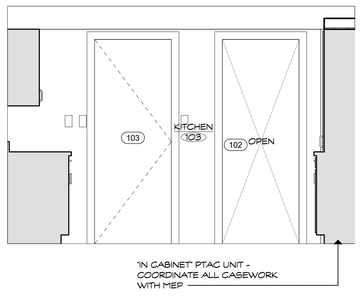
7 BATHROOM ELEVATION C
1/2" = 1'-0" 1/ A103



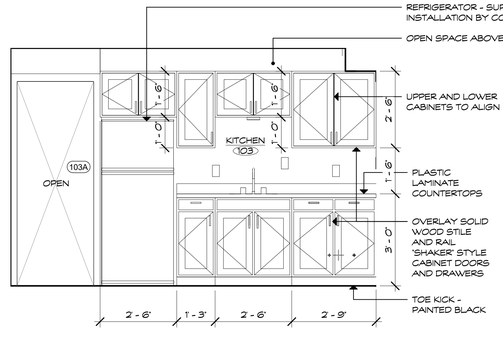
8 BATHROOM ELEVATION D
1/2" = 1'-0" 1/ A103



9 KITCHEN ELEVATION E
1/2" = 1'-0" 1/ A103



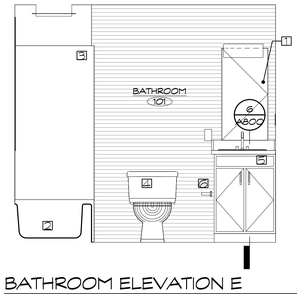
10 KITCHEN ELEVATION F
1/2" = 1'-0" 1/ A103



11 KITCHEN ELEVATION G
1/2" = 1'-0" 1/ A103



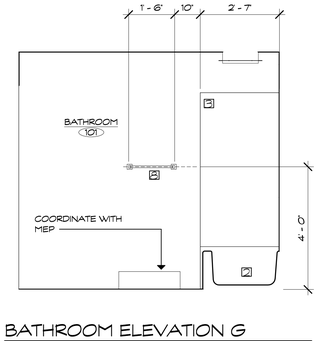
12 KITCHEN ELEVATION H
1/2" = 1'-0" 1/ A103



13 BATHROOM ELEVATION E
1/2" = 1'-0" 1/ A103



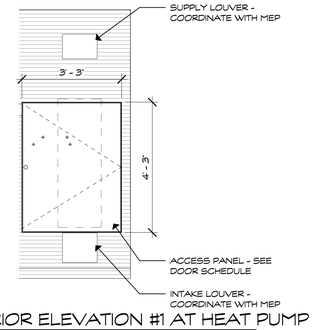
14 BATHROOM ELEVATION F
1/2" = 1'-0" 1/ A103



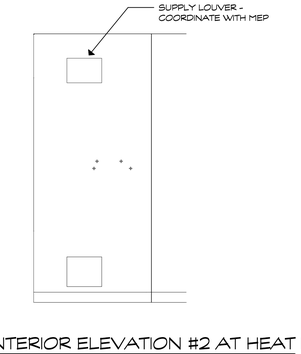
15 BATHROOM ELEVATION G
1/2" = 1'-0" 1/ A103



16 BATHROOM ELEVATION H
1/2" = 1'-0" 1/ A103



17 INTERIOR ELEVATION #1 AT HEAT PUMP
1/2" = 1'-0" 1/ A100



18 INTERIOR ELEVATION #2 AT HEAT PUMP
1/2" = 1'-0" 1/ A100

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

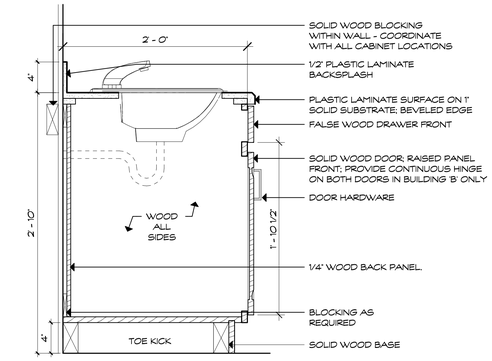
SILVER | PETRUCELLI + ASSOCIATES
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3190 Whitney Avenue | Hamden, CT 06518
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silverpetrucelli.com

Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
INTERIOR ELEVATIONS

Date: 4/13/2022
Scale: 1/2" = 1'-0"
Drawn By: BJV
Project Number: 21.081

Drawing Number:
A700



6 TYPICAL BATHROOM VANITY SECTION

1 1/2" = 1'-0" — 5/ A700

1 TYPICAL BASE CABINET SECTION

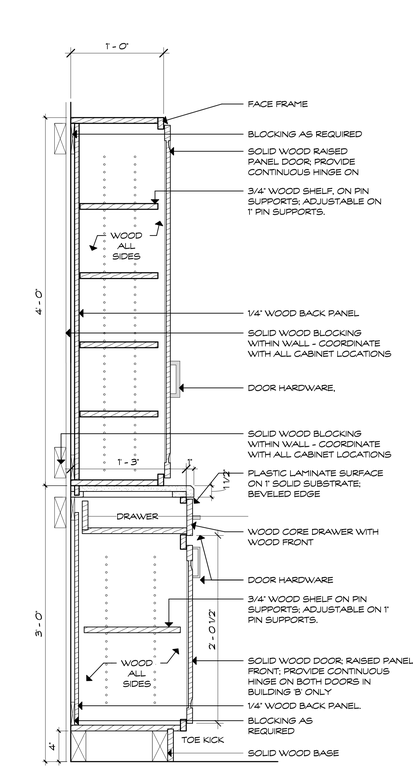
1 1/2" = 1'-0" — 1/ A700

2 TYPICAL BASE CABINET SECTION AT SINK

1 1/2" = 1'-0"

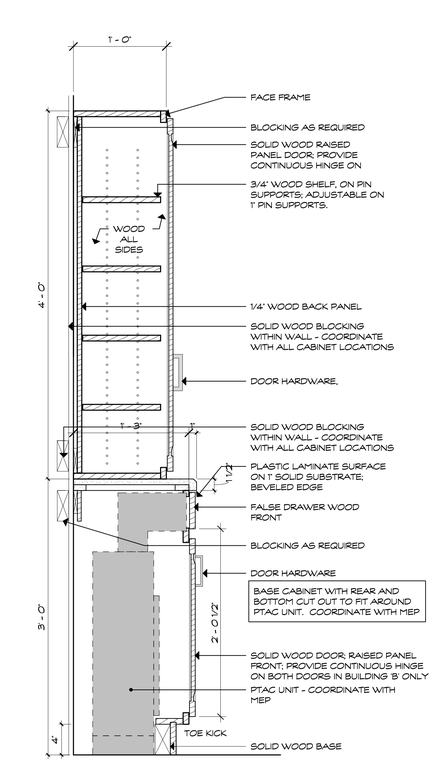
3 TYPICAL UPPER CABINET SECTION

1 1/2" = 1'-0" — 4/ A700



4 COMBINED BASE AND UPPER CABINET SECTION

1 1/2" = 1'-0" — 1/ A700



5 COMBINED BASE AND UPPER CABINET SECTION AT PTAC UNIT

1 1/2" = 1'-0" — 1/ A700

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

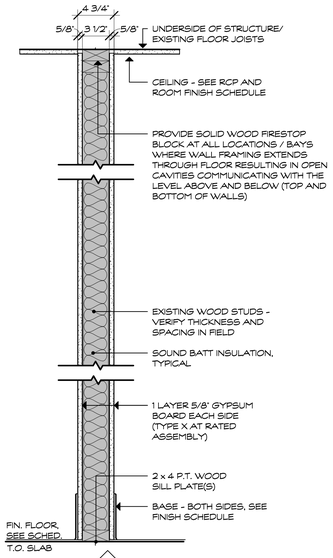
SILVER | PETRUCELLI + ASSOCIATES
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
CASEWORK SECTIONS

Date: 4/13/2022
Scale: 1 1/2" = 1'-0"
Drawn By: BJV
Project Number: 21.081

Drawing Number:
A800



TYPE 1B

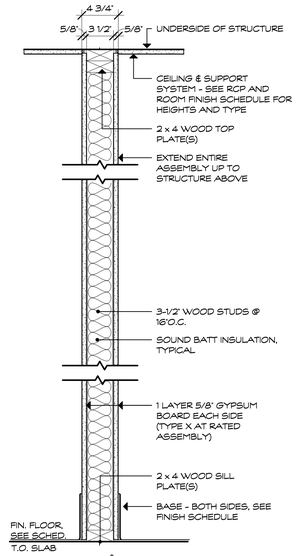
OMIT ONE LAYER OF GWB ON CHASE SIDE ON EXISTING WOOD STUD FRAMING

TYPE 1A

TYPE X GYPSUM BOARD EACH SIDE OF EXISTING WOOD STUD FRAMING - SEE CODE PLANS FOR RATED WALLS

TYPE 1

GWB ON BOTH SIDES
EXISTING WOOD STUD FRAMING



TYPE 2B

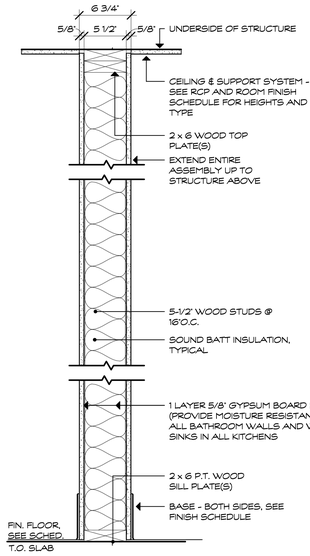
TYPE X GYPSUM BOARD EACH SIDE OF WOOD STUD FRAMING - SEE CODE PLANS FOR RATED WALLS

TYPE 2A

OMIT ONE LAYER OF GWB ON CHASE SIDE

TYPE 2

GWB ON BOTH SIDES



TYPE 3A

OMIT ONE LAYER OF GWB ON CHASE SIDE

TYPE 3

GWB ON BOTH SIDES

NOTE: USE WATER RESISTANT GYPSUM BOARD IN ALL BATHROOMS AND FULL LENGTH OF WALL BEHIND KITCHEN SINK. SEE PLANS FOR LOCATIONS.

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Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
INTERIOR PARTITION TYPES

Date: 4/13/2022
Scale: 1 1/2" = 1'-0"
Drawn By: BJV
Project Number: 21.081

Drawing Number:
A900

DOOR SCHEDULE - 1 HOLBROOK PLACE

DOOR											FRAME							FIRE RATING	HARDWARE - SEE SPECIFICATIONS																							
																			FIRE CODE					DISABLED REQUIREMENTS																	
DOOR NUMBER	FROM ROOM No.	TO ROOM No.	DOUBLE LEAF DOOR	UNEVEN DOUBLE LEAF	WIDTH	HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HEAD DETAIL	JAMB DETAIL	SADDLE DETAIL	FRAME GLAZING	RESISTS PASSAGE OF SMOKE	20 MINUTE LABELED	90 MINUTE LABELED	60 MINUTE LABELED	45 MINUTE LABELED	NOT REQUIRED	PANIC/EXIT DEVICE	POSITIVE LATCHING	ELECTRO-MAGNETIC HOLD	DELAYED ACTION CLOSER	PUSH PLATE/PULL HANDLES	ALARMED EXIT - SEE ELEC.	POWER ASSIST. OPERATOR	LEVER HANDLES	KICK PLATE	TACTILE WARNING	ACCESSIBLE THRESHOLD	SIGNAGE TYPE - SEE A930	SIGNAGE TEXT	REMARKS
003		003			2' - 6"	6' - 8"	1	FG	PT		D	COMP	PT-2	D/A910	D/A910	F/A910		●	●					●		●				●	●		●					
100	ST01	100			2' - 8"	6' - 8"	3	FG	PT-2		C	COMP	PT-2	C/A910	C/A910	G/A910		●	●					●		●				●	●		●		51	APT #		
101	100	101			2' - 8"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
102	103	102			2' - 6"	6' - 8"	N/A	PT	PT		B	WD	PT-2	B/A910	B/A910							●																1
103	103				2' - 6"	6' - 8"	3	FG	PT-2		D	COMP	PT-2	D/A910	D/A910			●	●					●		●				●	●		●		51	APT #		4
103A	100	103			2' - 6"	6' - 8"	N/A	N/A	PT		N/A	WD	PT-2	B/A910	B/A910							●																1
105	105	100			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
106	106	108			2' - 0"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
107	107	105			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
108	108	100			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
108A		108			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
109	109	100			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
110	109	110			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
110A		110			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
111	111	110			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
200	200	ST01			2' - 8"	6' - 8"	3	FG	PT-2		C	COMP	PT-2	C/A910	C/A910	G/A910		●	●					●		●				●	●		●		51	APT #		
201	201	200			2' - 8"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
202	202	203			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
203		203			2' - 6"	6' - 8"	3	FG	PT-2		D	COMP	PT-2	D/A910	D/A910			●	●					●		●				●	●		●		51	APT #		4
203A	203	200			2' - 6"	6' - 8"	N/A	N/A	PT			WD	PT-2	B/A910	B/A910							●																1
205	200	205			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
205A		205			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
206	208	206			2' - 0"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
207	205	207			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
208	200	208			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
209	200	209			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
209A		209			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
210	209	210			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
211	211	210			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
ST01	ST01				3' - 0"	7' - 0"	2	FG	PT-2	GL-10	D	COMP	PT-2	D/A910	D/A910	F/A910							●		●					●								3, 4
300	ST02	300			2' - 8"	6' - 8"	3	FG	PT-2		C	COMP	PT-2	C/A910	C/A910	G/A910		●	●					●		●				●	●		●		51	APT #		
301	300	301			2' - 8"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
302	303	302			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
303	303				2' - 6"	6' - 8"	3	FG	PT-2		D	COMP	PT-2	D/A910	D/A910			●	●					●		●				●	●		●		51	APT #		4
303A	300	303			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
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306	306	308			2' - 0"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
307	307	305			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
308	308	300			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
308A		308			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
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310	309	310			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
310A		310			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
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409A		409			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
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500	ST03	500			2' - 8"	6' - 8"	3	FG	PT-2		C	COMP	PT-2	C/A910	C/A910	G/A910		●	●					●		●				●	●		●		51	APT #		
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503A	500	503			2' - 6"	6' - 8"	N/A	N/A	PT			WD	PT-2	B/A910	B/A910							●																1
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506	506	508			2' - 0"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
507	507	505			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
508	508	500			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
508A		508			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
509	509	500			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
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510A		510			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
511	111	510			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
600	600	ST03			2' - 8"	6' - 8"	3	FG	PT-2		C	COMP	PT-2	C/A910	C/A910	G/A910		●	●					●		●				●	●		●		51	APT #		
601	600	601			2' - 8"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
602	602	603			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
603	603				2' - 6"	6' - 8"	3	FG	PT-2		D	COMP	PT-2	D/A910	D/A910			●	●					●		●				●	●		●		51	APT #		4
603A	603	600			2' - 6"	6' - 8"	N/A	N/A	PT			WD	PT-2	B/A910	B/A910							●																1
605	600	605			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
605A		605			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
606	608	606			2' - 0"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
607	607	605			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
608	600	608			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
609	600	609			2' - 6"	6' - 8"	N/A	N/A	PT		B	WD	PT-2	B/A910	B/A910							●																1
609A		609			3' - 0"	4' - 7"	4	STEEL	PT		N/A	STEEL	PT-2	E/A910	E/A910							●																2
610	609	610			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
611	211	610			2' - 6"	6' - 8"	1	WD	ST		A	WD	PT-2	A/A910	A/A910							●		●					●								
612	ST03	ST03			2' - 8"	6' - 8"		FG	PT-2			COMP	PT-2			G/A910			●					●		●				●	●		●					

GENERAL DOOR NOTES

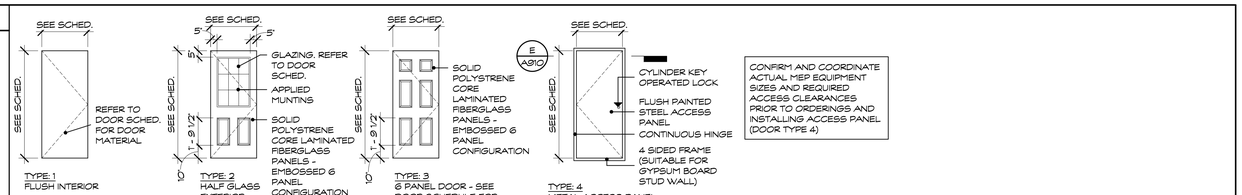
1. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS & DIMENSIONS.
2. ALL NEW KICK PLATES SHALL BE 12" HIGH AND OFFSET 1" FROM EDGES OF DOOR UNLESS OTHERWISE NOTED. CENTERED AT BOTTOM OF DOOR.
3. ALL GLASS IN DOORS SHALL BE TEMPERED UNLESS OTHERWISE NOTED. SEE SCHEDULE FOR SPECIFIC THICKNESS AND TYPE.
4. ALL EXTERIOR DOORS SHALL RECEIVE FULL WEATHER STRIPPING ON SIDES, TOP AND BOTTOM.
5. ALL INTERIOR APARTMENT ENTRY DOORS SHALL RECEIVE GASKETS ON SIDES, TOP AND BOTTOM.
6. SEE PROJECT MANUAL FOR HARDWARE SCHEDULE.

DOOR SCHEDULE REMARKS (LAST COLUMN IN DOOR SCHEDULE)

1. CASED OPENING
2. ACCESS PANEL (4 SIDED FRAME)
3. ELECTRONIC CARD ACCESS
4. INTERIOR SIDE OF DOOR - PAINT OPTION AS SHOWN IN INTERIOR FINISH SCHEDULE. EXTERIOR SIDE OF DOOR - COLOR TO BE DETERMINED

ABBREVIATIONS

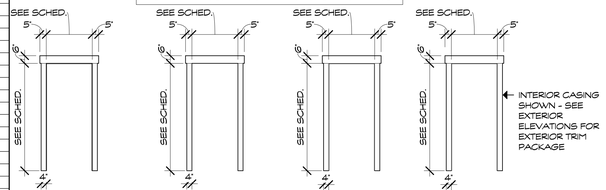
FG - FIBERGLASS
N/A - NOT APPLICABLE
PT - PAINT (SEE PROJECT MANUAL)
ST - STAIN (SEE PROJECT MANUAL)
WD - WOOD



1 DOOR ELEVATIONS

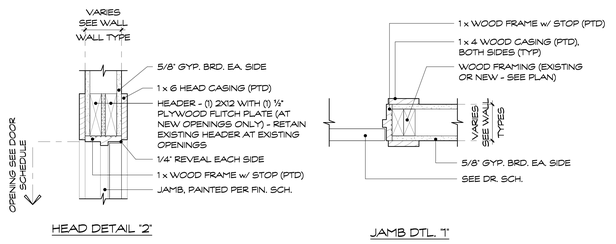
1/4" = 1'-0"

EASE ALL EXPOSED WOOD TRIM EDGES - 1/16" RADIUS



2 FRAME ELEVATIONS

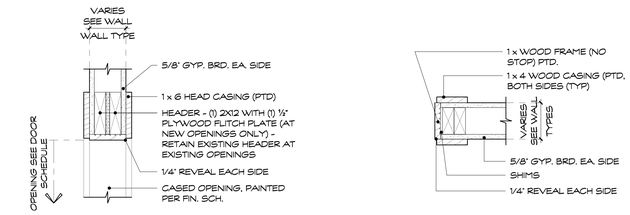
1/4" = 1'-0"



FOR WALL TYPE AND RATING REQUIREMENTS SEE FLOOR PLANS

A WOOD DOOR JAMB AND HEAD

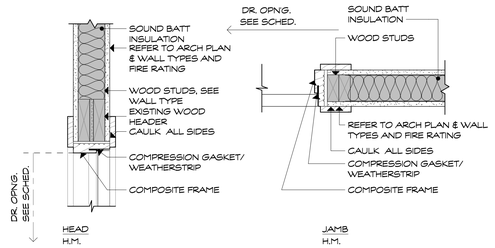
1 1/2" = 1'-0"



FOR WALL TYPE AND RATING REQUIREMENTS SEE FLOOR PLANS

B WOOD CASED OPENING JAMB AND HEAD

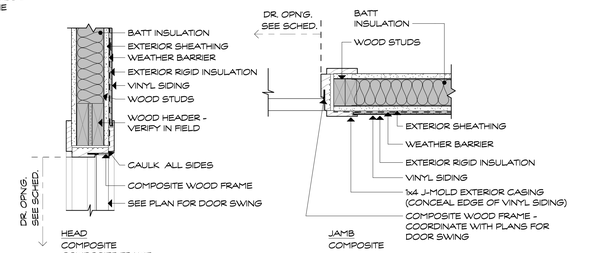
1 1/2" = 1'-0"



COMPOSITE FRAME
FOR WALL TYPE AND RATING REQUIREMENTS SEE FLOOR PLANS

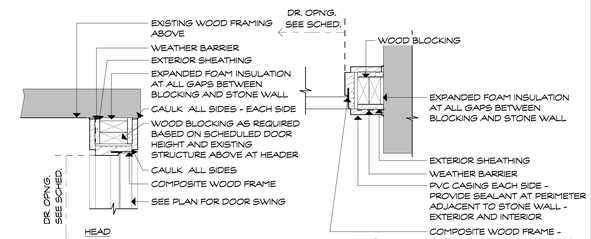
C COMPOSITE FRAME - INTERIOR

1 1/2" = 1'-0"



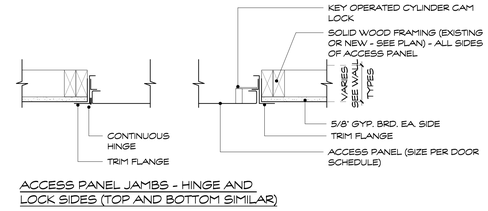
D COMPOSITE FRAME - EXTERIOR WALLS

1 1/2" = 1'-0"



D.1 COMPOSITE FRAME - BASEMENT WALL

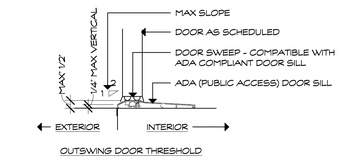
1 1/2" = 1'-0"



ACCESS PANEL JAMBS - HINGE AND LOCK SIDES (TOP AND BOTTOM SIMILAR)

E ACCESS PANEL JAMBS (HEAD AND SILL SIMILAR)

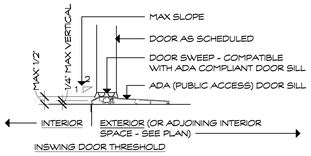
1 1/2" = 1'-0" 1/ A910



OUTSWING DOOR THRESHOLD

F OUTSWING DOOR THRESHOLD DETAIL

3" = 1'-0"



INSWING DOOR THRESHOLD

G INSWING DOOR THRESHOLD DETAIL

3" = 1'-0"

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

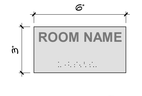
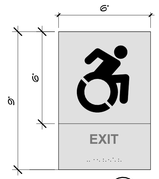
SILVER | PETRUCELLI + ASSOCIATES
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title: DOOR SCHEDULE

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081

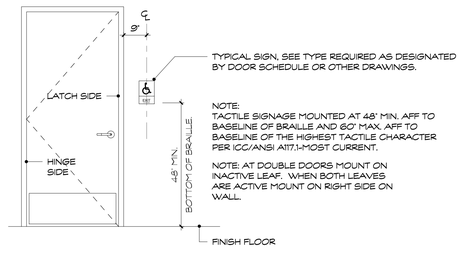
Drawing Number: A910

REFER TO DOOR SCHEDULE FOR LOCATIONS	PROVIDE AT ALL CO DETECTOR LOCATIONS	REFER TO DOOR SCHEDULE FOR LOCATIONS	COORDINATE QUANTITY AND LOCATIONS w/ OWNER
			
TYPE S9	TYPE S6	TYPE S8	TYPE S5

SEE ELECTRICAL DRAWINGS FOR ALL ILLUMINATED SIGNAGE

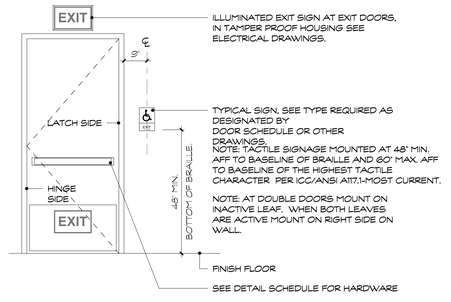
1 SIGNAGE DETAILS

3" = 1'-0"



3 TYP. SIGN MOUNTING DTL.

1/2" = 1'-0"



4 TYP. EXIT SIGN MOUNTING DTL.

1/2" = 1'-0"

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

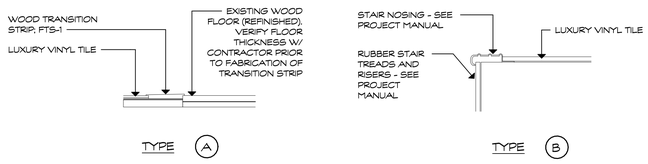
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
SIGNAGE

Date: 4/13/2022
Scale: As indicated
Drawn By: BJV
Project Number: 21.081

Drawing Number:
A930



- CENTER TRANSITION UNDER DOOR LEAFS AT DOOR LOCATIONS
- CENTER WITH DOORWAYS AT CASED OPENINGS

ABBREVIATION LEGEND

ARX -ABUSE RESISTANT TYPE X GYPSUM BOARD
E.T.R. -EXISTING TO REMAIN
FTS -FLOOR TRANSITION STRIP
LVT -LUXURY VINYL TILE
MRX -MOLD RESISTANT TYPE X GYPSUM BOARD
PT -PAINT
RB -RUBBER BASE
TYP. -TYPICAL
W/ -WITH
WB -WOOD WALL BASE - 1X6 WITH 1/4" ROUND SHOEMOLD
WF -WOOD FLOOR (EXISTING TO BE REFINISHED)

SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION

GENERAL FINISH NOTES

1. PREP ALL SURFACES FOR MATERIAL TO BE APPLIED BASED ON MANUFACTURER'S GUIDELINES.
2. WALL CAP TRIM AND HANDRAILS IN ALL STAIRS TO BE PAINTED PT-2 UNLESS OTHERWISE NOTED
3. ALL DOOR FRAMES, WINDOW TRIM, BASE MOLDING, AND EXPOSED WOOD STAIRS TO BE PAINTED PT-2.
4. ALL OUTSIDE CORNERS IN ALL CORRIDORS TO RECIEVE PVC CORNER GUARDS. CORNER GUARD TO RUN FROM FLOOR TO CEILING.
5. PROVIDE UNIT PRICING FOR STRIPPING, PREPARING, REPAIRING, AND REFINISHING ALL EXISTING HARDWOOD FLOORS TO REMAIN. CONTRACTOR TO FIELD VERIFY CONDITION AND AREAS OF ALL EXISTING HARDWOOD FLOORS.
6. SEE SECTIONS AND STAIR DETAILS FOR FINISH AT TREADS AND RISERS.
7. PROVIDE MOVABLE WALKOFF MAT AT FIRST FLOOR STAIR HALL AT INSIDE OF ENTRY.
8. PROVIDE PLYWOOD SECONDARY SUBFLOOR (OVER EXISTING PLANK SUBFLOOR) AT ALL LVT LOCATIONS. INSTALL PER LVT INSTALLATION REQUIREMENTS. 1/4" MINIMUM THICKNESS. COORDINATE PLYWOOD THICKNESS TO MATCH LVT ELEVATION WITH ADJACENT HARDWOOD FLOOR.

FLOOR TRANSITION NOTES

1. ALL WOOD FLOOR (WF) TO LUXURY VINYL TILE (LVT) AT BATHROOMS AND KITCHENS REQUIRE TRANSITION STRIPS - SEE TRANSITION TYPE A
2. ALL STAIR RUBBER TREADS REQUIRE TRANSITION STRIP TO LVT IN INTERIOR FRONT STAIR HALL. SEE TRANSITION TYPE B
3. ALSO REFER TO PROJECT MANUAL

ROOM FINISH SCHEDULE - SECOND FLOOR

Number	Name	EAST WALL FINISH	NORTH WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING FINISH	FLOOR FINISH	BASE	COMMENTS
300	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
301	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	MRX
302	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
303	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
305	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
306	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
307	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
308	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
309	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
310	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
311	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
400	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
401	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	MRX
402	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
403	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
405	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
406	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
407	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
408	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
409	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
410	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
411	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
ST02	STAIR HALL	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	RB / PT-2	ABX

ROOM FINISH SCHEDULE - FIRST FLOOR

Number	Name	EAST WALL FINISH	NORTH WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING FINISH	FLOOR FINISH	BASE	COMMENTS
100	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
101	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	MRX
102	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
103	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
105	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
106	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
107	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
108	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
109	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
110	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
111	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
200	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	MRX
201	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
202	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
203	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
205	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
206	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
207	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
208	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
209	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
210	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
211	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
ST01	STAIR HALL	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	RB / PT-2	ABX

ROOM FINISH SCHEDULE - THIRD FLOOR

Number	Name	EAST WALL FINISH	NORTH WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING FINISH	FLOOR FINISH	BASE	COMMENTS
500	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
501	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	MRX
502	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
503	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
505	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
506	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
507	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
508	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
509	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
510	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
511	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
600	HALLWAY	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
601	BATHROOM	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	MRX
602	PANTRY	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
603	KITCHEN	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	WB / PT-2	
605	BEDROOM 1	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
606	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
607	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
608	BEDROOM 2	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
609	LIVING ROOM	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
610	BEDROOM 3	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
611	CLOSET	PT-1	PT-1	PT-1	PT-1	PT-3	WF	WB / PT-2	
ST03	STAIR HALL	PT-1	PT-1	PT-1	PT-1	PT-3	LVT	RB / PT-2	ABX

Project Title:
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Apartment Building Renovations
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
INTERIOR FINISH SCHEDULES AND NOTES

Date: 4/13/2022
Scale: 3" = 1'-0"
Drawn By: BJV
Project Number: 21.081

Drawing Number: A950

PLUMBING GENERAL NOTES

GENERAL
THE INTENT OF THESE CONTRACT DOCUMENTS (SPECIFICATIONS AND DRAWINGS) IS FOR THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PLUMBING SYSTEMS. ALL SYSTEMS SHALL BE COMPLETE IN ALL RESPECTS, OPERATING, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.

WHEN A CONFLICT BETWEEN THE DRAWINGS, NOTES AND/OR SPECIFICATIONS OCCURS, THE MORE STRINGENT, AND/OR LARGER QUANTITY AND/OR MORE EXPENSIVE SHALL APPLY. THE REQUIREMENTS LISTED WITHIN NOTES OR SPECIFICATIONS SHALL BE REQUIRED, PROVIDED AND INSTALLED WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT.

ITEMS AND SERVICES NOT SHOWN ON DRAWINGS OR SPECIFICATIONS BUT REQUIRED TO RENDER THE WORK COMPLETE AND READY FOR OPERATION, SHALL BE PROVIDED WITHOUT ADDITIONAL COST.

WORK OF THIS SECTION SHALL BE GOVERNED BY THE CONTRACT DOCUMENTS. PROVIDE MATERIALS, LABOR, EQUIPMENT AND SERVICES NECESSARY TO FURNISH, DELIVER AND INSTALL ALL WORK AS SPECIFIED AND AS REQUIRED BY JOB CONDITIONS. WHERE A CONFLICT EXISTS BETWEEN THESE NOTES, THE DRAWINGS AND THE SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

DRAWINGS ARE DIAGRAMMATIC AND INDICATE A GENERAL ARRANGEMENT OF WORK AND ARE NOT TO BE CONSIDERED SUB-CONTRACTOR DOCUMENTS. IT IS THE INTENT OF THESE DOCUMENTS TO INCLUDE THE PROVISION AND INSTALLATION OF ALL NECESSARY WORK AND MATERIALS FOR COMPLETE, OPERATIONAL AND CODE COMPLIANT SYSTEMS BY THE CONTRACTOR. GENERAL DESIGN CONCEPTS INDICATED MUST BE FOLLOWED OR BETTERED. THE BID SHALL INCLUDE OFFSETS, ADDITIONAL PIPING, VALVES AND EQUIPMENT AND COMPONENTS AS REQUIRED TO MEET CONSTRUCTION CONDITIONS FOR PROPER OPERATION. DO NOT SCALE DRAWINGS. CONSULT ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPACE CONDITIONS AND ADDITIONAL REQUIREMENTS.

PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT GENERAL CONDITIONS AND WITH THE PROVISIONS OF ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS.

WORK SHALL INCLUDE ALL INCIDENTALS, LABOR, MATERIAL, EQUIPMENT, APPLIANCES, SERVICES, HOISTING, SCAFFOLDING, SUPPORTS, TOOLS, CONSUMABLE ITEMS, FEES, LICENSES, AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE WORK SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

ALL EQUIPMENT, MATERIALS AND RELATED SYSTEMS COMPONENTS SHALL BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE.

STORE MATERIALS INSIDE AND PROTECTED FROM DEBRIS, WEATHER AND MOISTURE.

THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER AND CONTROL WIRING REQUIRED FOR EQUIPMENT OPERATION REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THIS CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR INSTALLATION. COORDINATE REQUIREMENTS.

PROVIDE AND INSTALL INDIRECT CONDENSATE WASTE PIPING AND TRAP TO FLOOR DRAIN OR DRAIN RECEPTOR FROM ALL HVAC EQUIPMENT. PROVIDE ADDITIONAL FLOOR DRAINS WITH TRAP PRIMERS OR DRAIN RECEPTORS AS REQUIRED.

PLUMBING DEVICES, FAUCETS, VALVES AND FITTINGS REQUIRED FOR SPECIALTY SERVICE EQUIPMENT SHALL BE PROVIDED BY THIS CONTRACTOR UNLESS OTHERWISE SPECIFIED. THIS CONTRACTOR SHALL PROVIDE AND INSTALL PIPING, CONNECTIONS, DEVICES, VALVES AND EQUIPMENT REQUIRED FOR PROPER OPERATION. COORDINATE REQUIREMENTS.

ALL EXPOSED PIPING, STOPS, COCKS, AND WASTES WHICH ARE VISIBLE SHALL BE CHROME PLATED.

REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.

COORDINATION
THE CONTRACTOR SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS, INCLUDING PROJECT MANUAL, PLANS AND SPECIFICATIONS OF ALL TRADES BEFORE SUBMITTING BID. REFER TO SPECIFICATIONS, PROJECT MANUAL AND PLANS, INCLUDING ALL EQUIPMENT SCHEDULES FOR INFORMATION. CONTRACTOR SHALL WALK THROUGH BUILDING PRIOR TO SUBMITTING BID WHEN AVAILABLE.

ALL OF THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO FORM A TOTAL DESIGN PACKAGE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER TO DETERMINE WHICH TRADE CONTRACTOR IS RESPONSIBLE FOR VARIOUS PORTIONS OF THE WORK.

ALL WORK AND ACTION DEPICTED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.

CONTRACTORS SHALL COORDINATE THEIR WORK WITH ALL OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, RECEPTACLES, ETC. BEFORE INSTALLATION.

THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF EQUIPMENT WITH ALL TRADES BEFORE STARTING CONSTRUCTION. ANY MODIFICATIONS TO THE EQUIPMENT LAYOUT REQUIRED FOR INSTALLATION ARE TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

DEVELOP AND SUBMIT COORDINATION DRAWINGS AS OUTLINED.

SHEET METAL, PLUMBING AND FIRE PROTECTION SHOP DRAWINGS THAT HAVE BEEN COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. DRAWINGS MUST BE RETURNED FROM ENGINEER EITHER 'REVIEWED' OR 'FURNISH AS CORRECTED' PRIOR TO BEING USED AS BASIS FOR COORDINATION DRAWINGS.

AFTER SHEET METAL AND PIPING DRAWINGS HAVE BEEN REVISED PER ENGINEERS COMMENTS, REPRODUCIBLE COPIES SHALL BE SENT TO THE TRADES IN THE FOLLOWING SEQUENCE FOR THE INCLUSION OF THEIR WORK:

-MECHANICAL SHEET METAL -PLUMBING PIPING -MECHANICAL PIPING -SPRINKLER PIPING -ELECTRICAL WORK

AFTER ALL TRADES HAVE INCLUDED THEIR WORK ON THE COORDINATION DRAWING AND NOTED CONFLICTS, ALL TRADES SHALL MEET TO RESOLVE CONFLICTS AND AGREE TO ACCEPTABLE SOLUTIONS. EACH TRADE SHALL SIGN COORDINATION DRAWINGS. ITEMS NOT SHOWN ON COORDINATION DRAWING IS RESPONSIBILITY OF OMITTING CONTRACTOR AND CONTRACTOR IS SUBJECT TO ADDITIONAL COSTS INCURRED BY OTHER TRADES.

THE ARCHITECT AND ENGINEER ARE NOT PART OF THE COORDINATION DRAWING PROCESS. THE ENGINEER WILL PROVIDE ASSISTANCE FOR NOTED CONFLICTS ONLY. COORDINATION DRAWINGS ARE NOT TO BE CONSIDERED PIPING OR DUCT SHOP DRAWINGS. THE CONTRACTOR IS REQUIRED TO SUBMIT INDIVIDUAL PIPING AND DUCTWORK SHOP DRAWINGS FOR REVIEW BY THE ENGINEER. PIPING AND DUCTWORK SHOP DRAWINGS SHALL FOLLOW THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.

SUBMIT FINAL SIGNED COORDINATION DRAWINGS TO ENGINEER FOR REVIEW. ENGINEER WILL REVIEW COORDINATION DRAWINGS FOR GENERAL ARRANGEMENT AND FOR NOTED CONFLICTS ONLY. SPECIFIC INSTALLATION REQUIREMENTS WILL BE REVIEWED ONLY IN INDIVIDUAL TRADE SHOP DRAWINGS.

ANY WORK FABRICATED OR INSTALLED PRIOR TO SIGN OFF BY ALL TRADES WHICH IS DEEMED TO BE IN CONFLICT WITH COORDINATION DRAWINGS SHALL BE REMOVED AND RE-INSTALLED IN CONFORMANCE WITH COORDINATION DRAWINGS.

EACH CONTRACTOR (MENTIONED ABOVE) IS RESPONSIBLE FOR THE COORDINATION OF HIS SUB-CONTRACTORS.

SHOP DRAWINGS
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO BE APPROVED, REVISED, OR RESUBMITTED AS PER THE ENGINEERS COMMENTS, PRIOR TO CONSTRUCTION. INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

-PLUMBING FIXTURES	-CLEAN OUTS	-DRAINS
-PIPING	-PIPE SEALS	-COMPRESSORS
-FITTINGS	-BRAZING	-HANGERS/SUPPORTS
-INSULATION	-THERMOSTATIC MIXING VALVES	-EXPANSION TANKS
-VALVES	-PUMPS	-WATER HEATERS

AS-BUILT DRAWINGS
PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS REFLECTING AS INSTALLED CONDITIONS. AS-BUILT DRAWINGS SHALL INDICATE ALL INSTALLED CONDITIONS OF SYSTEMS WITHIN THIS DISCIPLINE. DRAWINGS SHALL BE OF SIMILAR SCALE AS THE CONSTRUCTION DOCUMENTS AND INCLUDE DETAILS AS NECESSARY TO CLEARLY REFLECT THE INSTALLED CONDITION. DRAWINGS SHALL BE BOUND IN A COMPLETE AND CONSECUTIVE SET. SUPPLEMENTAL SKETCHES AND LOOSE PAPERWORK WILL NOT BE ACCEPTABLE AND WILL BE RETURNED FOR REVISION. THE CONTRACTOR SHALL COMPLY WITH THE ENGINEERS COMMENTS TO PRODUCE A CLEAR AND CONCISE SET OF DRAWINGS. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC (AUTO-CAD VERSION AS REQUIRED BY THE OWNER) VERSION. NUMBER OF COPIES OF EACH AS REQUESTED BY THE OWNER.

PROVIDE "AS-BUILT DRAWINGS" INDICATING IN A NEAT AND ACCURATE MANNER A COMPLETE RECORD OF ALL REVISIONS OF THE ORIGINAL DESIGN OF THE WORK. INDICATE THE FOLLOWING INSTALLED CONDITIONS:

INCLUDE ALL CHANGES AND AN ACCURATE RECORD, ON REPRODUCTIONS OF THE CONTRACT DRAWINGS OR APPROPRIATE SHOP DRAWINGS, OF ALL DEVIATIONS, BETWEEN THE WORK SHOWN AND WORK INSTALLED.

MAINS AND BRANCHES OF PIPING SYSTEMS, WITH VALVES AND CONTROL DEVICES LOCATED AND NUMBERED, CONCEALED UNIONS LOCATED, AND WITH ITEMS REQUIRING MAINTENANCE LOCATED (IE. TRAPS, STRAINERS, EXPANSION COMPENSATORS, TANKS, ETC.). VALVE LOCATION DIAGRAMS, COMPLETE WITH VALVE TAG CHART.
EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED), DIMENSIONED FROM PROMINENT BUILDING LINES.

APPROVED SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

CONTRACT MODIFICATIONS, ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

SUBMIT FOR REVIEW PDF'S OF THE REQUIRED DRAWINGS, MANUALS AND OPERATING INSTRUCTIONS.

SUBMIT A COMPLETE MAINTENANCE MANUAL OF ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.

HANGERS AND SUPPORTS
SEISMIC RESTRAINT: PROVIDE SEISMIC RESTRAINT AND EXPANSION OF ALL PLUMBING EQUIPMENT AND SYSTEMS IN ACCORDANCE WITH STATE AND FEDERAL BUILDING CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT INDICATING ALL NECESSARY COMPONENT CUTS, PLAN LOCATIONS AND CALCULATIONS FOR A COMPLETE SYSTEM.

PROVIDE ALL NECESSARY STRUCTURAL MEMBERS INCLUDING ADDITIONAL STRUCTURAL SUPPORT TO SUPPORT PIPING AND EQUIPMENT. HANGERS AND SUPPORTS SHALL BE OF AN APPROVED DESIGN NECESSARY TO SUPPORT PIPING, EQUIPMENT AND TO KEEP PIPING IN PROPER ALIGNMENT AND PREVENT TRANSMISSION OF INJURIOUS THRUSTS AND VIBRATIONS. IN ALL CASES WHERE HANGERS, BRACKETS, ETC, ARE SUPPORTED FROM CONCRETE CONSTRUCTION, DO NOT WEAKEN CONCRETE OR PENETRATE WATERPROOFING. ALL HANGERS AND SUPPORTS SHALL BE CAPABLE OF SCREW ADJUSTMENT AFTER PIPING IS ERECTED. HANGERS SUPPORTING PIPING EXPANDING INTO LOOPS, BENDS AND OFFSETS SHALL BE SECURED TO THE BUILDING STRUCTURE IN SUCH A MANNER THAT HORIZONTAL ADJUSTMENT PERPENDICULAR TO THE RUN OF PIPING SUPPORTED MAY BE MADE TO ACCOMMODATE DISPLACEMENT DUE TO EXPANSION. ALL SUCH HANGERS SHALL BE FINALLY ADJUSTED BOTH IN THE VERTICAL AND HORIZONTAL DIRECTION AS REQUIRED. HANGERS IN CONTACT WITH COPPER OR BRASS PIPE SHALL BE DIELECTRIC, COMPATIBLE WITH COPPER AND BRASS ALLOY OR PROVIDED WITH FELT SLEEVE.

PROVIDE ADDITIONAL SUPPORT FOR PIPING AND EQUIPMENT WHEN DECK IS NOT CAPABLE OF SUPPORT.

BEAM CLAMPS - HANGERS SUPPORTED FROM STEEL SHALL BE CENTER LOADING BEAM CLAMPS FOR HANGERS SUPPORTING PIPING 2 INCHES. FOR PIPING 2-1/2 INCHES AND LARGER, I BEAM CLAMPS SHALL BE FORGED STEEL "C" CLAMPS ARE NOT TO BE USED.

PROVIDE AND INSTALL EXPANSION COMPENSATION FOR ALL PIPING. SUBMIT PLANS, CALCULATIONS AND EQUIPMENT DATA.

BAND IRON, TIE WIRE, METAL STRAPPING OR WIRE STRAPPING SHALL NOT BE PERMITTED TO SUPPORT PIPING OR EQUIPMENT.

PIPE SEALS
SEAL ALL PIPING PASSING THROUGH ALL FIRE AND/OR SMOKE RATED PARTITIONS AND WALLS WITH A UL-LISTED, APPROVED AND TESTED FIRE AND/OR SMOKE SEALING MATERIAL INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

ALL PIPING PENETRATING A SLAB ON GRADE OR FOUNDATION WALL BELOW GRADE AND IN CONTACT WITH EARTH SHALL BE PROVIDED WITH A POURED IN PLACE SCHEDULE 80 GALVANIZED STEEL WATER TIGHT SLEEVE WITH INTEGRAL WATER STOP AND SEAL EQUAL TO "LINK SEAL".

FURNISH AND SET STEEL PIPE SLEEVES OF SCHEDULE 40 BLACK STEEL FOR ALL LOCATIONS OF INTERIOR PARTITIONS, WALLS AND FLOORS PROVIDING AT LEAST 1/2" CLEARANCE BETWEEN PIPE INSULATION AND SLEEVE OR PIPE AND SLEEVE. WALL SLEEVES SHALL BE SMOOTH CUT AND SET FLUSH WITH FINISHED WALLS. FLOOR SLEEVES SHALL EXTENDED 2" ABOVE THE FINISHED FLOOR.

ALL PIPING THROUGH WALLS, FLOORS OR CEILINGS SHALL HAVE SLEEVES AND ESCUTCHEONS. PROVIDE A TWO PIECE CHROME ESCUTCHEON WHERE PIPING PASSES THROUGH WALLS OR FLOORS OF FINISHED SPACES.

PLUMBING FIXTURES
PLUMBING FIXTURES SHALL BE NEW, COMPLETE WITH TRIMMINGS AND FITTINGS, INCLUDING FAUCETS, CARRIERS, SUPPLIES, STOPS, TRAPS, TAILPIECES, WASTE PLUGS, CASINGS, HANGERS, PLATES, BRACKETS, ANCHORS, SUPPORTS, HARDWARE AND FASTENING DEVICES. NOTE: ALL FIXTURES SHALL BE OF SAME MANUFACTURER. TRIMMINGS AND FITTINGS SHALL BE CONSTRUCTED OF FORGED, CAST, ROLLED OR EXTRUDED BRASS OR BRONZE WITH MONEL AND OTHER SUITABLE NON-CORROSIVE PARTS. DESIGNED WITH EASILY RENEWABLE PARTS THAT ARE SUBJECT TO WEAR OR DETERIORATION. NO DIE CASTINGS AND STAMPINGS OTHER THAN BRASS OR STAINLESS STEEL. PROVIDE PLUMBING FIXTURES AND TRIM WITH ALL NECESSARY TRIM, DEVICES AND ACCESSORIES REQUIRED FOR PROPER OPERATIONS SPECIFICALLY NOTED OR NOT.

ESCUTCHEONS SHALL BE ONE-PIECE CHROME PLATED CAST BRASS OR STAINLESS STEEL.

P-TRAPS SHALL BE ONE-PIECE CHROME PLATED CAST BRASS WITH CLEANOUT PLUG.

EXAMINE ROUGHING-IN WORK OF POTABLE WATER AND WASTE PIPING SYSTEMS TO VERIFY ACTUAL LOCATIONS OF PIPING CONNECTIONS PRIOR TO INSTALLING FIXTURES. CORRECT ANY INCORRECT LOCATION OF PIPING, AND UNSATISFACTORY CONDITIONS FOR INSTALLATION OF PLUMBING FIXTURES. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE ENGINEER. ALL ROUGH-IN TO PLUMBING FIXTURES SHALL CONFORM TO FIXTURE MANUFACTURER PUBLISHED ROUGH-IN DIMENSIONS, AND REQUIREMENTS.

UPON COMPLETION OF INSTALLATION OF PLUMBING FIXTURES AND AFTER UNITS ARE WATER PRESSURIZED, TEST FIXTURES TO DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS. CORRECT MALFUNCTIONING UNITS AT SITE, THEN RETEST TO DEMONSTRATE COMPLIANCE; OTHERWISE, REMOVE AND REPLACE WITH NEW UNITS AND PROCEED WITH RETESTING.

CLEAN PLUMBING FIXTURES, TRIM, AND STRAINERS OF DIRT AND DEBRIS UPON COMPLETION OF INSTALLATION.

ADJUST WATER PRESSURE AT DRINKING FOUNTAINS, FAUCETS, SHOWER VALVES, AND FLUSH VALVES TO PROVIDE PROPER FLOW STREAM AND SPECIFIED GPM.

SET FIXTURES LEVEL AND UNIFORMLY, WITH CONNECTIONS AT RIGHT ANGLES TO WALL AND PROPERLY CENTERED. LAY OUT ROUGHING ACCURATELY AND IN COORDINATION WITH SPACE AND FINISH REQUIREMENTS.

LOCATE WASTE OUTLETS AND WATER SUPPLIES AT CONSTANT HORIZONTAL LEVELS, WITH WASTE OUTLET CENTERED ON FIXTURE DRAIN CONNECTION AND WATER SUPPLIES SPACED EQUALLY TO RIGHT AND LEFT.

REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF EQUIPMENT. COLORS SHALL BE COORDINATED WITH THE ARCHITECT. CONTACT ARCHITECT FOR CLARIFICATION IF INFORMATION IS NOT CONTAINED IN THE DRAWINGS.

DRAINS AND CLEANOUTS
PROVIDE ALL POURED-IN-PLACE DRAINS AND CLEANOUTS WITH 24" X 24" FLASHING.

PROVIDE A MANUFACTURED BRONZE OUTLET FITTING FOR ALL SECONDARY ROOF DRAIN OUTLETS.

INSTALL EXTERIOR CLEANOUTS WITH A 18" SQUARE X 6" THICK CONCRETE APRON.

COORDINATE FLOOR DRAIN LOCATIONS WITH RESPECT TO EQUIPMENT HOUSEKEEPING PADS. PLACE DRAINS SUCH THAT EDGE OF THE FLOOR GRATE EXTENDS NO FURTHER THAN 2 INCHES FROM THE SIDE OF THE PAD. CLEANOUT PLUGS SHALL BE BRASS OR PLASTIC, OR OTHER APPROVED MATERIALS. BRASS CLEANOUT PLUGS SHALL BE UTILIZED WITH METALLIC DRAIN, WASTE AND VENT PIPING ONLY, AND SHALL CONFORM TO ASTM A 74, ASME A112.3.1 OR ASME A112.36.2M. CLEANOUTS WITH PLATE-STYLE ACCESS COVERS SHALL BE FITTED WITH CORROSION-RESISTING FASTENERS. PLUGS SHALL HAVE RAISED SQUARE OR COUNTERSUNK SQUARE HEADS. COUNTERSUNK HEADS SHALL BE INSTALLED WHERE RAISED HEADS ARE A TRIP HAZARD. CLEANOUT PLUGS WITH BOROSILICATE GLASS SYSTEMS SHALL BE OF BOROSILICATE GLASS.

PROVIDE TRAP GUARDS FOR EACH FLOOR DRAIN.

CLEANOUTS SHALL BE LOCATED AT MINIMUM INTERVALS OF 50 FEET FOR PIPING NPS 4 AND SMALLER AND 100 FEET FOR LARGER PIPING.

BUILDING SEWERS SHALL BE PROVIDED WITH CLEANOUTS LOCATED NOT MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANOUT. FOR BUILDING SEWERS 8 INCHES AND LARGER, MANHOLES SHALL BE PROVIDED AND LOCATED NOT MORE THAN 200 FEET FROM THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER, AT EACH CHANGE IN DIRECTION AND AT INTERVALS OF NOT MORE THAN 400 FEET APART. MANHOLES AND MANHOLE COVERS SHALL BE OF AN APPROVED TYPE.

CLEANOUTS SHALL BE INSTALLED AT EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES (INCLUDING P-TRAPS). WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE (1) CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING.

A CLEANOUT SHALL BE PROVIDED AT THE BASE OF EACH WASTE OR SOIL STACK.

THERE SHALL BE A CLEANOUT NEAR THE JUNCTION OF THE BUILDING DRAIN AND THE BUILDING SEWER. THE CLEANOUT SHALL BE EITHER INSIDE OR OUTSIDE THE BUILDING WALL AND SHALL BE BROUGHT UP TO THE FINISHED FLOOR LEVEL. THE CLEANOUT AT THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER SHALL NOT BE REQUIRED IF THE CLEANOUT ON A 3-INCH OR LARGER DIAMETER SOIL STACK IS LOCATED WITHIN A DEVELOPED LENGTH OF 10 FEET OF THE BUILDING DRAIN AND BUILDING SEWER CONNECTION.

CONCEALED PIPING. CLEANOUTS ON CONCEALED PIPING OR PIPING UNDER A FLOOR SLAB OR IN A CRAWL SPACE OF LESS THAN 24 INCHES IN HEIGHT OR A PLENUM SHALL BE EXTENDED THROUGH AND TERMINATE FLUSH WITH THE FINISHED WALL, FLOOR OR GROUND SURFACE OR SHALL BE EXTENDED TO THE OUTSIDE OF THE BUILDING. CLEANOUT PLUGS SHALL NOT BE COVERED WITH CEMENT, PLASTER OR ANY OTHER PERMANENT FINISH MATERIAL. WHERE IT IS NECESSARY TO CONCEAL A CLEANOUT OR TO TERMINATE A CLEANOUT IN AN AREA SUBJECT TO VEHICULAR TRAFFIC, THE COVERING PLATE, ACCESS DOOR OR CLEANOUT SHALL BE OF AN APPROVED TYPE DESIGNED AND INSTALLED FOR THIS PURPOSE.

MINIMUM SIZE. CLEANOUTS SHALL BE THE SAME NOMINAL SIZE AS THE PIPE THEY SERVE UP TO 4 INCHES. FOR PIPES LARGER THAN 4 INCHES NOMINAL SIZE, THE MINIMUM SIZE OF THE CLEANOUT SHALL BE 4 INCHES.

CAST-IRON CLEANOUT SIZING SHALL BE IN ACCORDANCE WITH ASTM A 74 FOR HUB AND SPIGOT FITTINGS OR ASTM A 888 OR CISPI 301 FOR HUBLESS FITTINGS.

ACCESS SHALL BE PROVIDED TO ALL CLEANOUTS.

PROVIDE CONDENSATE DRAINAGE, FOR EACH COOLING COIL. CONDENSATE PUMP DISCHARGE SHALL BE CONNECTED VIA INDIRECT WASTE CONNECTION TO BUILDING SANITARY/WASTE PIPING SYSTEM. COORDINATE PUMP WIRING WITH PROJECT ELECTRICIAN. IF GRAVITY DRAINAGE IS POSSIBLE WITHIN THE CONSTRAINTS OF PIPING PITCH, CONCEALMENT ABOVE CEILINGS, AND ONLY AFTER COMPLETE COORDINATION WITH STRUCTURE AND OTHER TRADES, THE CONTRACTOR MAY SUBMIT SKETCH PROPOSALS FOR GRAVITY ROUTING FOR REVIEW/APPROVAL.

MISCELLANEOUS SPECIALTIES
ALL EQUIPMENT, VALVES, STRAINERS, UNIONS, TRAPS, FLANGES AND OTHER APPURTENANCES REQUIRING ACCESS SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PIECE OF EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL, THEN THE APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. SUCH EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO CLEANOUTS, WATER HAMMER ARRESTORS AND VALVES. THESE SHALL BE COORDINATED WITH THE ARCHITECT. ACCESS DOORS SHALL BE RIGID CONSTRUCTION WITH TWO (2) HINGES AND A LATCH. IN PLENUM CEILINGS, PROVIDE FELT BETWEEN THE DOOR AND FRAME TO MAKE AN AIR TIGHT SEAL. ACCESS DOORS SHALL BE RATED TO THE SAME OR GREATER RATING OF THE PARTITION IN WHICH THEY ARE INSTALLED. ACCESS DOORS SHALL BE FLUSH MOUNTED, PRIME COATED WITH RUST INHIBITIVE PAINT, CONCEALED FRAME, FLUSH SCREW DRIVER OPERATED LOCKS WITH METAL CAMS AND ANCHORS AS REQUIRED.

ACCESS DOOR SIZES SHALL BE:
12" X 12" AT EASILY ACCESSIBLE ITEMS
16" X 16" WHERE PARTIAL BODY ACCESS IS REQUIRED
24" X 24" WHERE FULL BODY ACCESS IS REQUIRED

PROVIDE AND INSTALL DRIP PANS WITH WATER DETECTOR AND DRAIN FOR PIPING REQUIRED BY ACTUAL FIELD CONDITIONS WHERE PIPING PASSES OVER INCLUDING AREA WITHIN 3'-0" OF ELECTRICAL EQUIPMENT.

DO NOT INSTALL AIR GAP BACKFLOW PREVENTERS IN CONCEALED SPACES OR IN AREAS WHERE SPLASHING WATER WILL DAMAGE FINISHES. PROVIDE AND INSTALL AN OVERSIZED COPPER FUNNEL WITH AIR GAP DIRECTLY BELOW RPD PRESSURE RELIEF PORT. PIPE FUNNEL TO SPILL AS AN INDIRECT WASTE TO AN APPROVED DRAIN LOCATION.

PROVIDE FLEXIBLE CONNECTIONS IN ALL PIPING SYSTEMS CONNECTED TO PUMPS AND OTHER EQUIPMENT WHICH REQUIRES VIBRATION ISOLATION, EXCEPT WATER COILS. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE.

PIPING GENERAL
NO PIPING SHALL BE COVERED UNTIL TESTED AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

ALL PIPING SHALL BE RUN PERPENDICULAR AND/OR PARALLEL TO FLOORS, INTERIOR WALLS, ETC. PIPING AND VALVES SHALL BE GROUPED NEATLY AND SHALL BE RUN AS TO MAXIMIZE HEADROOM OR PASSAGE CLEARANCE. ALL VALVES, CONTROLS AND ACCESSORIES CONCEALED IN FURRED SPACES AND REQUIRING ACCESS FOR OPERATION AND MAINTENANCE SHALL BE ARRANGED TO ASSURE THE USE OF A MINIMUM NUMBER OF ACCESS DOORS.

ALL PIPE LINES MADE WITH SCREWED FITTINGS MUST BE PROVIDED WITH A SUFFICIENT NUMBER OF FLANGES AND/OR UNIONS TO ALLOW FOR EASY AND CONVENIENT DISMANTLING OF THE SYSTEM WITHOUT BREAKING FITTINGS.

ALL PIPING SHALL RUN CONCEALED IN FURRED SPACES OF OCCUPIED AREAS OR CHASES. CONTRACTOR SHALL OBTAIN PERMISSION TO RUN ANY EXPOSED PIPES.

CAP ALL PIPE AND EQUIPMENT OUTLETS DURING CONSTRUCTION AND KEEP LINES AND INSIDE OF EQUIPMENT FREE OF FOREIGN MATERIALS.

PROVIDE FOR EXPANSION WITHOUT WARPING OR DISLOCATING LINES OR STRAINING CONNECTED EQUIPMENT. INSTALL PIPING TO CLEAR BUILDING CONSTRUCTION AND TO AVOID INTERFERENCE WITH OTHER WORK. THE CONTRACTOR SHALL PROVIDE AND INSTALL COMPLETE PIPING EXPANSION SYSTEM (INCLUDING SEISMIC JOINT EXPANSION) AND DEVICES AS REQUIRED FOR PROPER EXPANSION COMPENSATION STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.

THE DRAWINGS INDICATE SCHEMATICALLY THE SIZE AND LOCATION OF PIPING. PIPING SHALL BE SET UP AND DOWN AND OFFSET AS REQUIRED TO MEET CONSTRUCTION CONDITIONS.

THIS CONTRACTOR SHALL INFORM HIMSELF FROM THE GENERAL CONSTRUCTION SPECIFICATIONS AND PLANS, OF THE EXACT DIMENSION OF FINISHED WORK AND OF THE HEIGHT OF FINISHED CEILINGS IN ALL ROOMS WHERE EQUIPMENT OR PIPES ARE TO BE PLACED AND ARRANGE HIS WORK IN ACCORDANCE WITH THE SCHEDULE OF INTERIOR FINISHES, AS INDICATED ON THE ARCHITECTURAL DRAWINGS.

WATER PIPING SHALL BE RUN FREE OF TRAPS AND UNNECESSARY BENDS. ANY TRAPS FORMED SHALL BE PROVIDED WITH HOSE END DRAIN VALVES WITH THREADED CAP AND CHAIN TO COMPLETELY DRAIN THE SYSTEM.

PROVIDE SECTION CUT-OFF VALVES ON ALL MAINS AND BRANCHES. PITCH AND VALVE ALL WATER PIPING FOR CONVENIENT DRAINAGE.

UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.

WHEREVER DISSIMILAR METALS ARE JOINED TOGETHER AN APPROVED DIELECTRIC FITTING SHALL BE USED. THE DIELECTRIC FITTING SHALL BE A LISTED ASSEMBLY.

RUN ALL SOIL, WASTE AND VENT PIPING SHOWN OR REQUIRED BY LOCAL CODES. PIPING SHOWN IS MINIMUM AND IN ACCORDANCE WITH STATE AND FEDERAL CODES. IF LOCAL CODES REQUIRE ADDITIONAL VENTING OR LARGER SIZES, PROVIDE AS REQUIRED.

MAKE ALL CONNECTIONS THROUGH TRAPS. EACH TRAP TO BE VENTED, EITHER BY CIRCUIT, LOOP, OR INDIVIDUAL VENT, AS REQUIRED, BUT NOT LESS THAN SHOWN, OR AS REQUIRED BY LOCAL CODE.

ALL UNDERGROUND PIPING SHALL BE LAID ON 6" SAND AND BACKFILLED WITH CLEAN FINE EARTH COMPACTED TO 12" ABOVE PIPE. COMPLETE BACKFILL WITH AVAILABLE EARTH FREE OF LARGE BOULDERS AND SHARP ROCKS. TAMP BACKFILL IN 6" ELEVATIONS AND OVERFILL TO ALLOW FOR SETTLEMENT.

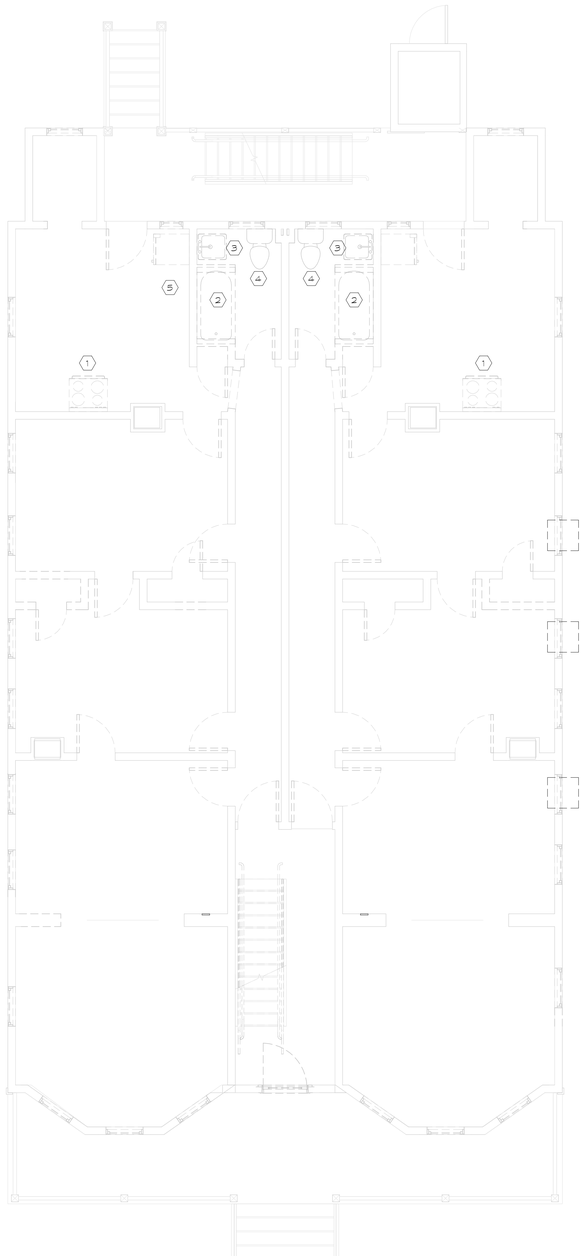
SET AND PROPERLY CONNECT ALL FIXTURES WITH HOT AND COLD WATER, VENT AND DRAINAGE PIPING, AS REQUIRED AND PROTECT FIXTURES UNTIL ACCEPTANCE AND TEST. CLEAN ALL FLUSH VALVES AFTER TWO (2) WEEKS OF OPERATION.

PLUMBING ABBREVIATIONS

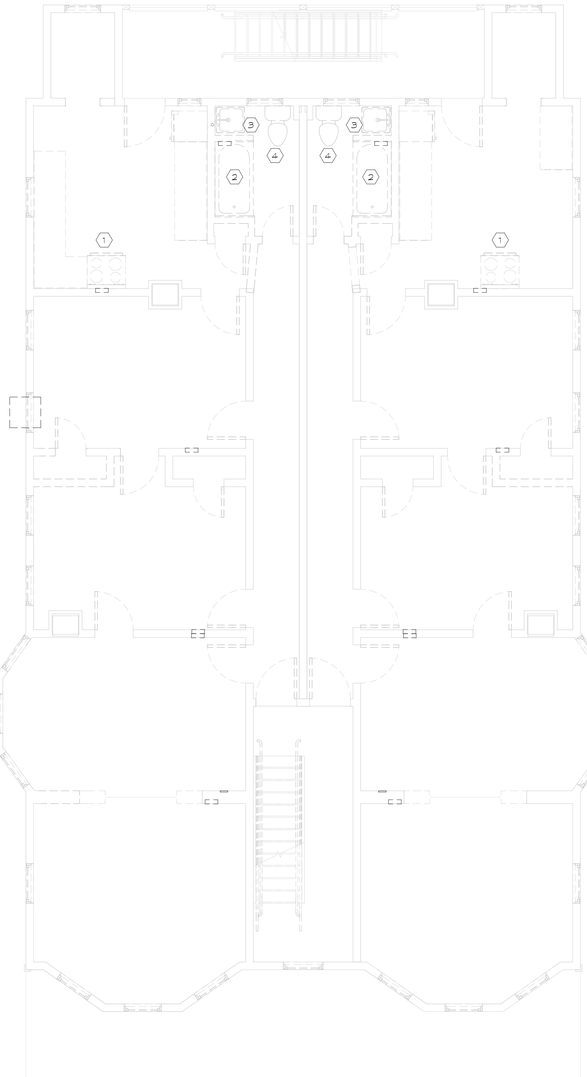
ABBREVIATION	DESCRIPTION
ADA	AMERICAN DISABILITIES ACT
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
B.F.F.	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BV	BUTTERFLY INDICATING VALVE
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
C.E.	CIVIL ENGINEER
CONT	CONTINUED
COP	CLEANOUT PLUG
CPVC	CH

PLUMBING DEMOLITION NOTES:

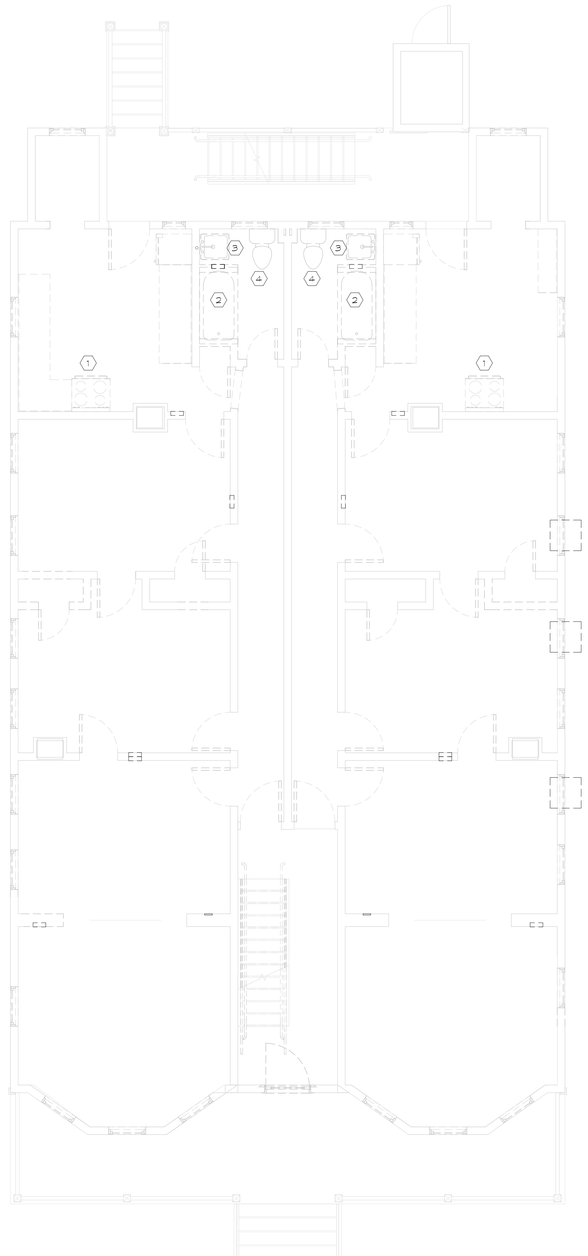
1. DEMO EXISTING STOVE AND ASSOCIATED FLEX HOSE. CHECK CONDITION OF EXISTING GAS LINE. REPLACE AS REQUIRED. PREP FOR NEW STOVE IN EXISTING LOCATION.
2. DEMO EXISTING TUB. REMOVE ASSOCIATED PIPING AND TRIM. CUT BACK TO EXISTING RISER WHICH IS TO REMAIN. PREP FOR NEW TUB IN NEW LOCATION.
3. DEMO EXISTING LAV. REMOVE ASSOCIATED PIPING AND TRIM. CUT BACK TO EXISTING RISER WHICH IS TO REMAIN. PREP FOR NEW LAV IN NEW LOCATION.
4. DEMO EXISTING WATER CLOSET. REMOVE ASSOCIATED PIPING AND TRIM. CUT BACK TO EXISTING RISER WHICH IS TO REMAIN. PREP FOR NEW WATER CLOSET IN NEW LOCATION.
5. DEMO EXISTING KITCHEN SINK. REMOVE ASSOCIATED PIPING AND TRIM. CUT BACK TO EXISTING RISER WHICH IS TO REMAIN. PREP FOR NEW KITCHEN SINK IN SAME LOCATION.



PLUMBING FIRST FLOOR DEMOLITION PLAN
SCALE: 1/4" = 1'-0"
1 P010



SECOND FLOOR PLUMBING DEMO PLAN
SCALE: 1/4" = 1'-0"
2 P010



FIRST FLOOR PLUMBING DEMO PLAN
SCALE: 1/4" = 1'-0"
3 P010

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

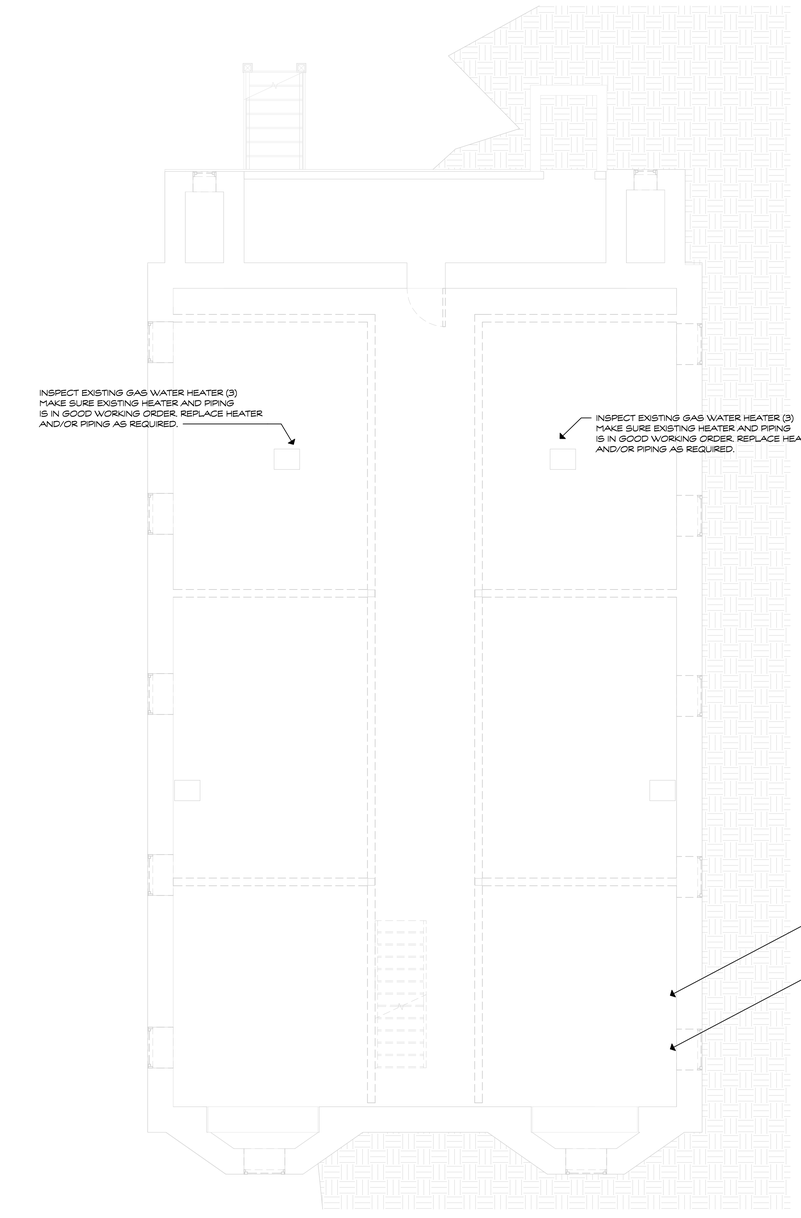
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Revision:	Description:	Date:	Revised By:
	95% CONSTRUCTION DOCUMENTS	3/23/2022	

Drawing Title:
PLUMBING DEMOLITION 1ST, 2ND, 3RD FLOOR PLANS

Date: 3/23/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
Project Number: 21.081

Drawing Number: P010



BASEMENT PLUMBING DEMO PLAN
SCALE 1/4" = 1'-0"

1
P011

Project Title:
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Revision:	Description:	Date:	Revised By:
	95% CONSTRUCTION DOCUMENTS	3/23/2022	

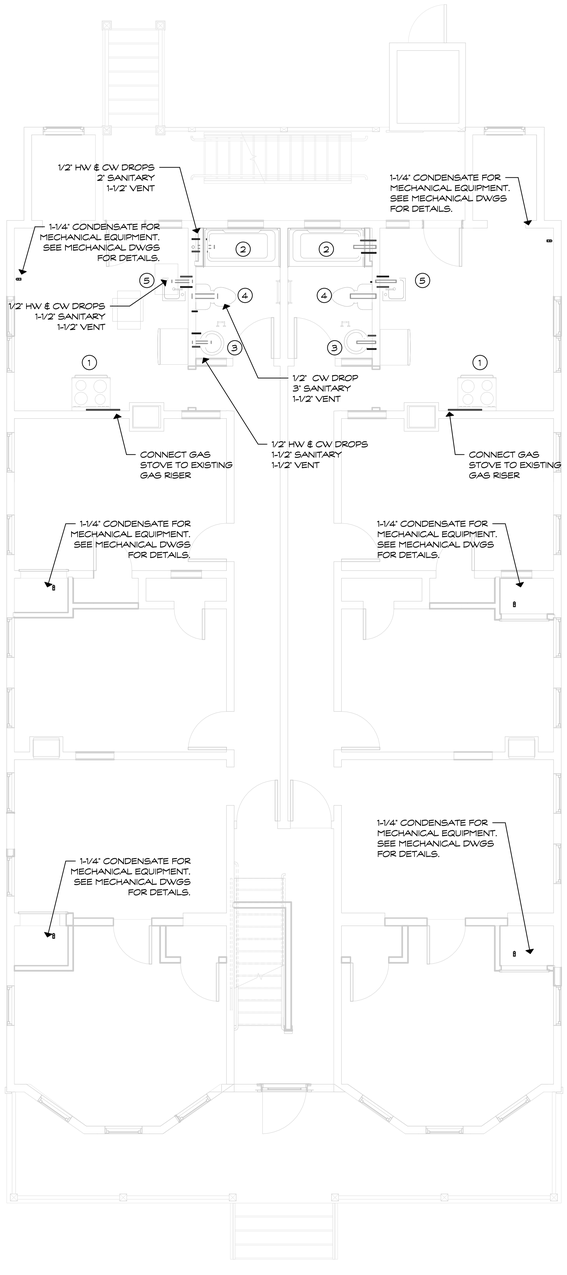
Drawing Title:
PLUMBING DEMOLITION
BASEMENT, ATTIC,& ROOF
PLANS

Date: 3/23/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
Project Number: 21.081

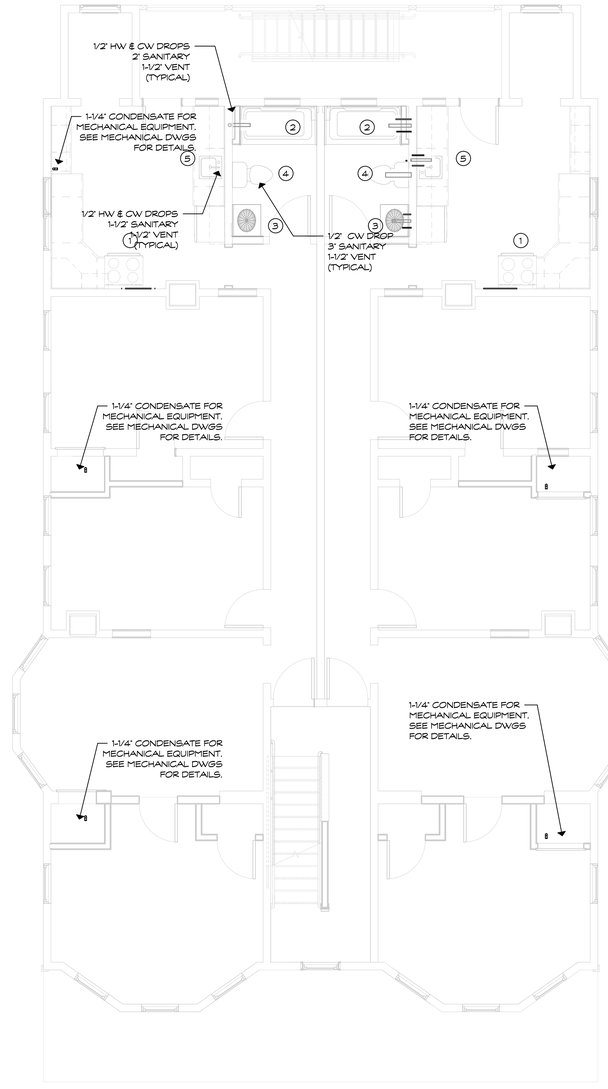
Drawing Number:
P011

PLUMBING CONSTRUCTION NOTES:

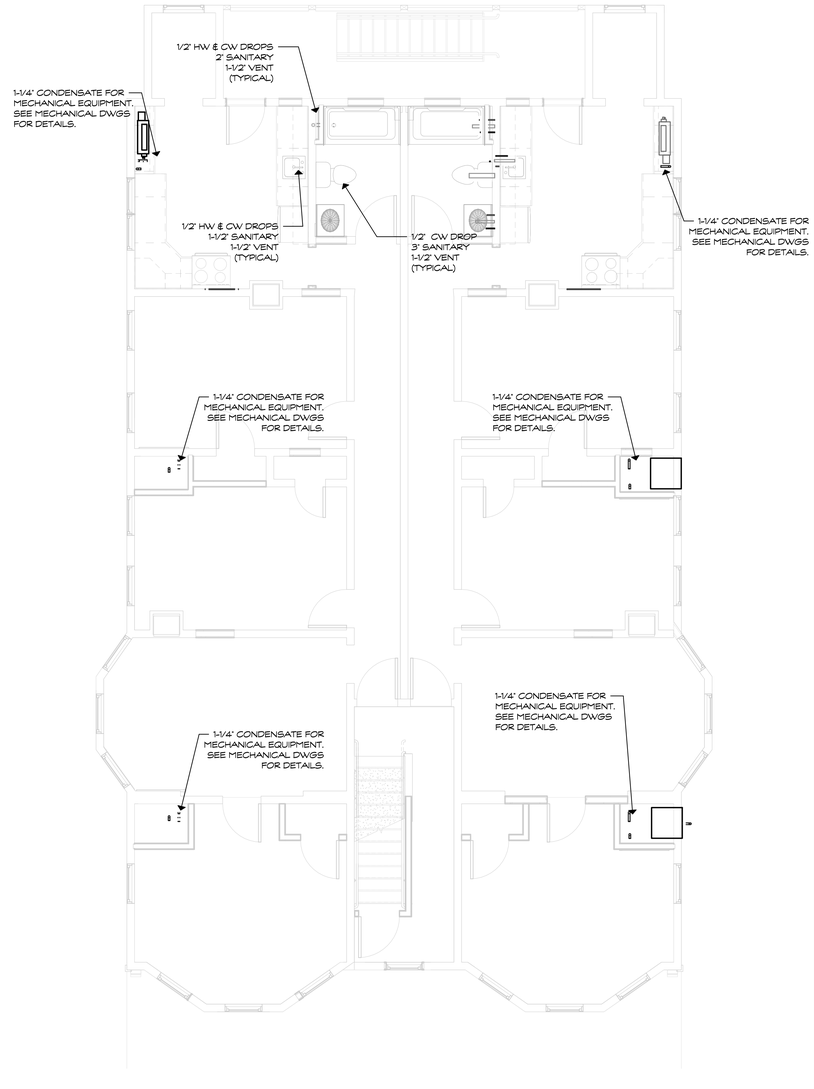
1. INSTALL NEW STOVE AND ASSOCIATED FLEX HOSE. CONNECT TO EXISTING GAS PIPING.
2. INSTALL NEW TUB AND ASSOCIATED PIPING AND TRIM. CONNECT TO EXISTING RISERS WHICH ARE TO REMAIN.
3. INSTALL NEW LAV. AND ASSOCIATED PIPING AND TRIM. CONNECT TO EXISTING RISERS WHICH ARE TO REMAIN.
4. INSTALL NEW WATER CLOSET AND ASSOCIATED PIPING AND TRIM. CONNECT TO EXISTING RISERS WHICH ARE TO REMAIN.
5. INSTALL NEW KITCHEN SINK AND ASSOCIATED PIPING AND TRIM. CONNECT TO EXISTING RISERS WHICH ARE TO REMAIN.
6. PROVIDE CONDENSATE FOR MECHANICAL UNITS. CONNECT TO NEW 1-1/2" RISER THAT GOES DOWN TO BASEMENT AND IS GRAVITY FED OUT CLOSEST BASEMENT WINDOW. CONDENSATE TO DISCHARGE AWAY FROM BUILDING.



FIRST FLOOR PLUMBING CONSTRUCTION PLAN
SCALE: 1/4" = 1'-0"
1 / P101



SECOND FLOOR PLUMBING CONSTRUCTION PLAN
SCALE: 1/4" = 1'-0"
2 / P101



THIRD FLOOR PLUMBING CONSTRUCTION PLAN
SCALE: 1/4" = 1'-0"
3 / P101

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

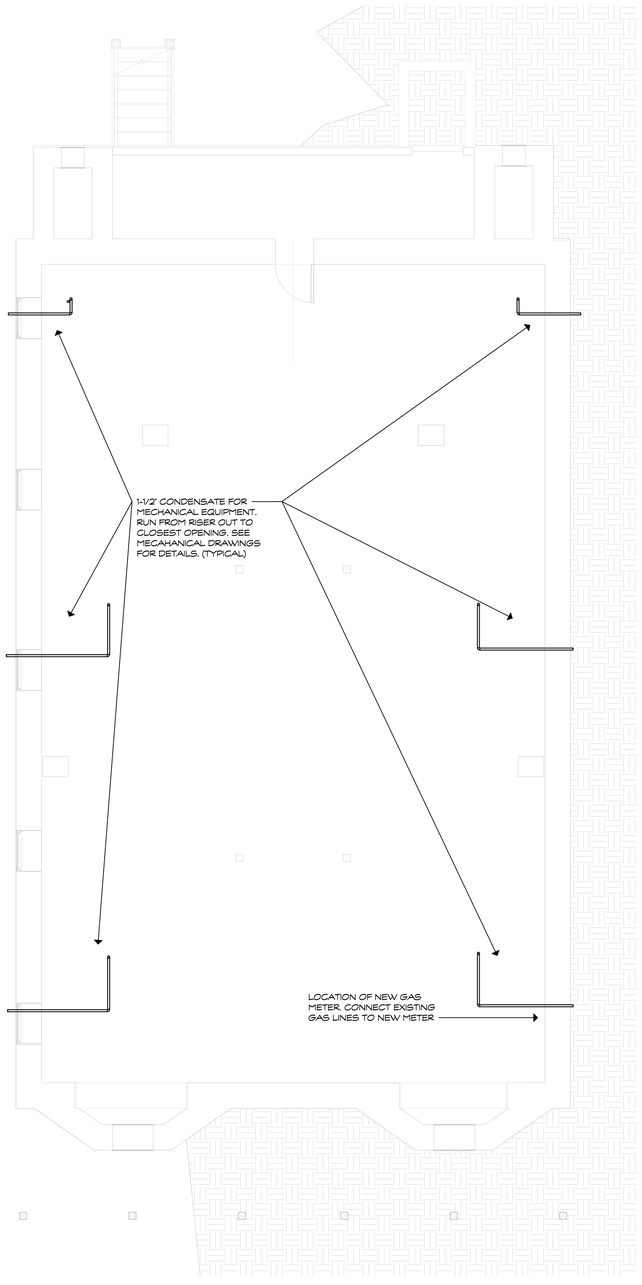
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Drawing Title:
PLUMBING CONSTRUCTION
1ST 2ND 3RD FLOOR PLANS

Date: 3/23/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
Project Number: 21.081

Drawing Number:
P101



W-BASEMENT PLAN
SCALE: 1/4" = 1'-0"

1
P102

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

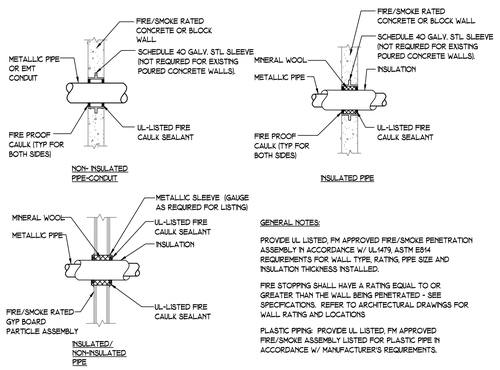
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Drawing Title:
PLUMBING CONSTRUCTION
BASEMENT, ATTIC, & ROOF
PLANS

Date: 3/23/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
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Drawing Number:
P102



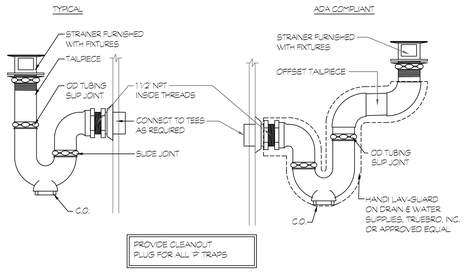
GENERAL NOTES:

PROVIDE UL LISTED, FM APPROVED FIRE/SMOKE PENETRATION ASSEMBLY IN ACCORDANCE W/ UL1479, ASTM E814 REQUIREMENTS FOR WALL TYPE, RATING, PIPE SIZE AND INSULATION THICKNESS INSTALLED.

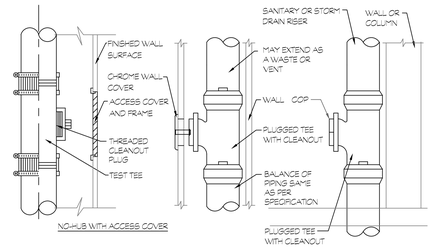
FIRE STOPPING SHALL HAVE A RATING EQUAL TO OR GREATER THAN THE WALL BEING PENETRATED - SEE SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL RATING AND LOCATIONS

PLASTIC PIPING: PROVIDE UL LISTED, FM APPROVED FIRE/SMOKE ASSEMBLY LISTED FOR PLASTIC PIPE IN ACCORDANCE W/ MANUFACTURER'S REQUIREMENTS.

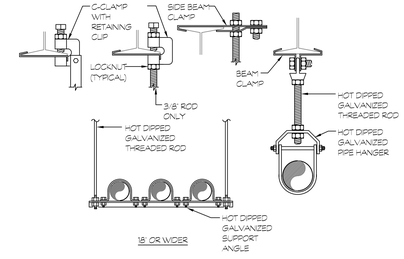
PIPE PENETRATION WITH FIRE/SMOKE SEAL
NOT TO SCALE



'P' TRAP WITH CLEANOUT DETAIL
NOT TO SCALE

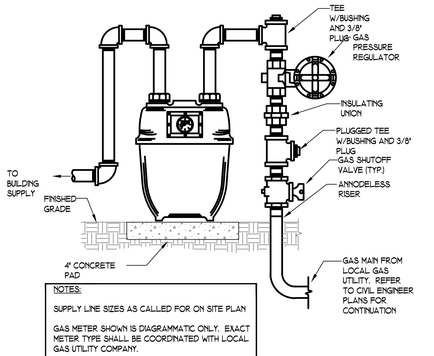


WALL AND RISER CLEANOUT DETAIL
NOT TO SCALE



PIPE SIZE	MAX SPACING STEEL PIPE EXCEPT THREADED LIGHTWALL	MAX SPACING STEEL PIPE THREADED LIGHTWALL
1", 1-1/4"	12'-0"	12'-0"
1-1/2", 2", 2-1/2", 3"	15'-0"	12'-0"
4", 6", 8"	15'-0"	N/A
INSTALL HANGERS IN ACCORDANCE WITH NFPA 13 AND STRUCTURAL REQUIREMENTS		

PIPE SUPPORT DETAIL
NOT TO SCALE



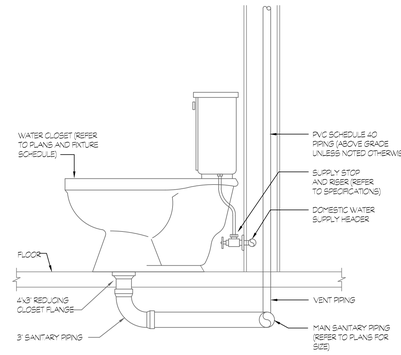
NOTES:

SUPPLY LINE SIZES AS CALLED FOR ON SITE PLAN

GAS METER SHOWN IS DIAGRAMMATIC ONLY. EXACT METER TYPE SHALL BE COORDINATED WITH LOCAL GAS UTILITY COMPANY.

GAS SERVICE AND METER CONFIGURATION SHALL BE COORDINATED WITH LOCAL GAS COMPANY REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE PROVIDING FOR ANY ALTERATIONS/DEVIATIONS TO THIS DETAIL

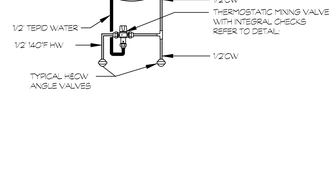
GAS METER DETAIL
NOT TO SCALE



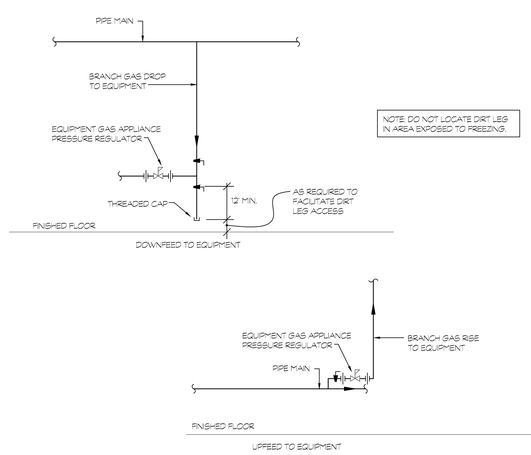
NOTES:

1. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR MOUNTING REQUIREMENTS.

WATER CLOSET CONNECTION DETAIL
NOT TO SCALE



THERMOSTATIC MIXING VALVE AT HAND SINK DETAIL
NOT TO SCALE



TYPICAL DIRT LEG DETAIL
NOT TO SCALE

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Ansonia, CT 06401

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Drawing Title:
Plumbing Details

Date: 4/13/2022
Scale: AS NOTED
Drawn By: MAB
Project Number: 21.081

Drawing Number:
P801

DRAIN SCHEDULE

MARK	FIXTURE, MODEL NUMBER AND DESCRIPTION	ROUGH-IN		
		TRAP	WASTE	VENT
FD-1	FLOOR DRAIN (TRASH ROOM), WADE 3000-2-8-2T-TSD, HEAVY DUTY CAST IRON BODY, BOTTOM OUTLET, 8" DIAMETER CAST IRON TOP, TRAP PRIMER CONNECTION, SEEPAGE PAN AND COMBINATION MEMBRANE FLASHING CLAMP	AS NOTED ON DRWGS.	AS NOTED ON DRWGS.	AS NOTED ON DRWGS.
FD-2	FLOOR DRAIN (TOILET ROOM), WADE 1100-A8-2T-TSD, HEAVY DUTY CAST IRON BODY, BOTTOM OUTLET, 6" ROUND NICKEL BRONZE TOP, TRAP PRIMER CONNECTION, SEEPAGE PAN AND COMBINATION MEMBRANE FLASHING CLAMP	AS NOTED ON DRWGS.	AS NOTED ON DRWGS.	AS NOTED ON DRWGS.

NOTES:
1. PROVIDE TRAP GUARDS FOR ALL DRAINS. DRAINS INCORPORATING A CONSTANT AND REGULAR WASTE ARE NOT REQUIRED TO INTERGRATE TRAP PRIMERS (IE. SHOWER DRAINS, KITCHEN DRAINS, ETC).

2.TRANSITION COUPLINGS AND NO-HUB PIPE SHALL NOT BE INSTALLED BELOW SLAB OR IN ANY BURIED CONDITIONS IN CONTACT WITH EARTH. PROVIDE PUSH-ON OR INSIDE CAULK OUTLETS.

BACKFLOW PREVENTER SCHEDULE

MARK	SIZE	LOCATION	SERVICE	BODY MATERIAL	TEMPERATURE RANGE	MAX. WORKING PRESSURE	MANUFACTURER / MODEL	REMARKS
BFP-1	PER DWGS.	PER DWGS.	DOMESTIC COLD WATER	BRONZE	33 F-140 F	175 PSI	WATTS / LFUC09-QT	LEAD FREE, REDUCED PRESSURE ZONE BACKFLOW ASSEMBLY, WITH QUARTER-TURN BALL VALVES, UNION CONNECTIONS

NOTE: PIPE EACH BFP-1 DISCHARGE VIA AIR GAP FITTING EITHER TO OUTSIDE (PREFERRED), OR TO FIXTURE OR FLOOR DRAIN WITH ADEQUATELY SIZED COLLECTION PROVISION (TO PREVENT SPLASHING AND OVERFLOW) AND DRAIN PIPE (TO ACCOMMODATE DISCHARGE FLOW RATE).

HEAT TRACE SCHEDULE

MARK	LOCATION	SERVICE	CABLE TYPE	FLUID	ELECTRICAL			MANUFACTURER / MODEL	REMARKS
					WATTS/AMPS	VOLTAGE	PHASE		
HT	PARKING GARAGE	SANITARY	SELF-REGULATING	WASTE	8 WATTS/FT/ (2) 30 AMPS	208	1	RAYCHEM / XL-TRACE 8XL2-CR	SYSTEM CONTROLLED BY A RAYCHEM 460 ELECTRONIC CONTROLLER. DOUBLE WRAP CABLE WITH TWO RUNS OF HEATING CABLE.
HT	PARKING GARAGE	STORM/CD	SELF-REGULATING	STORM & CONDENSATE	8 WATTS/FT/ (3) 30 AMPS	208	1	RAYCHEM / XL-TRACE 8XL2-CR	SYSTEM CONTROLLED BY A RAYCHEM 460 ELECTRONIC CONTROLLER. DOUBLE WRAP CABLE WITH TWO RUNS OF HEATING CABLE.

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

INSULATION SCHEDULE

SYSTEM	PIPE SIZE	INSULATION TYPE	INSULATION THICKNESS	FITTINGS, VALVES, FLANGES INSULATION TYPE	REMARKS
DOMESTIC COLD WATER	ALL	MINERAL FIBER, ASJ, SSL	1"	MOLDED, PRE-FORMED MINERAL FIBER WITH PVC JACKET	TYPE I
DOMESTIC HOT WATER	ALL	MINERAL FIBER, ASJ, SSL	1"	MOLDED, PRE-FORMED MINERAL FIBER WITH PVC JACKET	TYPE I
INTERIOR ROOF DRAIN PIPING	ALL	MINERAL FIBER, ASJ, SSL	1"	MOLDED, PRE-FORMED MINERAL FIBER WITH PVC JACKET	TYPE I
PARKING GARAGE SANITARY DRAIN PIPING	ALL	MINERAL FIBER, ASJ, SSL	2"	MOLDED, PRE-FORMED MINERAL FIBER WITH PVC JACKET	TYPE I

NOTES:
1. FIBERGLASS INSULATION: THERMAL CONDUCTIVITY .22 TO .28BTU X IN/H X FT X F W/ 100 F MEAN TEMP. THICKNESS BASED ON ASHRAE 90.1, 1999 6.2.4.5.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

CLEANOUT SCHEDULE

MARK		TRAP SIZE	REMARKS
FCO	FLOOR CLEANOUT (ALL INTERIOR AREAS EXCEPT EXTERIOR). WATTS CO-200-RX-C-6, ADJUSTABLE ROUND SCORIATED HEAVY DUTY NICKEL BRONZE SECURED TOP WITH FRAME, CAST IRON BODY, FLASHING FLANGE AND CLAMP, BRONZE PLUG. PROVIDE WITH VANDAL PROOF SCREWS. PROVIDE NICKEL BRONZE FRAME IN WET AREAS.	AS NOTED ON DWG.	--
YCO	FLOOR CLEANOUT (EXTERIOR AREAS). WATTS CO-300-MF-6 WITH CO-380 ROUND FLANGED HOUSING WITH HEAVY DUTY SCORIATED DUCTILE IRON TOP, CLEANOUT FERRULE BODY WITH BRONZE PLUG. INSTALL CLEANOUTS WITH 18"SQUARE X 6" DEEP CONCRETE APRON IN NON-PAVED AREAS. PROVIDE WITH VANDAL PROOF SCREWS.	AS NOTED ON DWG.	--
WCO	WALL PLATE CLEANOUT COVER. WATTS CO-590-RD, PROVIDE AT CAST IRON CLEANOUTS WITH COUNTERSUNK BRASS PLUG AND STAINLESS STEEL COVER SECURED WITH VANDAL PROOF SCREWS.	--	--

NOTES:
1. TRANSITION COUPLINGS AND NO-HUB PIPE SHALL NOT BE INSTALLED BELOW SLAB OR IN ANY BURIED CONDITIONS IN CONTACT WITH EARTH.
2. PROVIDE ALL POURED IN PLACE CLEANOUTS WITH 24"X24" FLASHING.

PIPE HANGER SPACING TABLE

PIPE MATERIAL	PIPE SIZES (INCHES)	HORIZONTAL PIPE MAX. HANGER DISTANCE (FT)	VERTICAL PIPE MAX. HANGER DISTANCE (FEET)
COPPER & COPPER ALLOY TUBING	1-1/4" & SMALLER	6'-0"	10'-0"
COPPER & COPPER ALLOY TUBING	1-1/2" & LARGER	10'-0"	10'-0"
COPPER & COPPER ALLOY PIPE	ALL	12'-0"	10'-0"
CAST IRON PIPE	ALL	5'-0" •	15'-0"
STEEL PIPE	ALL	12'-0"	15'-0"
STAINLESS STEEL DRAINAGE	ALL	10'-0"	10'-0 ••
CPVC PIPE OR TUBING	1" & SMALLER	3'-0"	10'-0 ••
CPVC PIPE OR TUBING	1-1/4" & LARGER	4'-0"	10'-0 ••
PVC PIPE	ALL	4'-0"	10'-0 ••

NOTES:
• MAXIMUM HORIZONTAL SPACING OF CAST IRON PIPE HANGERS SHALL BE INCREASED TO 10'-0" WHERE 10'- LENGTHS OF PIPE ARE USED

•• MIDSTORY GUIDE FOR SIZES 2" AND SMALLER

NOT ALL PIPE MATERIALS ON THIS TABLE WILL PERTAIN TO THIS PROJECT

PLUMBING FIXTURE/EQUIPMENT SCHEDULE

MARK	FIXTURE, MODEL NUMBER AND DESCRIPTION	ROUGH-IN				FLOW
		WASTE/ SANITARY	VENT	CW	HW	
W-1A	ADA COMPLIANT WATER CLOSET. HIGH EFFICIENCY RATED, AMERICAN STANDARD CADET 3 3378.128, ONE-PIECE TANK/BOWL COMBINATION, ADA 1.28 GPF WHITE VITREOUS CHINA, ELONGATED BOWL, 12" ROUGH-IN, 15 1/2" TO TOP OF RIM. PROVIDE TANK LEVER OPTION WHERE REQD TO MEET ADA ACCESSIBILITY REQUIREMENTS. WHITE ELONGATED TOILET SEAT, CLOSED FRONT, WITH COVER INCLUDED.	3"	2"	1/2"	--	1.28 GPF
L-1A	VANITY WITH DROP IN LAVATORY: WOOD CRAFTERS GLACIER BAY 24X18 CABINET & WHITE TOP. PROVIDE WITH WATER SENSE RATED, MOEN WB84803 SINGLE LEVER FAUCET WITH POP-UP DRAIN, RATED 1.2 GPM AT 60 PSI.	1-1/2"	1-1/2"	1/2"	1/2"	1.2 GPM
T-1A	BATHTUB/SHOWER: 30"X60" BOOTZ ALOHA PORCELAIN ENAMEL BATHTUB, L OR R DRAIN AS REQUIRED, WIDELTA TUB & SHOWER FAUCET W/ PRESSURE BALANCING MIXING VALVE. PROVIDE TUB POP-UP DRAIN, AND ASSOCIATED SURROUND AND TRIM.	2"	2"	1/2"	1/2"	1.75 GPM
S-1A	SINGLE BOWL SINK: ELKAY D12522, STAINLESS STEEL, TOP MOUNT SINGLE BOWL, 25" X 122" X 6-9/16" DEEP BOWL, 3 HOLE. PROVIDE WITH EZ-FLO FAUCET WITH PULL-OUT SPRAY 1.8 GPM AT 60 PSI.	2"	2"	1/2"	1/2"	1.75 GPM
SA	WATER HAMMER ARRESTOR, PRECISION PLUMBING PRODUCTS (PPP), SC SERIES. 1/2"-1", LOCATIONS AND SIZES PER MANUFACTURER RECOMMENDATIONS AND REQUIREMENTS	--	--	-	--	--

NOTES:
1. LAVATORY SUPPLY SHALL BE BRASS W/ BRASS ANGLE STOPS FOR 1/2 WATER SUPPLY LINES, W/ LOOSE KEY (W/ CAP), AND WALL FLANGE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH, MANUFACTURER BRASS CRAFT OR APPROVED EQUAL.
2. CAST BODY P TRAP 1-1/2" x 1-1/2" WITH HEAVY CAST J-BEND & FLAT CLEANOUT PLUG, SLIP NUTS AND WALL FLANGE. ALL COMPONENTS SHALL BE POLISHED CHROME FINISH, MANUFACTURER BRASS CRAFT OR APPROVED EQUAL.
3. STRAINERS SHALL BE FURNISHED WITH FIXTURES AS REQUIRED. FOR H/C LAVATORY OR SINKS PROVIDE OFFSET TAILPIECE.
4. PROVIDE TRUEBRO MODEL 103 (WHITE) ANTIMICROBIAL HAND LAV GUARDS INSTALLATION KIT FOR ALL WHEELCHAIR LAVATORY & SINKS FOR WATER SUPPLIES & WASTE LINE.
5. THE PLUMBING FIXTURES VENDOR SHALL COORDINATE WITH THE PLUMBING AND GENERAL CONTRACTOR ALL PLUMBING FIXTURES ROUGH IN DIMENSIONS BEFORE CONSTRUCTION BEGINS.
7. UNLESS SHOWN ABOVE, PLUMBING FIXTURES MANUFACTURER, TRIM COLOR AND FINISH SHALL BE FURNISHED AS DIRECTED BY OWNER/ARCHITECT.
8. REFER TO ARCHITECTURAL DRAWINGS FOR STANDARD, A.D.A MOUNTING AND CHILD HEIGHTS. REFER TO ARCHITECTURAL FOR LOCATION OF A.D.A COMPLIANT SHOWER SEAT AND SHOWER BARS
9. CONTRACTOR TO PROVIDE AN EXTRA 10% OF BATTERIES, AERATORS, CARTRIDGES, ETC..
11. ALL SANITARY, WASTE AND VENT PIPING BELOW SLABS ON GRADE SHALL BE 2" MINIMUM.

PIPE AND FITTING SCHEDULE

DESCRIPTION	SIZE	PIPE		FITTING		REMARKS
		TYPE	SCHEDULE	TYPE	RATING	
SOIL, WASTE AND VENT ABOVE GROUND	ALL	PVC	40	PVC	40	FOAM CELLULAR OR FOAM CORE IS NOT ALLOWED
SOIL, WASTE AND VENT BELOW GROUND	ALL	PVC	40	PVC	40	FOAM CELLULAR OR FOAM CORE IS NOT ALLOWED
STORM PIPING	ALL	PVC	40	PVC	40	FOAM CELLULAR OR FOAM CORE IS NOT ALLOWED
DOMESTIC WATER WITHIN BUILDING	1" & > & ALL VERTICAL MAINS	COPPER	TYPE L	CUS	STD	HARD TEMPERED
DOMESTIC WATER WITHIN BUILDING	< 1"	CPVC/PEX	CPVC/PEX	CPVC/PEX	CPVC/PEX	

NOTES:
1. TRANSITION COUPLINGS AND NO-HUB PIPE SHALL NOT BE INSTALLED BELOW SLAB OR IN ANY BURIED CONDITIONS IN CONTACT WITH EARTH.
2. ALL PIPING IN RETURN AIR CEILING PLENUM INSTALLATIONS SHALL BE UL-LISTED FOR THIS APPLICATION.
3. MECHANICAL JOINTS ARE ALLOWED FOR SERVICE PURPOSED ONLY IN WALLS AND CEILINGS BUT MUST BE READILY ACCESSIBLE. 25/50 PVDF IS UL-LISTED FOR RETURN AIR CEILING PLENUM INSTALLATIONS.

ABBREVIATIONS	DESCRIPTION	ABBREVIATIONS	DESCRIPTION
CI	CAST IRON	PEX	PEX PIPING
CUS	WROUGHT COPPER SOLDER (95/5)	STD	STANDARD
HES	HUB AND SPIGOT	SV	SERVICE WEIGHT
NH	NO HUB W/SUPER DUTY HUSKY SD 4000 CLAMP		

VALVE SCHEDULE

DESCRIPTION	SIZE	TYPE						CLASS	REMARKS
		GATE	GLOBE	CHECK	BALL	PLUG	BALANCE		
DOMESTIC COLD WATER & AIR	3" AND SMALLER	--	--	CVT	BVT	--	--	125PSI	--
DOMESTIC HOT WATER	3 AND SMALLER	--	--	CVT	BVT	--	CBV	125PSI	--

NOTES:
1. CALIBRATED PRESSURE RELIEF VALVE: INSTALL A MINIMUM OF 12" ABOVE WATER HEATER AND PIPE DISCHARGE TO ADEQUATE LOCATION. WATTS MODEL 540C.

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
BVT	BALL VALVE THREADED - 2-PIECE, FULL PORT, 400PSI, BRONZE	CVT	CHECK VALVE THREADED - BRONZE
CBV	CALIBRATED BALANCING VALVE - BRONZE		

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Drawing Title:
Plumbing Schedules

Date: 4/13/2022
Scale: AS NOTED
Drawn By: MAB
Project Number: 21.081

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P901

GENERAL MECHANICAL SYMBOLS

CHS	CHILLED WATER SUPPLY PIPING
CHR	CHILLED WATER RETURN PIPING
CWS	CONDENSER WATER SUPPLY PIPING
CWR	CONDENSER WATER RETURN PIPING
DTS	DUAL TEMPERATURE WATER SUPPLY PIPING
DTR	DUAL TEMPERATURE WATER RETURN PIPING
HWS	HOT WATER SUPPLY PIPING
HWR	HOT WATER RETURN PIPING
HTWS	HIGH TEMPERATURE HOT WATER SUPPLY PIPING
HTWR	HIGH TEMPERATURE HOT WATER RETURN PIPING
CD	CONDENSATE DRAIN PIPING
	HIDDEN PIPING
	EXISTING PIPING/EQUIPMENT TO REMAIN
	EXISTING PIPING/EQUIPMENT TO BE REMOVED
	DIRECTION OF FLOW IN PIPE
	PITCH PIPE DOWN IN DIRECTION OF ARROW
	PIPE ELBOW UP / DOWN
	PIPE TOP CONNECTION
	PIPE BOTTOM CONNECTION
	CAPPED PIPING
	PIPING CONTINUATION
	PIPE UNION
	PIPE ANCHOR
	PIPE GUIDE
	PRESSURE REDUCING VALVE
	CONTROL VALVE 2 WAY
	CONTROL VALVE 3 WAY
	MOTORIZED CONTROL VALVE 2 WAY
	MOTORIZED CONTROL VALVE 3 WAY
	BALL VALVE
	GLOBE VALVE
	GATE VALVE
	BUTTERFLY VALVE
	COMBINATION AUTOMATIC BALANCING/FLOW MEASURING DEVICE
	PLUG VALVE
	PETCOCK
	PRESSURE GAUGE WITH PETCOCK
	PIPE REDUCER OR INCREASER
	THERMOMETER
	PIPE WELL (FOR CONTROLS TEST)
A.V.	PIPE AIR VENT (M=MANUAL, A=AUTOMATIC)
	DRAIN VALVE WITH HOSE COUPLING
	CHECK VALVE
	OSY GATE VALVE
	MANUAL BUTTERFLY VALVE W/ HAND WHEEL
	MOTORIZED VALVE
	POINT OF CONNECTION
	POINT OF DEMOLITION

	EXISTING DUCTWORK TO REMAIN
	EXISTING DUCTWORK TO BE REMOVED
	HIDDEN DUCTWORK
	SUPPLY DUCT UP / DN / DN
	RETURN AIR DUCT UP / DN
	EXHAUST AIR DUCT UP / DN
24x12	DOUBLE LINE DUCTWORK WITH INDICATION OF INSIDE DIMENSIONS
	ACCESS DOOR IN DUCT
12"Ø	ROUND DUCT DIAMETER SIZE
	FLEXIBLE DUCT CONNECTION
	SUPPLY AIR FLOW
	EXHAUST/RETURN AIR FLOW
	UNDERCUT DOOR
	90° ELBOW WITH AIRFOIL TURNING VANES
	DUCT TAKE-OFF
	CEILING DIFFUSER REFER TO SCHEDULE FOR SIZE & TYPE
	RETURN / EXHAUST GRILLE REFER TO SCHEDULE FOR SIZE & TYPE
	LINEAR DIFFUSER
T	THERMOSTAT
TE	TEMPERATURE SENSOR
H	RELATIVE HUMIDITY SENSOR OR HUMIDISTAT
S	SMOKE DETECTOR IN DUCT
SD / SD*	SMOKE DAMPER
FD / FD*	FIRE DAMPER
FSD / FSD*	COMBINATION SMOKE & FIRE DAMPER
MD / MD*	MOTORIZED DAMPER
VD	MANUAL VOLUME DAMPER/CABLE OPERATED DAMPER (COD)
XXX	UNDERLINED TEXT DENOTES EQUIPMENT REFER TO SCHEDULE
A CFM=#	DIFFUSER LEGEND LTR = TYPE DESIGNATION, REFER TO SCHEDULES CFM = AIR FLOW QUANTITY # = BLOW ARRANGEMENT, 4-WAY BLOW IS TYPICAL UNLESS OTHERWISE NOTED 3 = 3-WAY BLOW 2 = 2-WAY BLOW 1 = 1-WAY BLOW
VFD	VARIABLE FREQUENCY DRIVE
CMS	COMBINATION MOTOR STARTER/DISCONNECT
TCP	TEMPERATURE CONTROL PANEL
CO2	CARBON DIONDE SENSOR

* ALL SYMBOLS MAY NOT BE USED IN THESE DOCUMENTS.

GENERAL MECHANICAL ABBREVIATIONS

ABV	ABOVE	FA	FACE AREA	NTS	NOT TO SCALE
AC	AIR COMPRESSOR	FB	FLOW BAR	OA	OUTSIDE AIR
ACC-#	AIR COOLED CONDENSER	FC	FORWARD CURVE	OAT	OUTDOOR AIR TEMPERATURE
ACU-#	AIR CONDITIONING UNIT	F.C.	FLEX CONNECTION	OAI	OUTDOOR AIR INTAKE
ACCU-#	AIR COOLED CONDENSING UNIT	FC-#	FAN COIL	OBD	OPPOSED BLADE DAMPER
AD	ACCESS DOOR	FCU-#	FAN COIL UNIT	OD	OUTSIDE DIMENSION
AF	AIRFOIL	FD	FIRE DAMPER WITH ACCESS DOOR	O.E. T.D.	OPEN END TRANSFER DUCT
AFC	ADJUSTABLE FREQUENCY CONTROLLER	FF	FINAL FILTER	OED	OPEN END DUCT
AFF	ABOVE FINISHED FLOOR	FIN FL	FINISH FLOOR	P-#	PUMP
AFMS	AIR FLOW MEASURING STATION	FL	FLOOR	PB	PUSH BUTTON
AHU-#	AIR HANDLING UNIT	FLA	FULL LOAD AMPERES	PBD	PARALLEL BLADE DAMPER
AL	ACOUSTIC LINING	FLEX	FLEXIBLE	PD	PRESSURE DROP
ALD	AUTOMATIC LOUVER DAMPER	FO	FLAT OVAL	PF	PREFILTER
ALP	ACOUSTICALLY LINED PLENUM	FPF	FINS PER FOOT	PH	PHASE
APD	AIR PRESSURE DROP	FT	FEET	PHC	PREHEAT COIL
AUTO	AUTOMATIC	F.T.	FLOAT & THERMOSTATIC TRAP	PPH	POUND PER HOUR
B-#	BOILER	FT-#	FIN TUBE RADIATION	PRV	PRESSURE REDUCING VALVE
BC	BACKWARD CURVED	FV	FACE VELOCITY	PSI	POUND PER SQUARE INCH
BD	BYPASS DAMPER	GC	GENERAL CONTRACTOR	RA	RETURN AIR
BMCS	BUILDING MANAGEMENT & CONTROL SYSTEM	GH	GRAVITY INTAKE HOOD	RAD	RETURN AIR DAMPER
BTU	BRITISH THERMAL UNIT	GPH	GALLONS PER HOUR	RAF-#	RETURN AIR FAN
BV	BYPASS VALVE	GPM	GALLONS PER MINUTE	RAT	RETURN AIR TEMPERATURE
CH-#	CHILLER	GT-#	GLYCOL TANK	REG	REGISTER
CHR	CHILLED WATER RETURN	H/C	HEATING/COOLING	RH	RELATIVE HUMIDITY
CHS	CHILLED WATER SUPPLY	H-#	HUMIDIFIER	RHC	REHEAT COIL
CAP	CAPACITY	H-O-A	HAND-OFF-AUTOMATIC	RLA	RATED LOAD AMPERES
CB-#	CONTROL BOX	HC-#	HEATING COIL	RM	ROOM
CC-#	COOLING COIL	HD	FEET OF HEAD	RR	RELIEF PENTHOUSE
CD	CEILING DIFFUSER	HP	HORSEPOWER	RPM	REVOLUTIONS PER MINUTE
CFM	CUBIC FEET PER MINUTE	HTG	HEATING	RTU-#	ROOFTOP AIR CONDITIONING UNIT
CG	CEILING GRILLE	HTR	HEATER	RV	RADIATION VALVE
CLG	CEILING	HV-#	HEATING AND VENTILATING UNIT	SA	SUPPLY AIR
C-#	CONVECTOR	HVAC	HEATING, VENTILATING & AIR CONDITIONING	SAF-#	SUPPLY AIR FAN
C.O.D.	CABLE OPERATED DAMPER			SAT	SUPPLY AIR TEMPERATURE
CP	CONDENSATE RECEIVER/PUMPING SYSTEM	HX-#	HEAT EXCHANGER CONVERTOR	SB	SECURITY BARS
CR	CEILING REGISTER	IBT	INVERTED BUCKET TRAP	VSC	VERTICAL SPLIT CASE
CT-#	COOLING TOWER	ID	INSIDE DIMENSION	HSC	HORIZONTAL SPLIT CASE
CTD	CEILING TRANSFER DUCT	IN	INCHES	SD	SMOKE DAMPER
CUH-#	CABINET UNIT HEATER	IP	INTAKE PENTHOUSE	SG	SUPPLY GRILLE
CV	CONTROL VALVE	IV	INLET GUIDE VANES	SP	STATIC PRESSURE
DET	DRIP AND TRAP	KW	KILOWATT	SQ FT	SQUARE FOOT (AREA)
DB	DRY BULB	KWH	KILOWATT HOUR	ST	SINGLE POLE SWITCH
DD	DIRECT DRIVE	L	NLINE	TAB	TESTING, ADJUSTING, BALANCING
DDC	DIRECT DIGITAL CONTROL	LAT	LEAVING AIR TEMPERATURE	T-STAT	THERMOSTAT
DIFF	DIFFUSER	LD	LINEAR DIFFUSER	TB-#	TERMINAL BOX
DL	DOOR LOUVER	LIN	LINEAR	TCP	TEMPERATURE CONTROL PANEL
DN	DOWN	LRA	LOCKED ROTOR AMPERES	TD	TEMPERATURE DIFFERENCE
DP	DEWPOINT TEMPERATURE	LPR	LOW PRESSURE RETURN	TEMP	TEMPERATURE
DR	DROP	LPS	LOW PRESSURE SUPPLY	TG	AIR TRANSFER GRILLE
DX	DIRECT EXPANSION	LVG	LEAVING	TOT	TOTAL
EF-#	EXHAUST FAN	LWT	LEAVING WATER TEMPERATURE	TN-HR	TON HOUR REFRIGERATION
EAT	ENTERING AIR TEMPERATURE	MAN	MANUAL	TR	TOP REGISTER
EER	ENERGY EFFICIENCY RATIO	MAT	MIXED AIR TEMPERATURE	TRD	TRANSFER DUCT
ES	EXHAUST GRILLE	MAX	MAXIMUM	TT	THERMOSTATIC TRAP
EHC-#	ELECTRIC HEATING COIL	MBH	1000 BTUS	TYP	TYPICAL
ENT	ENTERING	MCA	MINIMUM CIRCUIT AMPACITY	UC	UNDERCUT DOOR
HEPA	HIGH EFFICIENCY PARTICULATE FILTER	MD	MOTORIZED DAMPER	UH-#	UNIT HEATER HOT WATER
ER	EXHAUST REGISTER	MER	MECHANICAL EQUIPMENT ROOM	UV-#	UNIT VENTILATOR
ES	END SUCTION	MEZZ	MEZZANINE	VD	VOLUME DAMPER
ESP	EXTERNAL STATIC PRESSURE	MFS	MAXIMUM FUSE SIZE	VE	VOLUME EXTRACTOR
ET-#	EXPANSION TANK	MIN	MINIMUM	VFD	VARIABLE FREQUENCY DRIVE
ETR	EXISTING TO REMAIN	MTR	MOTOR	VI	VIBRATION ISOLATOR
EUH-#	ELECTRIC UNIT HEATER	MUA	MAKE-UP AIR	VSF	VARIABLE SPEED FAN SWITCH
EWT	ENTERING WATER TEMPERATURE	MV	MOTORIZED VALVE	W/	WITH
EXP-#	EXPANSION LOOP	NC	NOISE CRITERIA	WB	WET BULB
EX	EXISTING	NFA	NET FREE AREA	WPM	WATER FLOW MEASURING STATION
EXH	EXHAUST	NIC	NOT IN THIS CONTRACT	WMS	WIRE MESH SCREEN
EXT	EXTERNAL	NO	NORMALLY OPEN	WPD	WATER PRESSURE DROP
°F	DEGREES FAHRENHEIT			WT	WEIGHT (LBS)
FEB	FACE & BYPASS DAMPER			ZD	ZONE DAMPER

* ALL ABBREVIATIONS MAY NOT BE USED IN THESE DOCUMENTS.

MECHANICAL GENERAL NOTES

GENERAL

1. WHEN A CONFLICT BETWEEN THE DRAWINGS, NOTES AND/OR SPECIFICATIONS OCCUR, THE MORE STRINGENT, AND/OR LARGER QUANTITY AND/OR MORE EXPENSIVE SHALL APPLY. THE REQUIREMENTS LISTED WITHIN NOTES OR SPECIFICATIONS SHALL BE REQUIRED, PROVIDED AND INSTALLED WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT.
2. IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO PROVIDE FOR FINISHED WORK, TESTED AND READY FOR OPERATION.
3. ITEMS AND SERVICES NOT SHOWN ON DRAWINGS OR SPECIFICATIONS BUT REQUIRED TO RENDER THE WORK COMPLETE AND READY FOR OPERATION, SHALL BE PROVIDED WITHOUT ADDITIONAL COST.
4. WORK OF THIS SECTION SHALL BE GOVERNED BY THE CONTRACT DOCUMENTS. PROVIDE MATERIALS, LABOR, EQUIPMENT AND SERVICES NECESSARY TO FURNISH, DELIVER AND INSTALL ALL WORK AS SPECIFIED AND AS REQUIRED BY JOB CONDITIONS. WHERE A CONFLICT EXISTS BETWEEN THESE NOTES, THE DRAWINGS AND THE SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
5. DRAWINGS ARE DIAGRAMMATIC AND INDICATE A GENERAL ARRANGEMENT OF WORK AND ARE NOT TO BE CONSIDERED SUB-CONTRACTOR DOCUMENTS. IT IS THE INTENT OF THESE DOCUMENTS TO INCLUDE THE PROVISION AND INSTALLATION OF ALL NECESSARY WORK AND MATERIALS FOR COMPLETE, OPERATIONAL AND CODE COMPLIANT SYSTEMS BY THE CONTRACTOR. GENERAL DESIGN CONCEPTS INDICATED "MUST" BE FOLLOWED OR BETTERED. THE BID SHALL INCLUDE OFFSETS, ADDITIONAL PIPING, VALVES AND EQUIPMENT AND COMPONENTS AS REQUIRED TO MEET CONSTRUCTION CONDITIONS FOR PROPER OPERATION. DO NOT SCALE DRAWINGS. CONSULT ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPACE CONDITIONS AND ADDITIONAL REQUIREMENTS.
6. PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT GENERAL CONDITIONS AND WITH THE PROVISIONS OF ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS.
7. WORK SHALL INCLUDE ALL INCIDENTALS, LABOR, MATERIAL, EQUIPMENT, APPLIANCES, SERVICES, HOISTING, SCAFFOLDING, SUPPORTS, TOOLS, CONSUMABLE ITEMS, FEES, LICENSES, AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE WORK SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
8. STORE MATERIALS INSIDE AND PROTECTED FROM DEBRIS, WEATHER AND MOISTURE.
9. THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER AND CONTROL WIRING REQUIRED FOR EQUIPMENT OPERATION NOT SPECIFICALLY PROVIDED BY OTHERS BUT REQUIRED BY THE OWNER OR ARCHITECT/ENGINEER. THIS CONTRACTOR SHALL PROVIDE MOTOR STARTERS. COORDINATE REQUIREMENTS WITH DIVISION 26.

ALTERATION WORK AND DEMOLITION

1. ALL EQUIPMENT, DUCTWORK, PIPING, CONTROL DEVICES, ETC. TO BE REMOVED, SHALL BE DISPOSED OF, TURNED OVER TO THE OWNER, OR SALVAGED AS DIRECTED BY THE OWNER. EQUIPMENT, DUCTWORK, PIPING, CONTROL DEVICES, ETC. SHALL NOT BE REMOVED FROM THE PREMISES WITHOUT THE OWNERS APPROVAL.
2. UPON COMPLETION OF REMOVALS AND MODIFICATIONS, ALL DUCTWORK AND PIPING TO REMAIN SHALL BE PROPERLY VALVED, CAPPED AND/OR BY PASSED SUCH THAT UPON COMPLETION OF WORK ALL SYSTEMS TO REMAIN, REMAIN OPERATIONAL.
3. NO DEAD ENDS SHALL BE LEFT ON ANY DUCTWORK OR PIPING SYSTEM UPON COMPLETION OF WORK.
4. EXISTING DUCTWORK AND PIPING SYSTEMS NOT TO BE REUSED, AND NOT SPECIFICALLY NOTED FOR REMOVAL SHALL BE COMPLETELY REMOVED.
5. ALL SYSTEMS SHALL BE LEFT IN WORKING ORDER TO THE SATISFACTION OF THE OWNER UPON COMPLETION OF ALL NEW WORK.
6. ALL EXISTING UNNECESSARY DUCTWORK AND PIPING NOT RELATED TO NEW WORK SHALL BE COMPLETELY REMOVED.
7. RE-ROUTE ALL EXISTING DUCTWORK, PIPING AND SYSTEMS WHERE NECESSARY TO AVOID NEW EQUIPMENT, STRUCTURAL OR MASONRY WORK AS REQUIRED BY THE PROPOSED ALTERATIONS.
8. WHERE PORTIONS OF EXISTING DUCT SYSTEMS ARE TO REMAIN CONTRACTOR TO TAKE AIRFLOW READINGS AT ALL AIR TERMINALS ASSOCIATED WITH THE DUCT SYSTEM TO BE MODIFIED BEFORE COMMENCEMENT OF WORK AND AFTER ALTERATION WORK IS COMPLETE. AIR BALANCING WORK SHALL BE PERFORMED BY AN INDEPENDENT NEBB CERTIFIED COMPANY, NOT ASSOCIATED WITH THE CONTRACTOR. REPORTS ARE TO BE ISSUED TO THE OWNER AND ENGINEER AT BOTH OCCURRENCES. IF AS-BUILTS ARE AVAILABLE, DISCREPANCIES NOTED BETWEEN THE AS BUILT DRAWINGS AND THE INITIAL AIRFLOW READINGS ARE TO BE NOTED ON THE AIR FLOW REPORT. EXISTING AIR TERMINALS ARE TO BE BALANCED TO THE ORIGINAL READINGS AT COMPLETION OF WORK UNLESS OTHERWISE DENTIFIED.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO BE REVIEWED BY THE ENGINEER PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED FOR DUCTWORK LAYOUT, PIPING LAYOUT, SHEET METAL SHOP STANDARDS AND ALL EQUIPMENT FURNISHED.
2. ELECTRONIC DRAWING FILES SHALL BE GENERATED BY THE CONTRACTOR. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC VERSION (AUTOCAD VERSION AS REQUIRED BY THE OWNER) OR AUTOCAD VERSION 2010 IF NOT SPECIFIED.
3. PRIOR TO THE SUBMISSION AND REVIEW OF SHEET METAL SHOP DRAWINGS, THE CONTRACTOR SHALL SUBMIT FOR REVIEW SHEET METAL SHOP STANDARDS. ANY SHEET METAL SHOP DRAWINGS SUBMITTED PRIOR TO THE SUBMISSION OF THE SHOP STANDARDS SHALL BE RETURNED 'NOT REVIEWED'.

COORDINATION DRAWINGS

1. ELECTRONIC DRAWING FILES SHALL BE GENERATED BY THE CONTRACTOR. IF REQUESTED, ELECTRONIC FILES OF THE MECHANICAL FLOOR PLANS, SECTIONS AND ELEVATIONS ONLY WILL BE MADE AVAILABLE. ELECTRONIC FILES WILL BE RELEASED ONLY UPON RECEIPT OF THE SIGNED AGREEMENT FOR TRANSFER OF ELECTRONIC FILE DATA. AGREEMENT FOR TRANSFER OF BUILDING INFORMATION MODEL AND ALL FEES INDICATED THEREIN.
2. DEVELOP AND SUBMIT COORDINATION DRAWINGS AS OUTLINED.
   A. SHEET METAL, PLUMBING AND FIRE PROTECTION SHOP DRAWINGS THAT HAVE BEEN COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. DRAWINGS MUST BE RETURNED FROM ENGINEER EITHER 'REVIEWED' OR 'FURNISH AS CORRECTED' PRIOR TO BEING USED AS BASIS FOR COORDINATION DRAWINGS.
   B. AFTER SHEET METAL AND PIPING DRAWINGS HAVE BEEN REVISED PER ENGINEERS COMMENTS, REPRODUCIBLE COPIES SHALL BE SENT TO THE TRADES IN THE FOLLOWING SEQUENCE FOR THE INCLUSION OF THEIR WORK:
      -MECHANICAL SHEET METAL
      -PLUMBING PIPING
      -MECHANICAL PIPING
      -SPRINKLER PIPING
      -ELECTRICAL WORK
2. AFTER ALL TRADES HAVE INCLUDED THEIR WORK ON THE COORDINATION DRAWING AND NOTED CONFLICTS, ALL TRADES SHALL MEET TO RESOLVE CONFLICTS AND AGREE TO ACCEPTABLE SOLUTIONS. EACH TRADE SHALL SIGN COORDINATION DRAWINGS. ITEMS NOT SHOWN ON COORDINATION DRAWING IS RESPONSIBILITY OF OMITTING CONTRACTOR AND CONTRACTOR IS SUBJECT TO ADDITIONAL COSTS INCURRED BY OTHER TRADES.
3. THE ARCHITECT AND ENGINEER ARE NOT PART OF THE COORDINATION DRAWING PROCESS. THE ENGINEER WILL PROVIDE ASSISTANCE FOR NOTED CONFLICTS ONLY. COORDINATION DRAWINGS ARE NOT TO BE CONSIDERED PIPING OR DUCT SHOP DRAWINGS. THE CONTRACTOR IS REQUIRED TO SUBMIT INDIVIDUAL PIPING AND DUCTWORK SHOP DRAWINGS FOR REVIEW BY THE ENGINEER. PIPING AND DUCTWORK SHOP DRAWINGS SHALL FOLLOW THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.
4. SUBMIT FINAL SIGNED COORDINATION DRAWING TO ENGINEER FOR REVIEW. ENGINEER WILL REVIEW COORDINATION DRAWINGS FOR GENERAL ARRANGEMENT AND FOR NOTED CONFLICTS ONLY. SPECIFIC INSTALLATION REQUIREMENTS WILL BE REVIEWED ONLY IN INDIVIDUAL TRADE SHOP DRAWINGS.
5. ANY WORK FABRICATED OR INSTALLED PRIOR TO SIGN OFF BY ALL TRADES WHICH IS DEEMED TO BE IN CONFLICT WITH COORDINATION DRAWINGS SHALL BE REMOVED AND RE-INSTALLED IN CONFORMANCE WITH COORDINATION DRAWINGS.
6. EACH CONTRACTOR (MENTIONED ABOVE) IS RESPONSIBLE FOR THE COORDINATION OF HIS SUB-CONTRACTORS.
7. THE OVERALL COORDINATION OF THE COORDINATION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER IS NOT RESPONSIBLE FOR THE COORDINATION PROCESS. THE ENGINEER WILL RESPOND TO QUESTIONS THAT ARISE FROM THE COORDINATION PROCESS. DRAWINGS SUBMITTED WILL BE REVIEWED FOR CLEARLY IDENTIFIED CONFLICTS ONLY. SOLUTIONS TO CONFLICTS WILL NOT BEAR ADDITIONAL COST.

AS BUILT DRAWINGS

1. PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS REFLECTING AS INSTALLED CONDITIONS. AS-BUILT DRAWINGS SHALL INDICATE ALL INSTALLED CONDITIONS OF SYSTEMS WITHIN THIS DISCIPLINE. DRAWINGS SHALL BE OF SIMILAR SCALE AS THE CONSTRUCTION DOCUMENTS AND INCLUDE DETAILS AS NECESSARY TO CLEARLY REFLECT THE INSTALLED CONDITION. DRAWINGS SHALL BE BOUND IN A COMPLETE AND CONSECUTIVE SET. SUPPLEMENTAL SKETCHES AND LOOSE PAPERWORK WILL NOT BE ACCEPTABLE AND WILL BE RETURNED FOR REVISION. THE CONTRACTOR SHALL COMPLY WITH THE ENGINEERS COMMENTS TO PRODUCE A CLEAR AND CONCISE SET OF DRAWINGS. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC VERSION (AUTO-CAD VERSION AS REQUIRED BY THE OWNER OR AUTOCAD VERSION 2010 IF NOT SPECIFIED. NUMBER OF COPIES OF EACH AS REQUESTED BY THE OWNER.
2. PROVIDE "AS-BUILT DRAWINGS" INDICATING IN A NEAT AND ACCURATE MANNER A COMPLETE RECORD OF ALL REVISIONS OF THE ORIGINAL DESIGN OF THE WORK INDICATE THE FOLLOWING INSTALLED CONDITIONS:
3. INCLUDE ALL CHANGES AND AN ACCURATE RECORD IN AUTOCAD DRAWING OR APPROPRIATE SHOP DRAWINGS, OF ALL DEVIATIONS, BETWEEN THE WORK SHOWN AND WORK INSTALLED.
4. MAINS AND BRANCHES OF PIPING SYSTEMS, WITH VALVES AND CONTROL DEVICES LOCATED AND NUMBERED, CONCEALED UNIONS LOCATED, AND WITH ITEMS REQUIRING MAINTENANCE LOCATED (I.E., TRAPS, STRAINERS, EXPANSION COMPENSATORS, TANKS, ETC.). VALVE LOCATION DIAGRAMS, COMPLETE WITH VALVE TAG CHART.
5. EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED), DIMENSIONED FROM PROMINENT BUILDING LINES.
6. APPROVED SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.
7. CONTRACT MODIFICATIONS, ACTUAL EQUIPMENT AND MATERIALS INSTALLED.
8. SUBMIT FOR REVIEW BOUND SETS OF THE REQUIRED DRAWINGS, MANUALS AND OPERATING INSTRUCTIONS.
9. SUBMIT A COMPLETE MAINTENANCE MANUAL OF ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.

HOUSEKEEPING PADS

1. PROVIDE CONCRETE HOUSEKEEPING PADS FOR FLOOR-MOUNTED EQUIPMENT. COORDINATE EXACT LOCATIONS, DIMENSIONS, PIPING LOCATIONS, AND ANCHOR BOLT REQUIREMENTS. PROVIDE CONCRETE HOUSEKEEPING PADS UNDER ALL FLOOR MOUNTED EQUIPMENT. PADS SHALL BE CONSTRUCTED OF 3,000 PSI CONCRETE. PADS SHALL BE 4 INCHES HIGH, AND MINIMUM 4 INCHES WIDER THAN THE EQUIPMENT IN BOTH DIRECTIONS.
2. COORDINATE FLOOR DRAIN LOCATIONS WITH RESPECT TO EQUIPMENT HOUSEKEEPING PADS. PLACE DRAINS SUCH THAT EDGE OF THE FLOOR GRATE EXTENDS NO CLOSER THAN 2 INCHES FROM THE SIDE OF THE PAD. FLOOR DRAINS TO BE COORDINATED WITH PLUMBING CONTRACTOR.

HANGERS AND SUPPORT

1. SEISMIC RESTRAINT. PROVIDE SEISMIC RESTRAINT AND EXPANSION OF ALL MECHANICAL EQUIPMENT AND SYSTEMS IN ACCORDANCE WITH STATE AND FEDERAL BUILDING CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT INDICATING ALL NECESSARY COMPONENT CUTS, PLAN LOCATIONS AND CALCULATIONS FOR A COMPLETE SYSTEM. IT IS THE RESPONSIBILITY OF THE HIRED ENGINEER TO ANALYSIS AND DETERMINE ALL THE QUANTITIES AND LOCATIONS OF ALL REQUIRED VIBRATION & SEISMIC CONTROLS, DEVICES AND RESTRAINTS.
2. PROVIDE ALL NECESSARY STRUCTURAL MEMBERS INCLUDING ADDITIONAL STRUCTURAL SUPPORT TO SUPPORT PIPING AND EQUIPMENT. HANGERS AND SUPPORTS SHALL BE OF AN APPROVED DESIGN NECESSARY TO SUPPORT DUCTWORK, PIPING, EQUIPMENT AND TO KEEP IN PROPER ALIGNMENT, AND PREVENT TRANSMISSION OF INJURIOUS THRUSTS AND VIBRATIONS. IN ALL CASES WHERE HANGERS, BRACKETS, ETC., ARE SUPPORTED FROM CONCRETE CONSTRUCTION, DO NOT WEAKEN CONCRETE OR PENETRATE WATERPROOFING. ALL HANGERS AND SUPPORTS SHALL BE CAPABLE OF SCREW ADJUSTMENT AFTER EQUIPMENT AND PIPING IS ERECTED. HANGERS SUPPORTING PIPING EXPANDING INTO LOOPS, BENDS AND OFFSETS SHALL BE SECURED TO THE BUILDING STRUCTURE IN SUCH A MANNER THAT HORIZONTAL ADJUSTMENT PERPENDICULAR TO THE RUN OF PIPING SUPPORTED MAY BE MADE TO ACCOMMODATE DISPLACEMENT DUE TO EXPANSION. ALL SUCH HANGERS SHALL BE FINALLY ADJUSTED IN THE VERTICAL AND HORIZONTAL DIRECTION AS REQUIRED. HANGERS IN CONTACT WITH COPPER OR BRASS PIPE SHALL BE DIELECTRIC, COMPATIBLE WITH COPPER AND BRASS ALLOY OR PROVIDED WITH FELT SLEEVE.
3. PROVIDE ADDITIONAL SUPPORT FOR DUCTWORK PIPING AND EQUIPMENT WHEN DECK IS NOT CAPABLE OF SUPPORT.
4. BEAM CLAMPS - HANGERS SUPPORTED FROM STEEL SHALL BE CENTER LOADING BEAM CLAMPS FOR HANGERS SUPPORTING PIPES 2 INCHES FOR PIPES 2-1/2 INCHES AND LARGER, I BEAM CLAMPS SHALL BE FORGED STEEL. 'C' CLAMPS ARE NOT TO BE USED.
5. PROVIDE AND INSTALL EXPANSION COMPENSATION FOR ALL PIPING. SUBMIT PLANS, CALCULATIONS AND EQUIPMENT DATA.

MECHANICAL PHASING NOTES

1. THIS PROJECT CONSISTS OF MULTIPLE PHASES OF CONSTRUCTION OVER A SPECIFIED TIME PERIOD. PROVIDE ALL WORK NECESSARY TO KEEP EXISTING SYSTEMS IN SAFE OPERATION. PROVIDE ISOLATION (SHUTOFF) VALVES AT ALL CONNECTION POINTS TO EXISTING SYSTEMS.
2. CONTRACTOR TO COORDINATE WITH CONSTUCTION MANAGER. CONSTRUCTION MANAGER WILL BE DICTATING THE PHASING SCHEDULE OF THIS PROJECT.
3. WORK SHALL BE PHASED TO ALLOW OWNER TO CONTINUE BUSINESS OPERATIONS DURING THE CONSTRUCTION PERIOD. COORDINATE WORK WITH OWNER AND GENERAL CONTRACTOR TO ALLOW SUFFICIENT TIME TO RELOCATE OPERATIONS WITHIN THE BUILDING PRIOR TO COMMENCING WORK IN AREAS AFFECTED BY DEMOLITION OR NEW CONSTRUCTION.
4. WORK REQUIRING INTERRUPTION OF ESSENTIAL BUILDING SERVICES SHALL BE PERFORMED DURING UNOCCUPIED PERIODS (AFTER BUSINESS HOURS). ESSENTIAL SERVICES SHALL INCLUDE BUT NOT BE LIMITED TO VENTILATION, WATER AND SEWER SERVICE, POWER, TELECOMMUNICATIONS. HEATING AND AIR CONDITIONING SHALL BE CONSIDERED TO BE ESSENTIAL WHEN CONDITIONS WILL CAUSE TEMPERATURES IN THE BUILDING TO FALL BELOW 68°F OR EXCEED 78°F.
5. CONTRACTOR TO PROVIDE TEMPORARY HEATING DURING PHASES OF CONSTRUCTION OCCURRING DURING COLDER SEASONS. CONTRACTOR TO PROVIDE ALL NECESSARY COMPONENTS AND DEVICES.

MECHANICAL DEMOLITION NOTES

1. COORDINATE PHASING OF DEMOLITION WITH C.M./G.C. AND PROPOSED CONSTRUCTION SCHEDULE TO MAINTAIN MECHANICAL SERVICES (HEATING, TEMPERATURE CONTROLS, EXHAUSTS, MAKE UP AIR ETC.) TO OCCUPIED AREAS OF THE BUILDING DURING CONSTRUCTION.
2. THE EXISTING FACILITY WILL BE OCCUPIED AND IN OPERATION DURING THE PERFORMANCE OF THE WORK.
3. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING PIPING OR DUCTWORK WHICH MAY CAUSE DISRUPTION TO OCCUPIED FACILITIES, CONFER WITH THE OWNER, AND SCHEDULE A MUTUALLY AGREEABLE PERIOD OF INTERRUPTION.
4. WHERE REPLACEMENT, RELOCATION OR MODIFICATION OF EXISTING EQUIPMENT IS INDICATED, PROVIDE AND MAINTAIN ALL TEMPORARY SERVICES, CONNECTIONS, CONTROLS, AND ANY OTHER MATERIALS AND APPURTENANCES REQUIRED TO MAINTAIN SERVICES TO OCCUPIED AREAS.
5. NO WORK SHALL BE LEFT INCOMPLETE, NOR ANY HAZARDOUS SITUATION CREATED, WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS, AT NO TIME SHALL THE WORK INTERFERE WITH OR CUT OFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNERS PRIOR WRITTEN PERMISSION.
6. THE OWNER RESERVES THE RIGHT TO OPERATE ALL EXISTING MECHANICAL EQUIPMENT UNTIL THE NEW SYSTEMS COME ON LINE.
7. IT IS REQUIRED THAT THE WORK INDICATED AND/OR SPECIFIED SHALL BE CARRIED OUT WITH A MINIMUM OF INTERFERENCE TO THE ESTABLISHED OPERATIONS OF THE BUILDING.
8. REMOVED MATERIALS SHALL BE DISPOSED OF USING LICENSED CARTING SERVICE.
9. HAZARDOUS MATERIALS - SHALL BE DISPOSED OF BY AN EPA APPROVED, LICENSED DISPOSAL SERVICE. CONTRACTOR SHALL OBTAIN AND HAVE ON FILE, AFFIDAVIT, AND RECEIPTS STATING HOW AND WHERE THE WASTE WAS DISPOSED OF OR CONVERTED.
10. IT IS THE INTENTION OF THESE DEMO DRAWINGS TO INDICATE GENERAL SYSTEMS AND MATERIALS TO BE REMOVED. CONTRACTOR SHALL REMOVE ALL OBSOLETE PIPING, DUCTWORK, EQUIPMENT, CONTROLS, ETC, INDICATED O

GENERAL NOTES

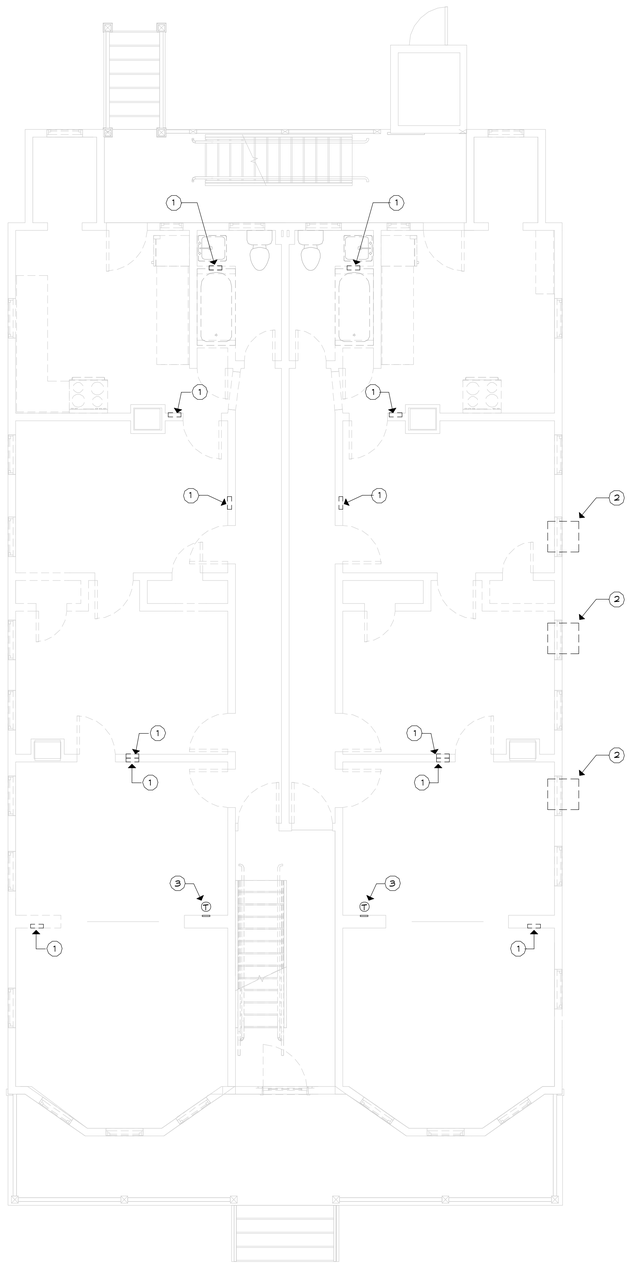
1. REFER TO DRAWING M001 FOR ADDITIONAL MECHANICAL NOTES.
2. PROJECT CONSIST OF MULTIPLE PHASES. REFER TO DRAWING M001 FOR MECHANICAL PHASING NOTES.
3. ALL EXISTING DUCTWORK, ASSOCIATED DUCT RISERS, SUPPORTS, HANGERS, DIFFUSERS, GRILLES, ETC. SHALL BE REMOVED UNLESS OTHERWISAE NOTED.
4. CONTRACTOR TO PROVDE ALL PENETRATIONS WITHIN WALLS, FLOORS, CEILINGS, ROOF, ETC AS NECESSARY TO ACCOMMODATE NEW WORK.

DEMOLITION NOTES

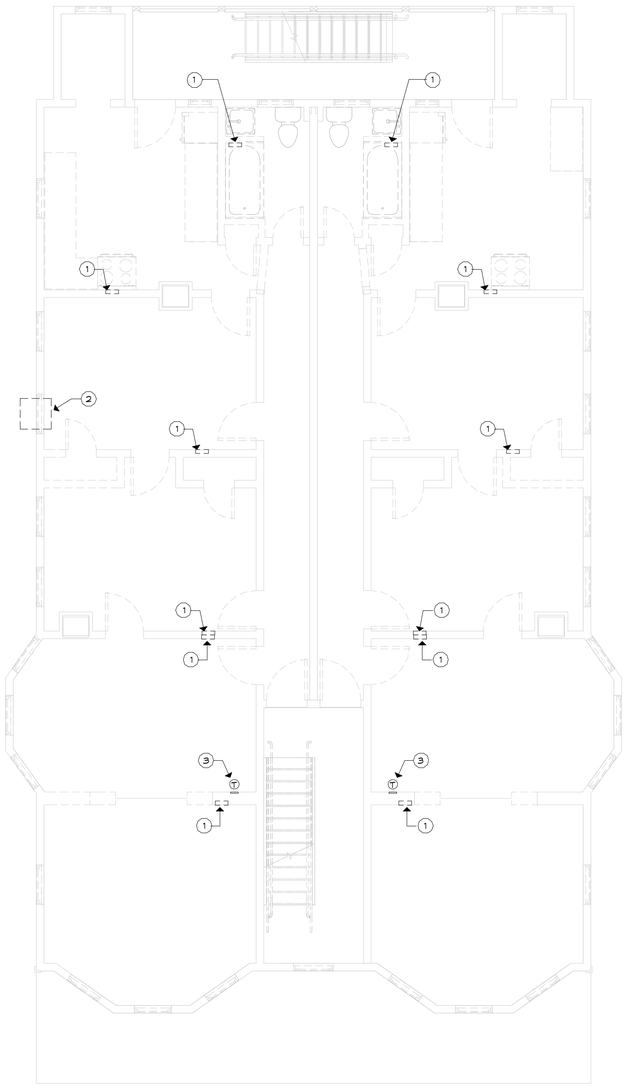
① EXISTING DIFFUSER, DAMPER AND ASSOCIATED DUCTWORK SHALL BE REMOVED COMPLETELY BACK TO THE UNIT LOCATED N THE BASEMENT.

② EXISTING WINDOW MOUNTED AC UNIT AND CONTROLS TO BE REMOVED COMPLETELY.

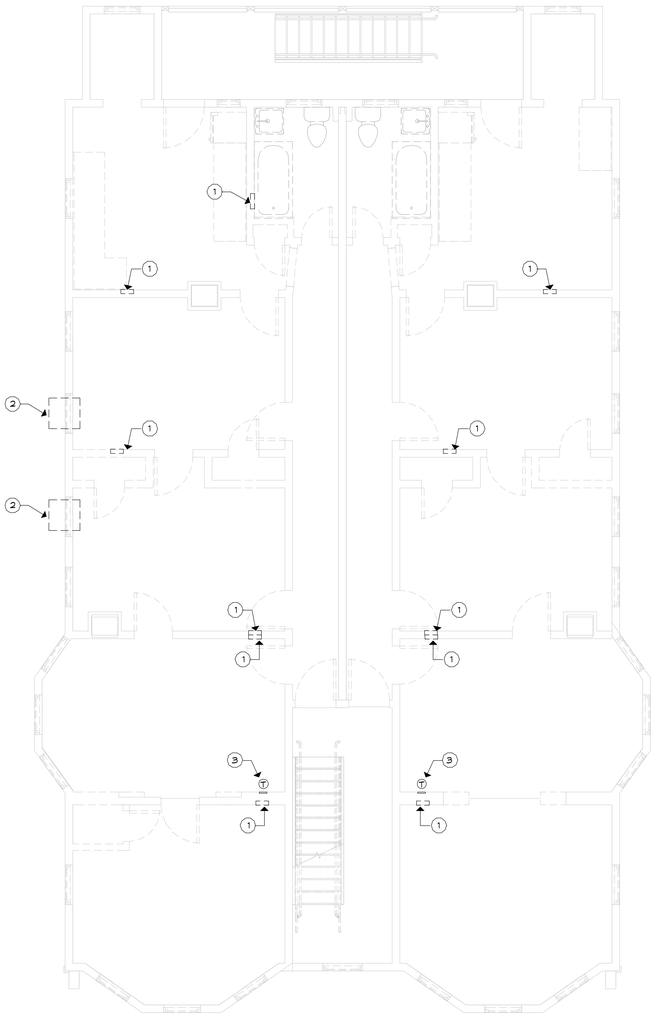
③ EXISTING WALL MOUNTED THERMOSTAT TO BE REMOVED COMPLETELY



FIRST FLOOR MECHANICAL DUCT DEMO PLAN — 1 M010
SCALE 1/4" = 1'-0"



SECOND FLOOR MECHANICAL DUCT DEMO PLAN — 2 M010
SCALE 1/4" = 1'-0"



THIRD FLOOR MECHANICAL DUCT DEMO PLAN — 3 M010
SCALE 1/4" = 1'-0"

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
DEMOLITION LEVELS 1,2&3
FLOOR PLANS - MECHANICAL

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: WJY
Project Number: 21.081

Drawing Number: M010

GENERAL NOTES

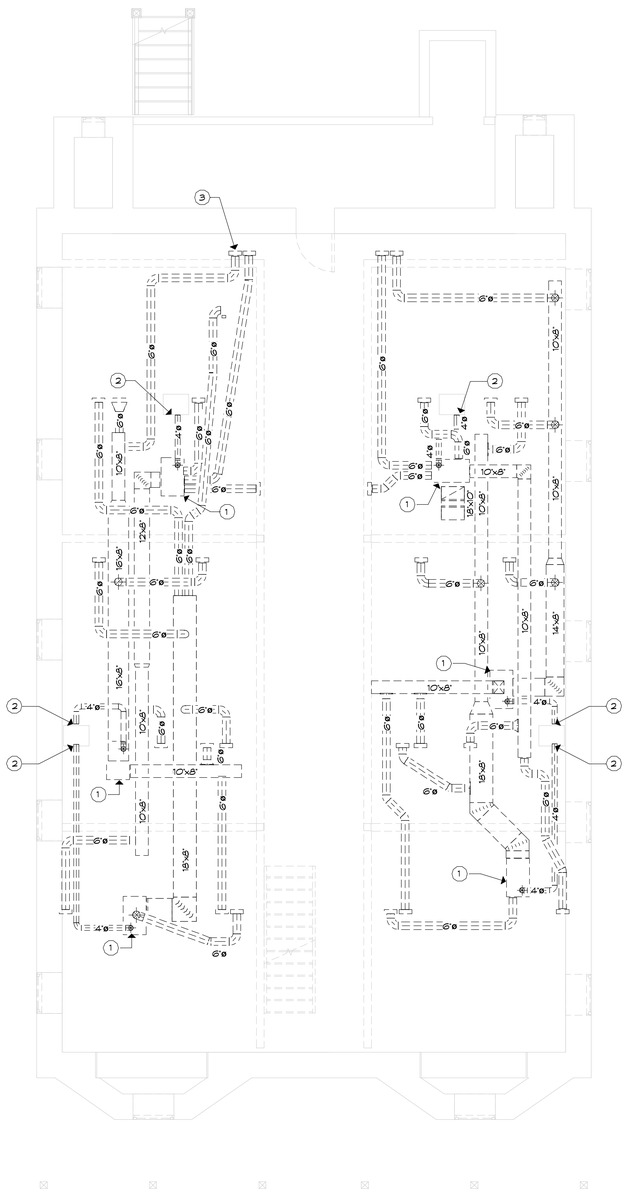
1. REFER TO DRAWING M001 FOR ADDITIONAL MECHANICAL NOTES.
2. PROJECT CONSIST OF MULTIPLE PHASES. REFER TO DRAWING M001 FOR MECHANICAL PHASING NOTES.
3. ALL EXISTING DUCTWORK, ASSOCIATED DUCT RISERS, SUPPORTS, HANGERS, DIFFUSERS, GRILLES, ETC. SHALL BE REMOVED UNLESS OTHERWISAE NOTED.
4. CONTRACTOR TO PROVIDE ALL PENETRATIONS WITHIN WALLS, FLOORS, CEILINGS, ROOF, ETC AS NECESSARY TO ACCOMMODATE NEW WORK.

DEMOLITION NOTES

① EXISTING GAS-FIRED FURNACE AND ASSOCIATED DUCTWORK, COMBUSTION AIR DUCT, CONTROLS, ETC. SHALL BE REMOVED COMPLETELY UP TO AND INCLUDING THE DIFFUSERS LOCATED ON THE FLOOR ABOVE.

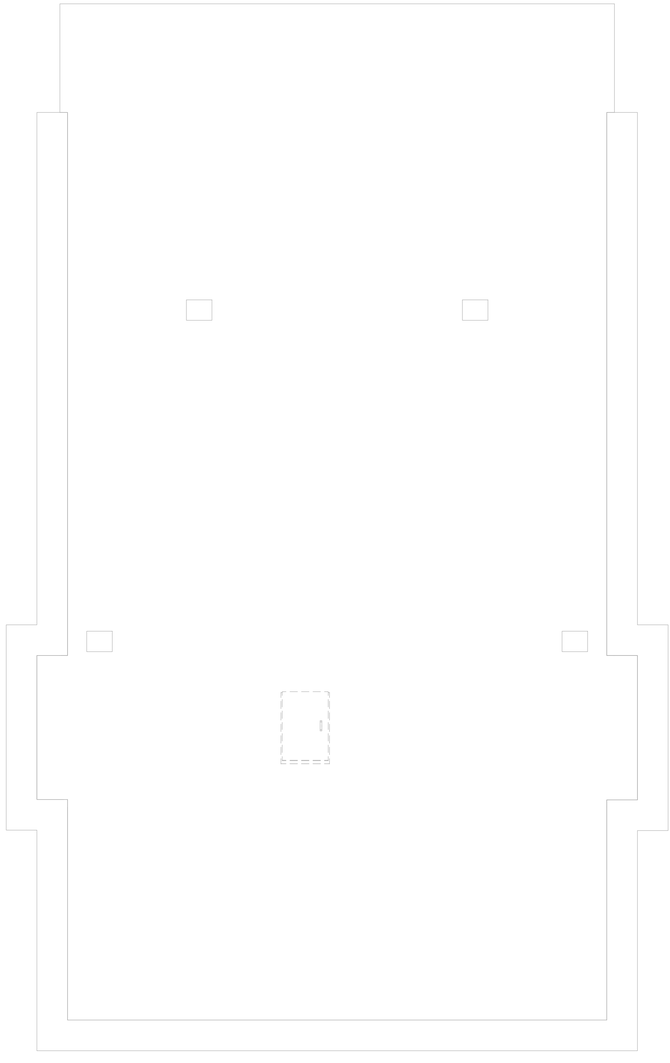
② CUT & CAP EXISTING COMBUSTION AIR DUCT AT CHIMNEY.

③ TYPICAL DUCT RISER TO BE REMOVED.



BASEMENT MECHANICAL DUCT DEMO PLAN
SCALE 1/4" = 1'-0"
1 M011

ATTIC MECHANICAL DUCT DEMO PLAN
SCALE 1/4" = 1'-0"
2 M011



ROOF MECHANICAL DUCT DEMO PLAN
SCALE 1/4" = 1'-0"
3 M011

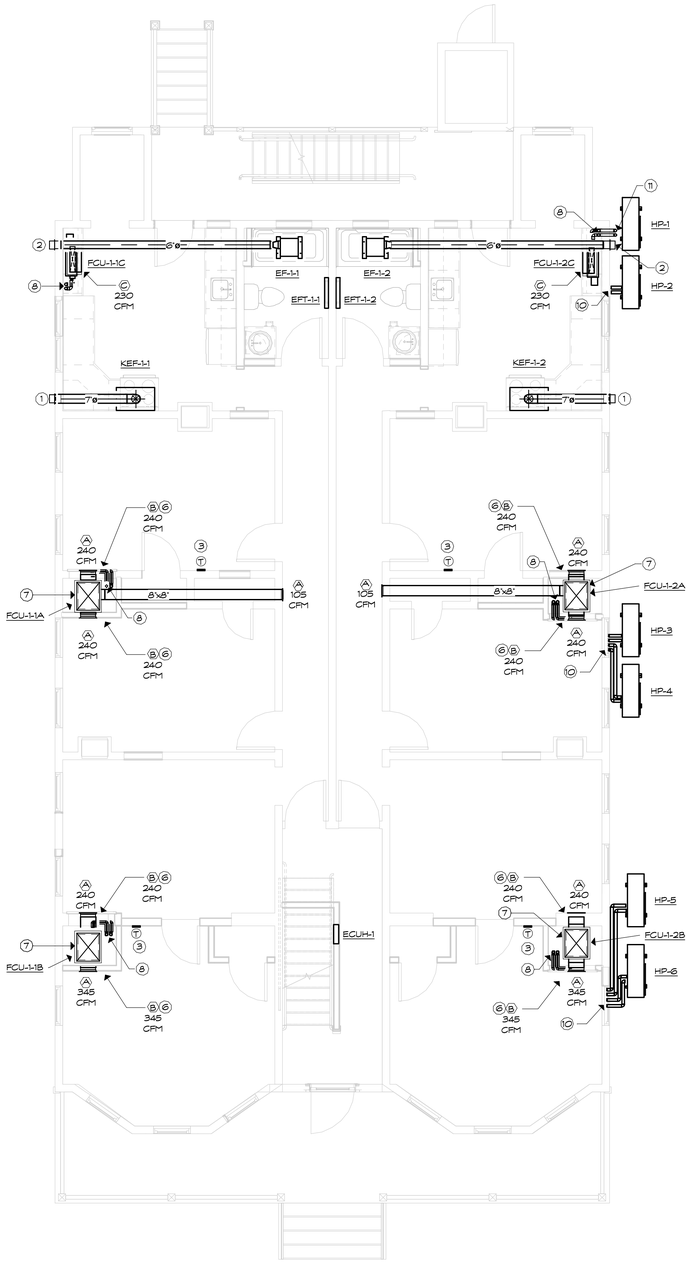
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Revision:	Description:	Date:	Revised By:
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Drawing Title:
DEMOLITION BASEMENT, ATTIC & ROOF PLANS - MECHANICAL

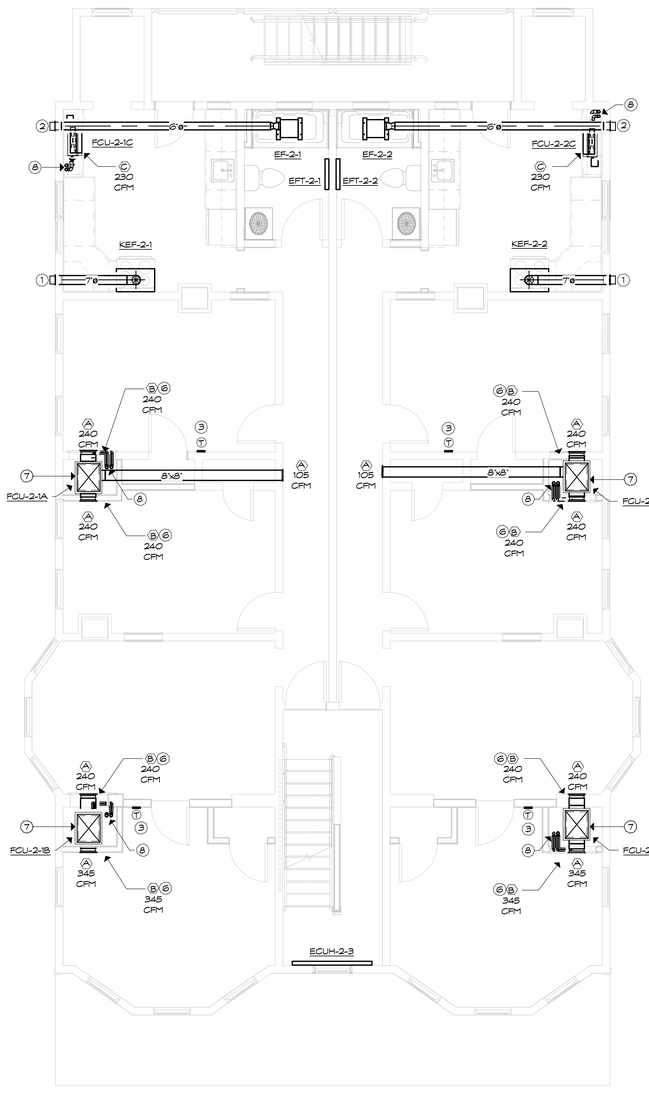
Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: WJY
Project Number: 21.081
Drawing Number: M011



FIRST FLOOR MECHANICAL DUCT PLAN

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

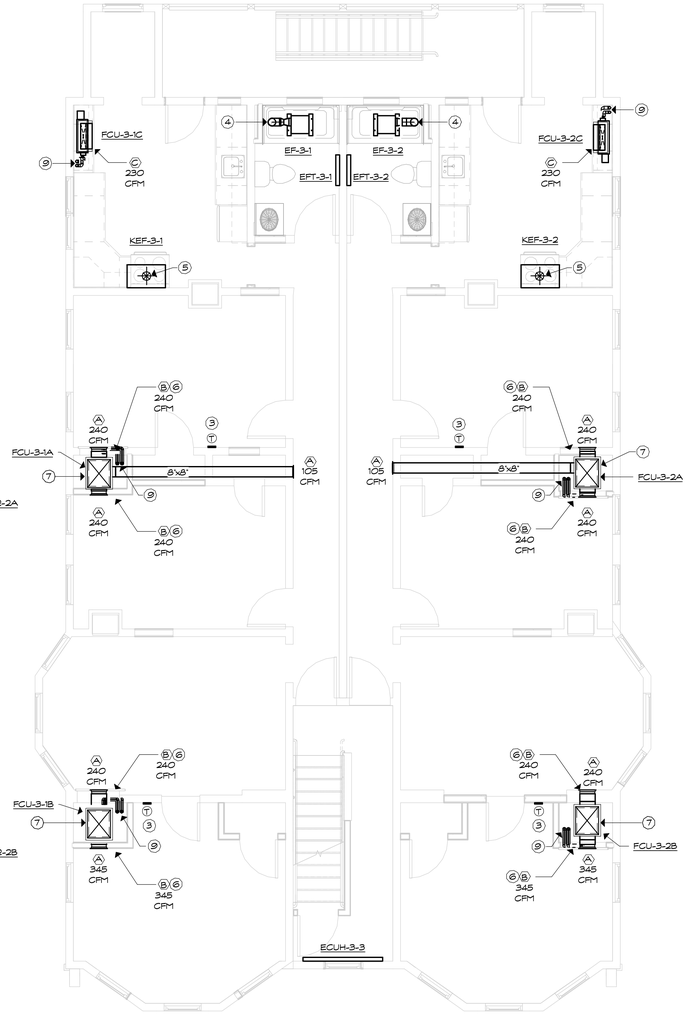
1 M100



SECOND FLOOR MECHANICAL DUCT PLAN

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

2 M100



THIRD FLOOR MECHANICAL DUCT PLAN

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

3 M100

GENERAL NOTES

1. REFER TO DRAWING M001 FOR ADDITIONAL MECHANICAL NOTES.
2. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR TO HIRE A CERTIFIED TESTING & BALANCING (TAB) CONTRACTOR TO BALANCE ALL NEW HVAC EQUIPMENT (EF-#) AND ASSOCIATED TO AIR FLOWS (CFM) INDICATED ON DRAWINGS. CONTRACTOR TO ALSO REFER TO SPECIFICATION SECTION 230593 "TESTING, ADJUSTING, AND BALANCING FOR HVAC" FOR ADDITIONAL REQUIREMENTS.
3. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR TO HIRE A CERTIFIED TESTING & BALANCING (TAB) CONTRACTOR TO BALANCE ALL NEW HVAC EQUIPMENT (FCU-#) AND ASSOCIATED DIFFUSERS / GRILLES TO AIR FLOWS (CFM) INDICATED ON DRAWINGS. CONTRACTOR TO ALSO REFER TO SPECIFICATION SECTION 230593 "TESTING, ADJUSTING, AND BALANCING FOR HVAC" FOR ADDITIONAL REQUIREMENTS.
4. ALL NEW DUCTWORK & PIPING SHALL BE INSULATED AND LABELED. REFER TO SCHEDULES FOR INSULATION CHART. LABELS SHALL BE SETON CODE SELF-ADHESIVE DUCT MARKERS. LABELS SHALL BE LOCATED EVERY 20 FEET AND ON BOTH SIDES OF WALL PENETRATIONS.
5. CONTRACTOR TO PROVIDE ALL PENETRATIONS WITHIN WALLS, FLOORS, CEILINGS, ROOF, ETC AS NECESSARY TO ACCOMMODATE NEW WORK.
6. CONTRACTOR SHALL PROVIDE ALL CONTROL DEVICES, RELAYS, SENSORS, PANELS, TRANSFORMERS, LOW VOLTAGE WIRING, PROGRAMMABLE CONTROLLERS AND PROGRAMMING NECESSARY TO ACHIEVE THE SEQUENCE OF OPERATION IN SPECIFICATION SECTION 230993 - 'SEQUENCE OF OPERATION FOR HVAC CONTROLS'.
7. RUN REFRIGERATION PIPING FROM INDOOR FAN COIL UNIT (FCU-#) TO RESPECTIVE OUTDOOR HEAT PUMP (HP-#). ROUTE AND SIZE PIPING PER EQUIPMENT MANUFACTURERS RECOMMENDATIONS.
8. REFER TO PLUMBING DRAWINGS FOR CONDENSATE PIPING.
9. CONTRACTOR TO MAINTAIN EQUIPMENT MANUFACTURERS REQUIRED SERVICE CLEARENCES.

KITCHEN HOOD NOTES

1. PROVIDE AND INSTALL A UL LISTED UNDER THE CABINET KITCHEN RANGE EXHAUST FAN DUCTED TO THE EXTERIOR
2. DUCTWORK SHALL CONNECT TO THE TOP OF THE EXHAUST FAN IN THE VERTICAL ORIENTATION AND BE ROUTED UP THRU THE CABINET. EXHAUST DUCT SHALL TRANSITION HORIZONTALLY AFTER THE TOP OF CABINET. ROUTE EXHAUST PARALLEL TO THE WALL AND LOCATE TIGHT TO THE CEILING. CONCEAL DCTWORK WITHIN A SOFFIT. EXHAUST SHALL THEN TERMINATE THRU THE EXTERIOR WALL WITH AN ALUMINUM WALL CAP.
3. VERIFY IN FIELD ALL CONDITIONS AND CUT / MODIFY CABINET AS REQUIRED TO ACCOMODATE INSTALLATION.
4. REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL NOTES

1. PROVIDE BROAN WALL TERMINATION HOOD, MODEL 647.
2. PROVIDE GREENHECK WALL TERMINATION HOOD, MODEL WC-8 WITH BACKDRAFT DAMPER AND BUILT-IN BIRDSCREEN.
3. PROVIDE NEW DDC WALL MOUNTED THERMOSTAT.THERMOSTAT SHALL BE LABELED W/ ASSOCIATED HVAC EQUIPMENT (FCU-#) PRIOR TO OCCUPANCY.
4. PROVIDE 6" ROUND DUCT UP TO ROOF CAP.
5. PROVIDE 7" ROUND DUCT UP TO ROOF CAP.
6. BOTTOM OF WALL MOUNTED RETURN GRILLE IS LOCATED @ A.F.F. DIRECTLY UNDER THE SUPPLY GRILLE SHOWN ON PLAN. REFER TO ARCHITECTURAL DRAWINGS FOR WALL ACCESS PANEL DETAIL.
7. CONTRACTOR TO FIELD FABRICATE UNIT STAND AND TOP SUPPLY PLENUM. STAND SHALL BE CONSTRUCTED OF 1-1/4"X1-1/4"X1/8" ANGLE IRON AND SHALL BE 20" HIGH TO ACCOMMODATE RETURN AIR PATH TO UNIT. ALL SUPPLY PLENUM LOCATED ON TOP OF THE UNIT SHALL BE FULL LENGTH AND WIDTH OF THE UNIT BY APPROXIMATELY 30" HIGH TO ACCOMMODATE DUCTWORK CONNECTIONS TO ASSOCIATED WALL MOUNTED SUPPLY GRILLES. CONTRACTOR TO VERIFY PLENUM HEIGHT REQUIRED IN FIELD PRIOR TO FABRICATION. REFER TO DETAILS ON DRAWING M202.
8. REFRIGERANT PIPING UP AND DOWN.
9. REFRIGERANT PIPING DOWN.
10. REFER TO DRAWING M101 FOR CONTINUATION OF PIPING. (TYPICAL)
11. PROVIDE LINE SET COVER FOR REFRIGERANT PIPING ALONG THE EXTERIOR WALL OF THE BUILDING. REFRIGERANT PIPING PENETRATES THE EXTERIOR WALL APPROXIMATELY 8' A.F.F. ON THE FIRST FLOOR AND RUNS DOWN THE EXTERIOR OF THE BUILDING TO HP-1 LOCATED AT GRADE.

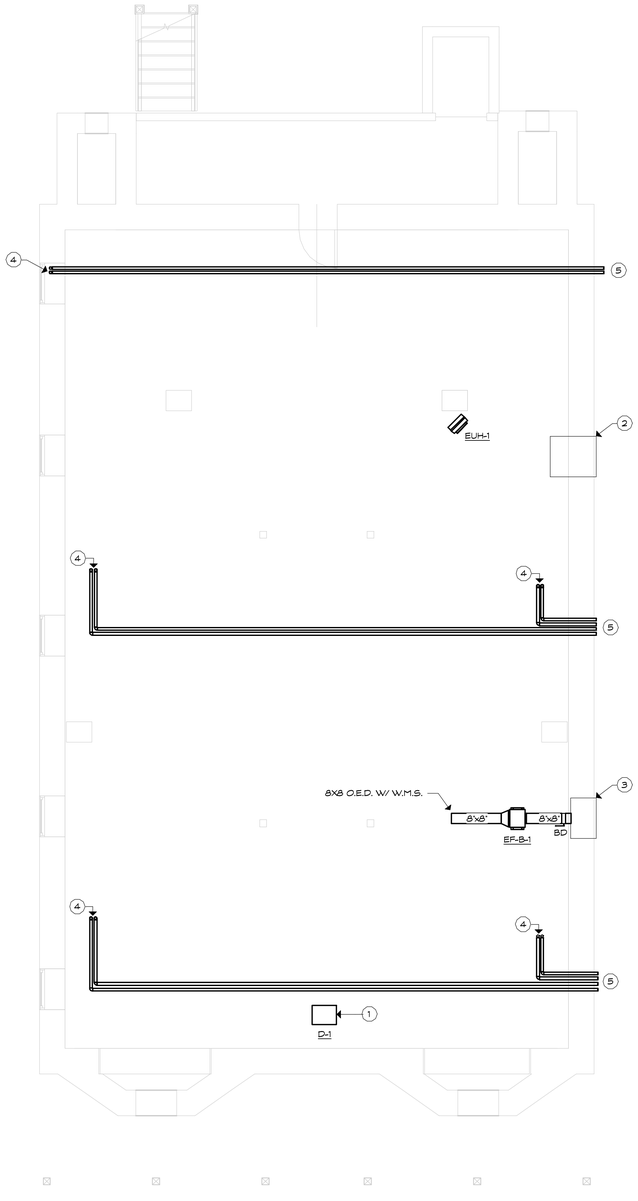
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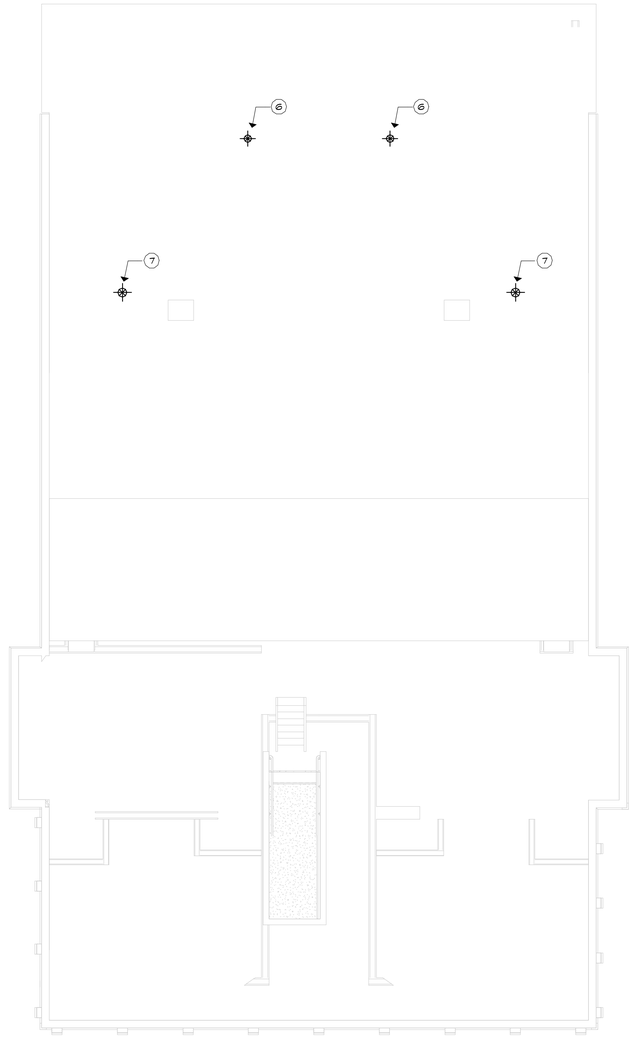
Revision:	Description:	Date:	Revised By:
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Drawing Title:
LEVEL 1,2&3 FLOOR PLANS - MECHANICAL

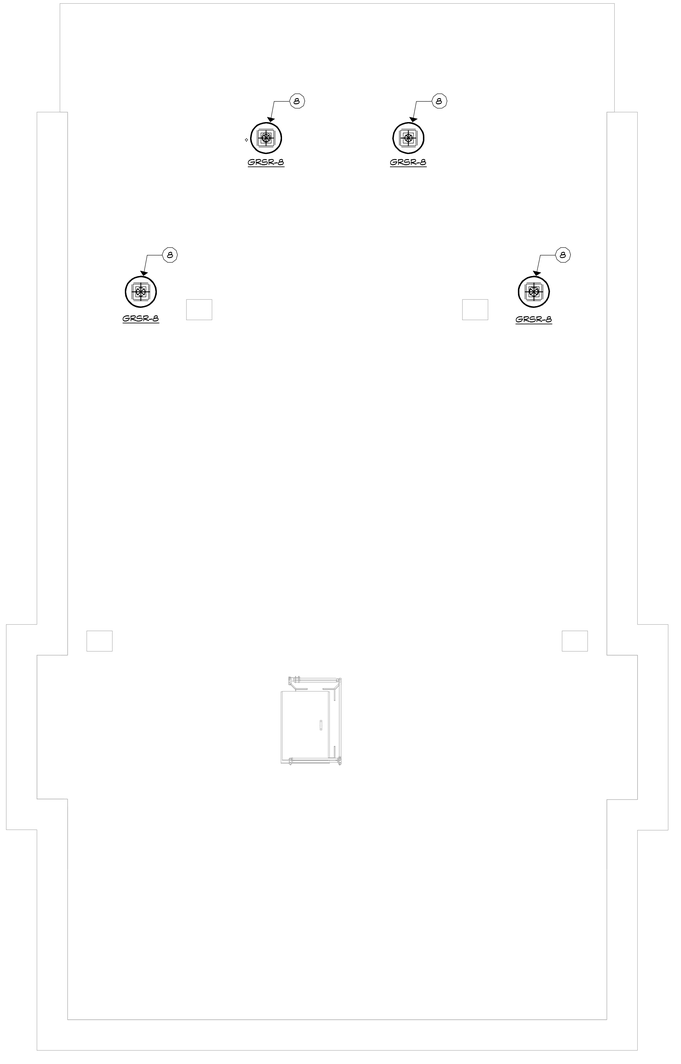
Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
Project Number: 21.081
Drawing Number: M100



BASEMENT MECHANICAL DUCT PLAN
SCALE: 1/4" = 1'-0"
1 M101



ATTIC MECHANICAL DUCT PLAN
SCALE: 1/4" = 1'-0"
2 M101



ROOF MECHANICAL DUCT PLAN
SCALE: 1/4" = 1'-0"
3 M101

GENERAL NOTES

1. REFER TO DRAWING M001 FOR ADDITIONAL MECHANICAL NOTES.
2. ALL NEW DUCTWORK & PIPING SHALL BE INSULATED AND LABELED. REFER TO SCHEDULES FOR INSULATION CHART. LABELS SHALL BE SETON CODE SELF-ADHESIVE DUCT MARKERS. LABELS SHALL BE LOCATED EVERY 20 FEET AND ON BOTH SIDES OF WALL PENETRATIONS.
3. CONTRACTOR TO PROVIDE ALL PENETRATIONS WITHIN WALLS, FLOORS, CEILINGS, ROOF, ETC AS NECESSARY TO ACCOMMODATE NEW WORK.
4. RUN REFRIGERATION PIPING FROM INDOOR FAN COIL UNIT (FCU-#) TO RESPECTIVE OUTDOOR HEAT PUMP (HP-#). ROUTE AND SIZE PIPING PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
5. REFER TO PLUMBING DRAWINGS FOR CONDENSATE PIPING.

MECHANICAL NOTES

① PROVIDE KEYSTONE ENERGY STAR 95-PINT DEHUMDIFIER WITH BUILT IN PUMP (D-1), MODEL KSTAD95TPA 115V, 680W, 11.8 AMPS, 95 PINTS OF MOISTURE FROM THE AIR PER DAY, ELECTRONIC CONTROLS WITH LED DISPLAY AND 24 HOUR TIMER, AUTO-RESTART WITH POWER OUTAGE SETTING SAVER, SETTINGS (NORMAL, TURBO & AUTO-DEFROST), FULL BUCKET ALERT WITH AUTOMATIC SHUT-OFF AND REMOVABLE FILTER WITH CLEAN FILTER ALERT. CONTRACTOR SHALL PIPE CONDENSATE TO EXTERIOR OF BUILDING. CONTRACTOR TO COORDINATE LOCATIONS OF UNIT AND CONDENSATE DISCHARGE WITH OWNER.

② PROVIDE 30X12 GREENHECK INTAKE LOUVER, MODEL ESD-435 WITH BIRDSCREEN. CONTRACTOR TO FIELD FABRICATE OUTSIDE AIR PLENUM. PLENUM SHALL BE 32LX14"H AND EXTEND 20" INTO THE BUILDING. REFER TO DETAIL DRAWINGS.

③ PROVIDE 30X12 GREENHECK EXHAUST LOUVER, MODEL ESD-435 WITH BIRDSCREEN. CONTRACTOR TO FIELD FABRICATE EXHAUST AIR PLENUM. PLENUM SHALL BE 32"LX14"HX12"D. REFER TO DETAIL DRAWINGS.

④ REFRIGERANT PIPING UP TO UNITS ON FLOORS ABOVE.

⑤ REFER TO DRAWING M100 FOR CONTINUATION OF PIPING TO EXTERIOR OF BUILDING.

⑥ NEW 4" EXHAUST DUCT UP TO ROOF CAP AND DOWN TO CEILING MOUNTED EXHAUST FAN.

⑦ NEW 7" EXHAUST DUCT UP TO ROOF CAP AND DOWN TO KITCHEN HOOD.

⑧ PROVIDE GREENHECK ROOF CAP MODEL GRSR-8 WITH BACKDRAFT DAMPER, BUILT-IN BIRDSCREEN AND ROOF CURB.

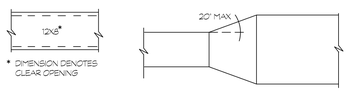
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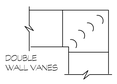
Drawing Title:
BASEMENT, ATTIC & ROOF PLANS - MECHANICAL

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: Author
Project Number: 21.081
Drawing Number: M101



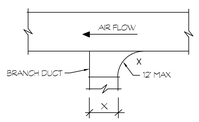
ACOUSTICALLY LINED DUCT

TRANSITION

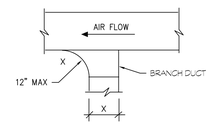


ONLY ACCEPTABLE WERE SPACE DOES NOT PERMIT THE USE OF RADIUS ELBOWS

SQUARE ELBOW



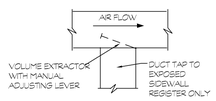
SUPPLY TAP



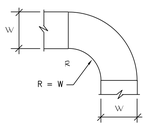
RETURN TAP

NOTE:

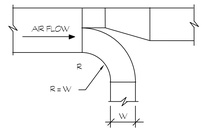
SPECIFICATIONS EXCEED SMACNA STANDARDS IN SOME INSTANCES. SMACNA SHALL BE CONSIDERED THE MINIMUM STANDARD UNLESS OTHERWISE NOTED ON THE DRAWINGS, DETAILS OR IN THE SPECIFICATIONS.



TAKE-OFF TO EXPOSED SIDEWALL REGISTER



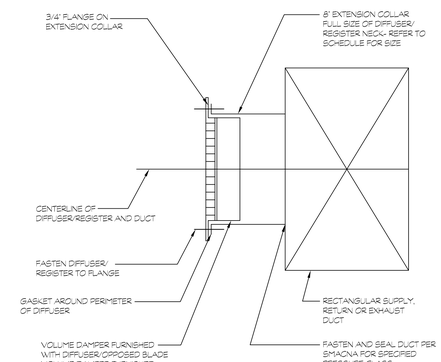
RADUS ELBOW



SUPPLY SPUT

DUCT CONSTRUCTION DETAIL

NOT TO SCALE

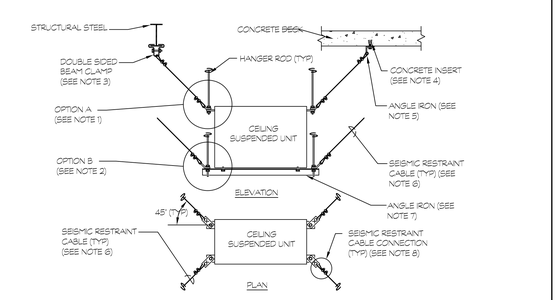


NOTES:

1. INSTALL DIFFUSER/REGISTER PER SMACNA AND MANUFACTURERS RECOMMENDATIONS.
2. ADJUST DIFFUSER VANES TO ANGLE INDICATED ON SCHEDULE AND MANUFACTURERS RECOMMENDATIONS.

TYPICAL RECTANGULAR EXPOSED DUCT SUPPLY, RETURN/EXHAUST REGISTER

NOT TO SCALE



NOTES:

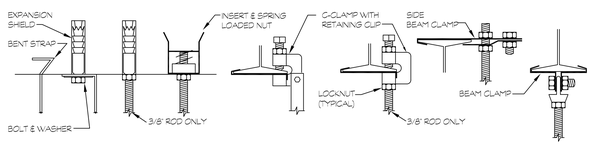
1. OPTION A APPLIES TO EQUIPMENT HAVING TOP OR SIDE ATTACHMENT.
2. OPTION B APPLIES TO EQUIPMENT SUPPORTED FROM THE BOTTOM OF THE EQUIPMENT.
3. USE DOUBLE SIDED BEAM CLAMPS FOR ATTACHMENT TO STRUCTURAL STEEL OR JOISTS.
4. USE CONCRETE INSERTS FOR ATTACHMENT TO CONCRETE DECK TYPE CONSTRUCTION.
5. ANGLE IRON SHALL BE 2-1/2"X2"X1/4" ANGLE 2' WIDE WITH (2) 3/16" HOLES FOR FASTENING TO CONCRETE DECK.
6. SIZE CABLE BASED ON SEISMIC HAZARD LEVEL SPECIFIED. PROVIDE CABLE WITH 1/2" OF SLACK WHERE CABLES ARE USED WITH VIBRATION ISOLATED EQUIPMENT.
7. PROVIDE 2 ANGLES FOR BOTTOM SUPPORT OF UNIT (OPTION B). PROVIDE (4) 2"x 2"x 2"x1/4" ANGLES WELDED TO BOTTOM SUPPORT ANGLES AND TO UNIT. (THIS IS NOT REQUIRED WHERE UNIT IS PROVIDED WITH BOTTOM MOUNTING HOLES).
8. REFER TO SMACNA-SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS' FOR CABLE CONNECTION DETAIL.

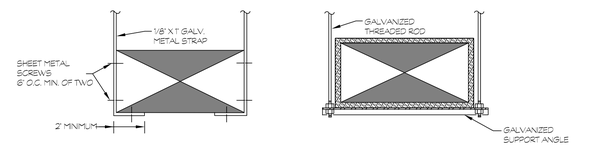
TYPICAL SEISMIC BRACING FOR SUSPENDED EQUIPMENT DETAIL

NOT TO SCALE

DUCT WIDTH	SUPPORT ANGLE OR EQUIV. CHANNEL	ROD DIA	MAXIMUM SPACING	MAXIMUM AREA *
25" TO 30"	1 1/2" X 1 1/2" X 1/8"	3/8"	8'-0" O.C.	4 SQ. FT.
31" TO 42"	1 1/2" X 1 1/2" X 1/8"	3/8"	8'-0" O.C.	10 SQ. FT.
43" TO 60"	1 1/2" X 1 1/2" X 1/8"	1/2"	8'-0" O.C.	10 SQ. FT.
61" TO 84"	2" X 2" X 1/4"	1/2"	4'-0" O.C.	-
85" AND UP	2" X 2" X 1/4"	1/2"	4'-0" O.C.	-

* REDUCE SPACING TO NEXT SMALLER INTERVAL IF DUCT AREA EXCEEDS MAXIMUM

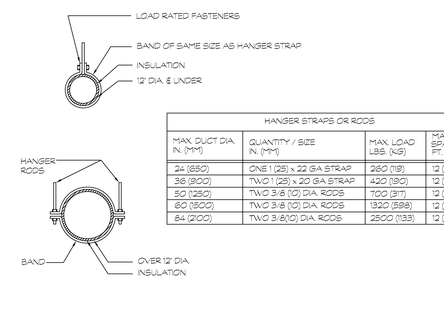




25" OR WIDER

DUCT SUPPORT DETAIL

NOT TO SCALE



HANGER STRAPS OR RODS			
MAX. DUCT DIA IN. (MM)	QUANTITY / SIZE IN. (MM)	MAX. LOAD LBS. (KG)	MAX SPACING FT. (M)
24 (650)	ONE 1 (25) x 22 GA STRAP	260 (118)	12 (3.7)
36 (900)	TWO 1 (25) x 20 GA STRAP	420 (190)	12 (3.7)
50 (1250)	TWO 3/8 (10) DIA RODS	700 (317)	12 (3.7)
60 (1500)	TWO 3/8 (10) DIA RODS	1320 (598)	12 (3.7)
84 (2100)	TWO 3/8(10) DIA RODS	2500 (1133)	12 (3.7)

NOTE:

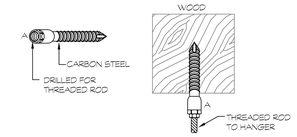
1. TABULATED DATA FROM SMACNA ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.

ROUND DUCTWORK HANGER DETAIL

NOT TO SCALE

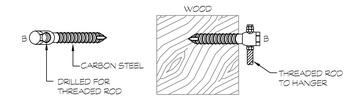
VERTICAL MOUNT

PERFORMANCE VALUES	
WOOD TYPE	AVG. ULTIMATE PULL-OUT VALUE (LBS)
DOUGLAS FIR	2457
SOUTHERN PINE	2162
HEM FIR	1788



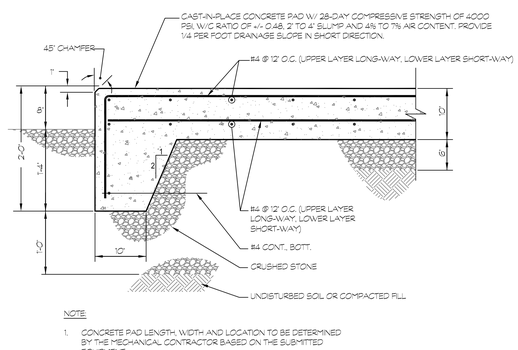
HORIZONTAL MOUNT

PERFORMANCE VALUES	
WOOD TYPE	AVG. ULTIMATE PULL-OUT VALUE (LBS)
DOUGLAS FIR	1801
SOUTHERN PINE	1480
HEM FIR	1451



THREADED ROD ANCHORING SYSTEM

NOT TO SCALE

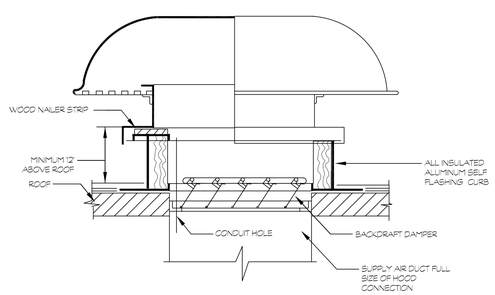


NOTE:

1. CONCRETE PAD LENGTH, WIDTH AND LOCATION TO BE DETERMINED BY THE MECHANICAL CONTRACTOR BASED ON THE SUBMITTED EQUIPMENT.

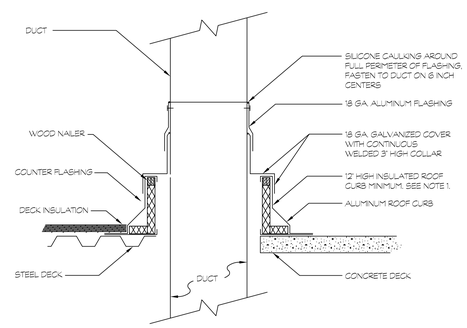
CONCRETE PAD AT GRADE DETAIL

NOT TO SCALE



ROOF INTAKE/EXHAUST INSTALLATION DETAIL

NOT TO SCALE



NOTES:

1. COORDINATE CURB STEP HEIGHT WITH ROOF DECK INSULATION THICKNESS

DUCT PENETRATION THROUGH ROOF DETAIL

NOT TO SCALE

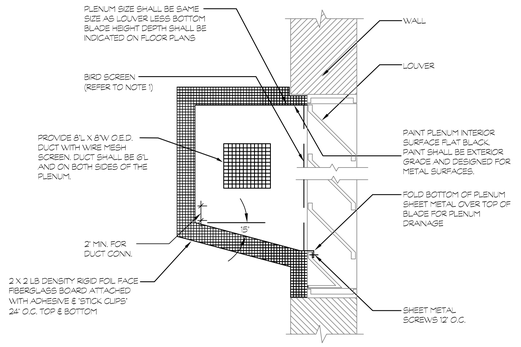
Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Revision:	Description:	Date:	Revised By:
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Drawing Title:
DETAILS
MECHANICAL

Date: 4/13/2022
Scale: AS NOTED
Drawn By: WJY
Project Number: 21.081
Drawing Number: M200

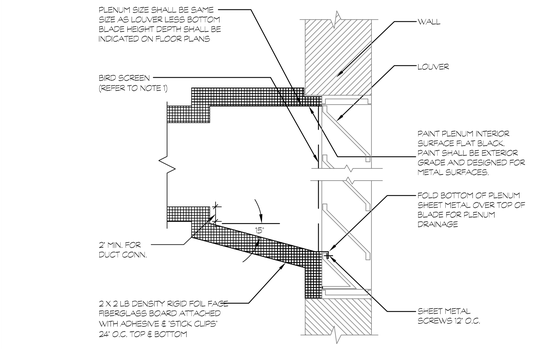


NOTES:

1. COVER INSIDE FACE OF LOUVER WITH 1/2" MESH ALUMINUM BIRD SCREEN SCREWED IN PLACE.
2. INSULATE UNUSED PORTION OF LOUVER WITH 2" DOUBLE WALL INSULATED PANELS.
3. SEAL ALL PLENUM SEAMS WATERTIGHT WITH SILICONE SEALANT.
4. TYPICAL FOR CRAWL SPACE OUTSIDE AIR PLENUMS.

BASEMENT/CRAWL SPACE INTAKE LOUVER PLENUM DETAIL

NOT TO SCALE

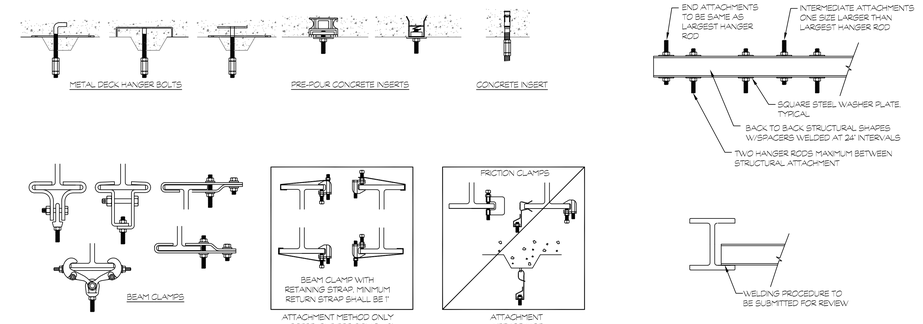


NOTES:

1. COVER INSIDE FACE OF LOUVER WITH 1/2" MESH ALUMINUM BIRD SCREEN SCREWED IN PLACE.
2. INSULATE UNUSED PORTION OF LOUVER WITH 2" DOUBLE WALL INSULATED PANELS.
3. SEAL ALL PLENUM SEAMS WATERTIGHT WITH SILICONE SEALANT.
4. TYPICAL FOR SUPPLY AND EXHAUST PLENUMS.
5. PROVIDE ACCESS DOOR IN PLENUM. DOOR SHALL BE FIELD COORDINATED FOR ACCESS. REFER TO SPECIFICATION FOR DOOR SIZE AND CONSTRUCTION.

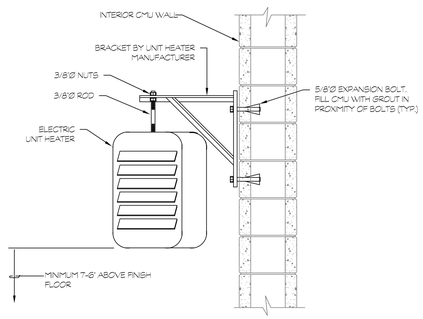
EXHAUST LOUVER PLENUM DETAIL

NOT TO SCALE



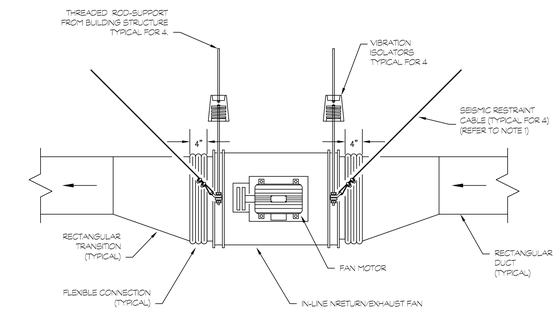
PIPE HANGER ATTACHMENT DETAIL

NOT TO SCALE



UNIT HEATER SUPPORT DETAIL

NOT TO SCALE

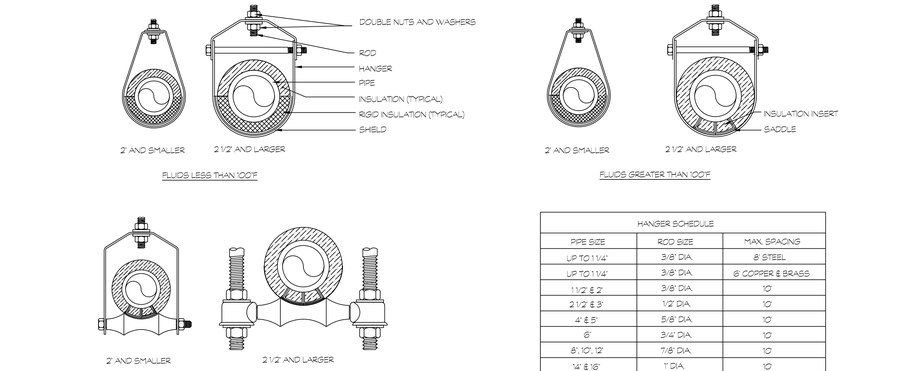


NOTES:

1. INSTALL SEISMIC RESTRAINT CABLE PER SPECIFICATIONS. SMACNA SEISMIC RESTRAINT MANUAL-GUIDLINES FOR MECHANICAL SYSTEMS.

INLINE CENTRIFUGAL FAN INSTALLATION DETAIL

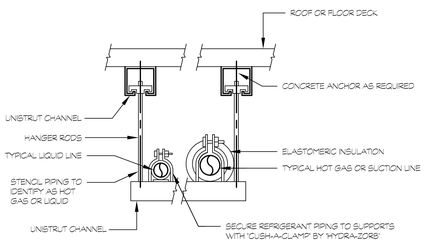
NOT TO SCALE



HANGER SCHEDULE		
PIPE SIZE	ROD SIZE	MAX. SPACING
UP TO 1 1/4"	3/8" DIA.	8' STEEL
UP TO 1 1/4"	3/8" DIA.	6' COPPER & BRASS
1 1/2" & 2"	3/8" DIA.	10'
2 1/2" & 3"	1/2" DIA.	10'
4" & 5"	5/8" DIA.	10'
6"	3/4" DIA.	10'
8", 10", 12"	7/8" DIA.	10'
14" & 16"	1" DIA.	10'
18"	1 1/8" DIA.	10'
20" & 24"	1 1/4" DIA.	10'

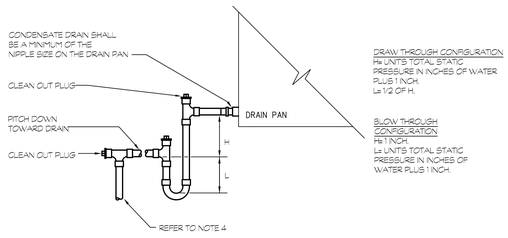
PIPE HANGER DETAIL

NOT TO SCALE



REFRIGERANT PIPE SUPPORT DETAIL

NOT TO SCALE

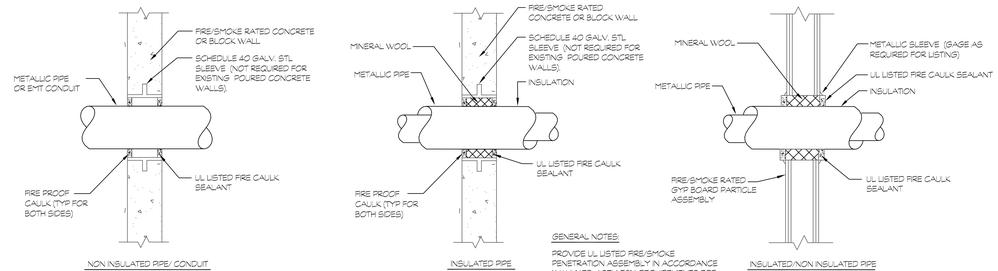


NOTES:

1. REFER TO MECHANICAL FLOOR PLANS AND SCHEDULES TO DETERMINE UNIT'S CONFIGURATION.
2. REFER TO MECHANICAL SCHEDULES FOR UNIT'S TOTAL STATIC PRESSURES.
3. MANUALLY PRIME TRAP PRIOR TO START-UP OF UNIT.
4. UNITS ABOVE CEILINGS: DRAIN PIPING SHALL BE INSULATED AND PIPED TO THE DISCHARGE POINT INDICATED WITH AN AIR GAP OF 2 TIMES THE CONDENSATE DRAIN SIZE.
5. UNITS ON ROOFS: DRAIN PIPING SHALL BE PIPED TO ROOF DRAIN. SPLASH BLOCK (BY THIS DIVISION) OR LOCATED INSIDE BUILDING.
6. UNITS INSIDE BUILDING: DRAIN PIPING SHALL BE INSULATED AND PIPED TO THE DISCHARGE POINT INDICATED WITH AN AIR GAP OF 2 TIMES THE CONDENSATE DRAIN SIZE.

COOLING COIL DRAIN TRAP DETAIL

NOT TO SCALE



GENERAL NOTES:

PROVIDE UL LISTED FIRE/SMOKE PENETRATION ASSEMBLY IN ACCORDANCE W/ ULI479, ASTM E814 REQUIREMENTS FOR WALL TYPE, RATING, PIPE SIZE AND INSULATION THICKNESS INSTALLED. PLASTIC PIPE SYSTEMS: REFER TO MANUFACTURERS REQUIREMENTS.

PIPE PENETRATION WITH FIRE / SMOKE SEAL

NOT TO SCALE

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

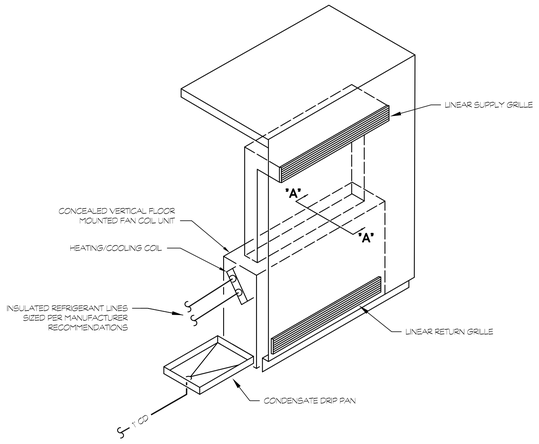
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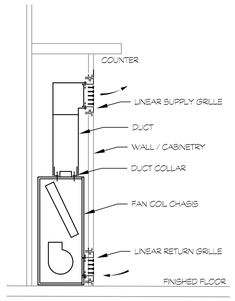
Revision:	Description:	Date:	Revised By:
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Drawing Title:
DETAILS
MECHANICAL

Date: 4/13/2022
Scale: AS NOTED
Drawn By: WJY
Project Number: 21.081

Drawing Number:
M201

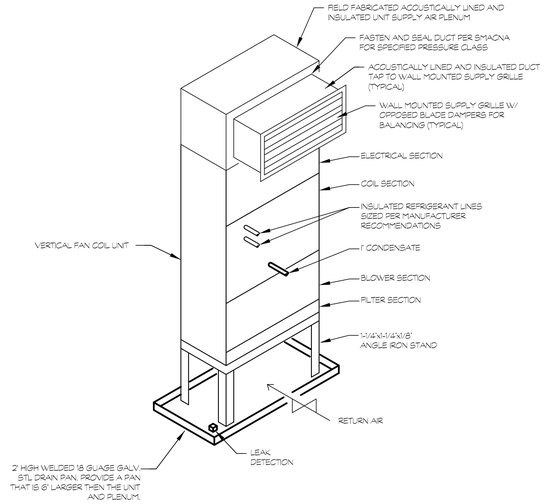


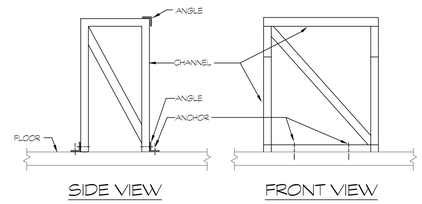


SECTION A-A

VERTICAL FLOOR MOUNTED FAN COIL DETAIL

NOT TO SCALE



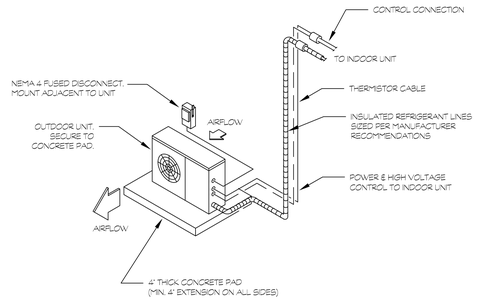


NOTES:

1. SIZING OF CHANNELS, ANGLES, ANCHORS, ETC., SHALL BE PER SPECIFICATION SECTION 230548 VIBRATION AND SEISMIC CONTROLS FOR HVAC PIPING AND EQUIPMENT.

VERTICAL FAN COIL UNIT ON STAND DETAIL

NOT TO SCALE



SPLIT SYSTEM UNIT, GRADE MOUNTED HEAT PUMP UNIT DETAIL

NOT TO SCALE

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Drawing Title:
DETAILS
MECHANICAL

Date: 4/13/2022
Scale: AS NOTED
Drawn By: WJY
Project Number: 21.081

Drawing Number: M202

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF INDOOR UNIT SCHEDULE

System Tag	Room Name	Tag Reference	M-NET Address	Model	Type	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Cooling Design Entering Temp DB/WB (°F) / [Water in temp]	Heating Design Entering Temp DB/WB (°F) / [Water in temp]	Corrected Capacity					Estimated Cooling Coil LAT (°F) / [LWT]	Estimated Heating Coil LAT (°F) / [LWT]	Refrig Pipe Dim Liquid/Suction (inch)	Fan Speed Setting	Peak Fan Airflow (cfm) / [Design gpm @(US)/min]	Max Fan ESP Setting 208V/230V (IN WG)	Sound Pressure Per Fan Speed 208V/230V (dBA)	Voltage / Phase	Electrical MCA/MFS	Condensate Removal Rate (gal/hr)	Remarks
										Cooling Diversity Full/Partial (See Note 5, 6)	Cooling Total Capacity (BTU/h)	Cooling Sensible Capacity (BTU/h)	Heating Diversity Full/Partial (See Note 5, 6)	Heating Capacity (BTU/h)											
East A	Level 1 East A Bedroom 1 & 2	FCU-1-1A	13	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East A	Level 2 East A Bedroom 1 & 2	FCU-2-1A	14	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East A	Level 3 East A Bedroom 1 & 2	FCU-3-1A	15	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East B	Level 1 East B Bedroom 3 & Front Room	FCU-1-1B	16	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East B	Level 2 East B Bedroom 3 & Front Room	FCU-2-1B	17	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East B	Level 3 East B Bedroom 3 & Front Room	FCU-3-1B	18	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West A	Level 1 West A Bedroom 1 & 2	FCU-1-2A	19	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West A	Level 2 West A Bedroom 1 & 2	FCU-2-2A	20	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West A	Level 3 West A Bedroom 1 & 2	FCU-3-2A	21	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West B	Level 1 West B Bedroom 3 & Front Room	FCU-1-2B	22	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West B	Level 2 West B Bedroom 3 & Front Room	FCU-2-2B	23	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
West B	Level 3 West B Bedroom 3 & Front Room	FCU-3-2B	24	TPVRYP018AM1A1A	Multi-Position Air Handler	18,000.00	20,000.00	80.0/67.0	70	PARTIAL DEMAND	18,024.00	13,713.40	FULL DEMAND	9,937.20	57.9	85.7	1/4 / 1/2	HIGH	585	0.3/0.5/0.8	28-32-36	208/230V/1-phase	3.00/3.00/15	0.5	See Below
East Kitchen	Level 1 East Kitchen	FCU-1-1C	1	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below
East Kitchen	Level 2 East Kitchen	FCU-2-1C	2	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below
East Kitchen	Level 3 East Kitchen	FCU-3-1C	3	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below
West Kitchen	Level 1 West Kitchen	FCU-1-2C	4	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below
West Kitchen	Level 2 West Kitchen	FCU-2-2C	5	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below
West Kitchen	Level 3 West Kitchen	FCU-3-2C	6	TPFFYP009RE14QA	Floor-Standing Type (Concealed)	8,000.00	9,000.00	80.0/67.0	70	PARTIAL DEMAND	8,010.70	5,790.90	FULL DEMAND	7,627.80	56.2	100.7	1/4 / 1/2	HIGH	230		36-41/34-41	208/230V/1-phase	0.32/0.34/15	0.27	See Below

REMARKS:

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB)
3. SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES.
4. REFER SCHEMATIC PIPING/CONTROL DIAGRAM PROVIDED BY MANUFACTURER FOR INDICATION OF REQUIRED INDOOR UNIT REMOTE CONTROLLERS, SYSTEM CONTROLLERS, AND INTEGRATION DEVICES.
5. FULL DEMAND CORRECTED CAPACITY INCLUDES DE-RATE ASSOCIATED WITH INDOOR VS. OUTDOOR CONNECTED CAPACITY INDICATED ON OUTDOOR UNIT SCHEDULE FOR ASSOCIATED SYSTEM. PARTIAL CORRECTED CAPACITY ASSUMES SUFFICIENT DIVERSITY EXISTS SUCH THAT THE CONNECTED CAPACITY DE-RATE DOES NOT APPLY. IT IS THE DESIGNERS RESPONSIBILITY TO ENSURE DIAMOND SYSTEM BUILDER IS SET IN THE APPROPRIATE OUTPUT CAPACITY SETTING (FULL DEMAND/PARTIAL DEMAND) PRIOR TO GENERATING THIS SCHEDULE.
6. IT IS RECOMMENDED TO ALWAYS BASE HEATING CORRECTED CAPACITY ON FULL DEMAND.
7. UNIT SHALL UTILIZE R-410A REFRIGERANT. R-22 REFRIGERANT IS NOT ACCEPTABLE.
8. PROVIDE 2 SETS OF SPARE FILTERS FOR EACH UNIT.
9. REFER TO OUTDOOR UNIT FOR ADDITIONAL INFORMATION.
10. EQUIPMENT MUST BE PURCHASED FROM A COMMERCIAL SALES OFFICE THAT OFFERS FULL SALES, TECHNICAL SUPPORT AND HAS FULL SERVICE OPERATION WITH A MINIMUM OF (10) SERVICE TRUCKS. THE COMMERCIAL SALES OFFICE SHALL HAVE ACCESS TO ELECTRONIC SALES, SERVICE AND TECHNICAL SOFTWARE FOR COMPLETE SUBMITTAL PACKAGES AND AFTER-MARKET SUPPORT.
11. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

MITSUBISHI ELECTRIC TRANE HVAC US: CITY MULTI VRF OUTDOOR UNIT SCHEDULE

System Tag	Tag Reference	M-NET Address	Model Number	Modules	Nominal Cooling Capacity (BTU/h)	Nominal Heating Capacity (BTU/h)	Cooling Efficiency EER/EER [SEER]	Heating COP @ 47°F [HSPF]	Design Cooling Outdoor Temp DB (°F)	Design Heating Outdoor Temp WB (°F)	Corrected Cooling Total Capacity (BTU/h)	Corrected Heating Capacity (BTU/h)	Preliminary Added Field Charge (See Note 5)	Electrical-Per Module				Remarks
															208/230 or [460V]			
														Voltage / Phase	MCA 208/230 or [460V]	RFS	MOCP	
East A	HP-3	63	TUMYP048TAK43NA	P48	48,000.00	54,000.00	0 / 12.2 [19.55]	4.08 [11.5]	91	2.2	48,246.00	29,811.60	7.3	208/230V / 1-phase	29	30	44	See Below
East B	HP-5	65	TUMYP048TAK43NA	P48	48,000.00	54,000.00	0 / 12.2 [19.55]	4.08 [11.5]	91	2.2	48,246.00	29,811.60	7.3	208/230V / 1-phase	29	30	44	See Below
West A	HP-4	69	TUMYP048TAK43NA	P48	48,000.00	54,000.00	0 / 12.2 [19.55]	4.08 [11.5]	91	2.2	48,246.00	29,811.60	7.3	208/230V / 1-phase	29	30	44	See Below
West B	HP-6	72	TUMYP048TAK43NA	P48	48,000.00	54,000.00	0 / 12.2 [19.55]	4.08 [11.5]	91	2.2	48,246.00	29,811.60	7.3	208/230V / 1-phase	29	30	44	See Below
East Kitchen	HP-1	51	TUMYP036TAK43NA	P36	36,000.00	42,000.00	0 / 13.8 [20.3]	4.08 [11.6]	91	2.2	36,172.20	22,883.30	5.1	208/230V / 1-phase	29	30	44	See Below
West Kitchen	HP-2	54	TUMYP036TAK43NA	P36	36,000.00	42,000.00	0 / 13.8 [20.3]	4.08 [11.6]	91	2.2	36,172.20	22,883.30	5.1	208/230V / 1-phase	29	30	44	See Below

REMARKS:

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB)
3. EFFICIENCY VALUES FOR EER, IEER, COP ARE BASED ON AHRI 1230 TEST METHOD FOR MIXTURE OF DUCTED & NON-DUCTED INDOOR UNITS.
4. FOR SYSTEMS WITH MULTIPLE MODULES, REFRIGERANT PIPE DIMENSIONS INDICATE TOTAL SYSTEM COMBINED PIPING DOWNSTREAM OF MODULE TWINNING.
5. ADDED FIELD CHARGE LISTED IS IN ADDITION TO FACTORY CHARGE, THIS MUST BE UPDATED BASED UPON FINAL AS-BUILT PIPING LAYOUT.
6. THE COMPRESSORS SHALL UTILIZE R-410A REFRIGERANT. R-22 REFRIGERANT IS NOT ACCEPTABLE.
7. THE UNIT SHALL BE EQUIPPED WITH THE FOLLOWING: FRONT SEAT SERVICE VALVES, INTERNAL PRESSURE RELIEF VALVE, LONG LINE CAPABILITY, LOSS OF CHARGE SWITCH, HIGH PRESSURE SWITCH, CRANKCASE HEATER, SNOW STAND HEAD PRESSURE CONTROL AND EVAPORATOR DEFROST CONTROL.
8. PROVIDE SNOW / HAIL GUARDS ON ALL UNITS.
9. PROVIDE FACTORY DRAIN PAN HEATER.
10. CONTRACTOR TO FINALIZE REFRIGERANT PIPE SIZES WITH EQUIPMENT MANUFACTURER BASED ON ACTUAL LAYOUT.
11. UNIT SHALL BE CAPABLE OF OPERATION AT OUTDOOR AMBIENT TEMPERATURE FROM 0°F TO 110°F.
12. EQUIPMENT MUST BE PURCHASED FROM A COMMERCIAL SALES OFFICE THAT OFFERS FULL SALES, TECHNICAL SUPPORT AND HAS FULL SERVICE OPERATION WITH A MINIMUM OF (10) SERVICE TRUCKS. THE COMMERCIAL SALES OFFICE SHALL HAVE ACCESS TO ELECTRONIC SALES, SERVICE AND TECHNICAL SOFTWARE FOR COMPLETE SUBMITTAL PACKAGES AND AFTER-MARKET SUPPORT.
13. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
14. PROVIDE CONCRETE CURBS AND QUICK SLING STYLE MOUNTING STANDS FOR UNITS MOUNTED AT GRADE.

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

SILVER | PETRUCELLI + ASSOCIATES
Architects | Engineers | Interior Designers
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
SCHEDULES
MECHANICAL

Date: 4/13/2022
Scale: AS NOTED
Drawn By: WJY
Project Number: 21.081

Drawing Number:
M300

KITCHEN HOOD WITH EXHAUST FAN SCHEDULE

MARK	LOCATION	SYSTEM SERVED	CFM	ESP	FAN RPM	TIP SPEED	SOUND SONES	ELECTRICAL DATA				MAKE/ MODEL	REMARKS
								AMPS	VOLTS	Ø	RPM		
KEF-1-1	LEVEL 1 KITCHEN (EAST)	LEVEL 1 KITCHEN (EAST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW
KEF-1-2	LEVEL 1 KITCHEN (WEST)	LEVEL 1 KITCHEN (WEST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW
KEF-2-1	LEVEL 2 KITCHEN (EAST)	LEVEL 2 KITCHEN (EAST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW
KEF-2-2	LEVEL 2 KITCHEN (WEST)	LEVEL 2 KITCHEN (WEST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW
KEF-3-1	LEVEL 3 KITCHEN (EAST)	LEVEL 3 KITCHEN (EAST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW
KEF-3-2	LEVEL 3 KITCHEN (WEST)	LEVEL 3 KITCHEN (WEST)	190	0.25	2850	-	6.5	2	115	1	1725	BROAN / F40000	SEE BELOW

REMARKS:

1. ALL FANS SHALL BE BALANCED TO AIRFLOW QUANTITY INDICATED ON PLANS AT INLETS AND OUTLETS.
2. PROVIDE ALUMINUM WALL CAP BY BROAN MODEL 647, 7"Ø ROUND DUCT, 0.25 ALUMINUM, MANUFACTURED WITH AN INTEGAL SPRING-LOADED BACKDRAFT DAMPER AND BIRD SCREEN FOR KITCHEN HOODS FANS (EXCEPT KEF-3-1 & KEF-3-2).
3. PROVIDE GREENHECK ROOF CAP TERMINATION MODEL GRSR-8 WITH BACKDRAFT DAMPER, BIRDSCREEN AND ROOF CURB FOR KITCHEN HOOD KEF-3-1 & KEF-3-2.
4. EXHAUST FAN STANDARD FEATURES:
   A. 24" WIDTH.
   B. PERMANENTLY LUBRICATED MOTOR.
   C. WASHABLE ALUMINUM FILTER.
   D. UNDER MOUNTED 75 WATT (MAX) LIGHT.
   E. TWO SPEED FAN CONTROL SWITCH.
   F. COLOR TO BE WHITE.
   G. UNIT SHALL HAVE MITERED SIDES AND HEMMED BOTTOM FOR SAFETY AND AESTHETICS.
   H. UL LISTED.
   I. ALTERNATE MANUFACTURES: NUTONE, GE, WHIRLPOOL.

FAN SCHEDULE

MARK	LOCATION	SYSTEM SERVED	TYPE	CFM	ESP	MAX BHP	FAN RPM	TIP SPEED	SOUND SONES	ELECTRICAL DATA				MAKE/ MODEL	OPER. WEIGHT (LB)	REMARKS
										HP	VOLTS	Ø	RPM			
EF-B-1	BASEMENT	BASEMENT	INLINE	200	0.50	0.05	933	-	1.4	40W	115	1	1725	GREENHECK / CSP-A380-VG	25	SEE BELOW
EF-1-1	LEVEL 1 TOILET RM (EAST)	LEVEL 1 TOILET RM (EAST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW
EF-1-2	LEVEL 1 TOILET RM (WEST)	LEVEL 1 TOILET RM (WEST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW
EF-2-1	LEVEL 2 TOILET RM (EAST)	LEVEL 2 TOILET RM (EAST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW
EF-2-2	LEVEL 2 TOILET RM (WEST)	LEVEL 2 TOILET RM (WEST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW
EF-3-1	LEVEL 3 TOILET RM (EAST)	LEVEL 3 TOILET RM (EAST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW
EF-3-2	LEVEL 3 TOILET RM (WEST)	LEVEL 3 TOILET RM (WEST)	CEILING MOUNT	75	0.25	-	879	-	0.6	6W	115	1	1725	GREENHECK / SP-80-VG	16	SEE BELOW

REMARKS:

1. ALL FANS SHALL BE BALANCED TO AIRFLOW QUANTITY INDICATED ON PLANS AT INLETS AND OUTLETS.
2. PROVIDE SPEED CONTROLLERS.
3. PROVIDE BACKDRAFT DAMPERS.
4. PROVIDE VIBRATION ISOLATION.
5. PROVIDE FACTORY WIRED DISCONNECT SWITCHES.
6. PROVIDE GRILLE MOUNTED LIGHT ON TOILET ROOM FANS (EF-1-1, EF-1-2, EF-2-1, EF-2-2, EF-3-1 & EF-3-2)
7. PROVIDE GREENHECK TERMINATION HOOD MODEL WC-8 WITH BACKDRAFT DAMPER AND BUILT-IN BIRDSCREEN FOR TOILET ROOM FANS (EXCEPT EF-3-1 & EF-3-2).
8. PROVIDE GREENHECK ROOF CAP TERMINATION MODEL GRSR-8 WITH BACKDRAFT DAMPER, BUILT-IN BIRDSCREEN AND ROOF CURB FOR TOILET FANS EF-3-1 & EF-3-2
9. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

REGISTERS, GRILLES & DIFFUSERS

SYM	SERVICE	TYPE	MAKE	MODEL	MATERIAL FINISH	NECK SIZE (W'xH")	FACE SIZE (W'xH")	CFM RANGE	BORDER TYPE	NC LEVEL (MAXIMUM)	ACCESSORIES	REMARKS
A	SUPPLY	TR	TITUS	300 RS	STEEL	8x8	10x10	0-200	BY ARCH	25	PROVIDE OPPOSED BLADE DAMPER	SEE BELOW
	↓	↓	↓	↓	↓	12x8	14x10	201-400	↓	↓	↓	↓
B	EXHAUST /RETURN	TG	TITUS	350 RL	STEEL	6x6	8x8	0-100	BY ARCH	25	PROVIDE OPPOSED BLADE DAMPER	SEE BELOW
	↓	↓	↓	↓	↓	10x10	12x12	101-400	↓	↓	↓	↓
C	SUPPLY	LG	TITUS	CT580	STEEL	22x4	24x6	0-230	BY ARCH	25		SEE BELOW

REMARKS:

1. PROVIDE ALL NECESSARY ACCESSORIES FOR INSTALLATION INTO ARCHITECTURAL WALL/CABINETRY. REFER TO ARCHITECTURAL DRAWINGS FOR WALL/CABINETRY TYPES.

ELECTRIC CABINET UNIT HEATER SCHEDULE

MARK	LOCATION	HEATER DATA					AIR DATA			DIMENSIONS			WT (LBS)	MAKE/ MODEL	REMARKS
		OUTPUT (MBH)	KW	VOLT	Ø	AMPS	CFM	TEMP. °F ENT.	TEMP. °F LVG.	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)			
ECUH-1	REFER TO PLAN	3.413	1.0	120	1	8.4	65	50	95	12-1/2	10-3/8	3-3/4	25	QMARK / CW-H10DS	SEE BELOW

REMARKS:

1. PROVIDE RECESSED WALL MOUNTED ELECTRIC CABINET UNIT HEATERS.
2. PROVIDE DEAD FRONT DISCONNECT SWITCH.
3. PROVIDE INTEGRAL THERMOSTATS FOR ALL UNITS.
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

ELECTRIC UNIT HEATER SCHEDULE

MARK	LOCATION	HEATER DATA				AIR DATA			FAN MOTOR DATA				MAKE/ MODEL	REMARKS
		OUTPUT (MBH)	KW	VOLT	Ø	CFM	TEMP. °F ENT.	TEMP. °F LVG.	HP	RPM	VOLTS	Ø		
EUH-1	PREP ROOM RM 44A	25.6	7.5	208	3	650	50	95	1/20	1600	208	3	QMARK/MUH-072	SEE BELOW

REMARKS:

1. PROVIDE WALL MOUNTED SUPPORTS.
2. PROVIDE INTEGRAL THERMOSTATS FOR ALL UNITS LOCATED IN THE BASEMENT AND CRAWL SPACES.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

DUCT MATERIAL SCHEDULE

APPLICATION	SUPPLY	RETURN	EXHAUST
TYPICAL (UNLESS OTHERWISE SPECIFIED)	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL
OUTDOOR AIR INTAKE PLENUM	3003 H-14 ALUMINUM	--	--
OUTDOOR AIR	3003 H-14 ALUMINUM	--	--
EXPOSED AND CONCEALED EXHAUST DUCTWORK AND PLENUMS SERVING TOILET ROOMS, SHOWER ROOMS, CLOTHES DRYER, ALL DUCTWORK RUNNING THROUGH, OVER OR SERVING SHOWER ROOMS, HATCHERIES, AND ALL SPACES WITH OPEN TANKS.	3003 H-14 ALUMINUM	3003 H-14 ALUMINUM	3003 H-14 ALUMINUM
EXPOSED DUCTWORK LOCATED IN AND SERVING AIR-CONDITIONED SPACES TO BE FIELD PAINTED OTHER THAN DUCTWORK LOCATED IN SPACES REQUIRED TO BE ALUMINUM	ASG GALVANNEALED STEEL	ASG GALVANNEALED STEEL	ASG GALVANNEALED STEEL
EXPOSED DUCTWORK LOCATED IN AND SERVING CONDITIONED SPACES OTHER THAN DUCTWORK LOCATED IN SPACES REQUIRED TO BE ALUMINUM.	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL
EXPOSED DUCTWORK LOCATED IN AND SERVING CONDITIONED SPACES OTHER THAN DUCTWORK LOCATED IN SPACES REQUIRED TO BE ALUMINUM OR TO BE FIELD PAINTED.	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL	G90 GALVANIZED STEEL
CONDENSING BOILER AND WATER HEATER FLUES	AL29-4C	--	AL29-4C

1. DUCT CONSTRUCTION SHALL MEET SMACNA METAL & FLEXIBLE 2006 3RD EDITION STANDARDS.

DUCT INSULATION SCHEDULE

SYSTEM	INSULATION TYPE	MINIMUM INSTALLED INSULATION VALUES	NOMINAL DENSITY
INDOOR DUCT/PLENUM CONCEALED SA, RA, OA, OTHER THAN PRE-MANUFACTURED LINEAR SUPPLY AND RETURN GRILLE PLENUMS.	MINERAL FIBER BLANKET	R-6	3/4 LB/FT³
	MINERAL FIBER BOARD WITH REFLECTIVE VAPOR BARRIER.	R-6	3 LB/FT³
INDOOR DUCT/PLENUM EXPOSED SA AND RA LOCATED IN MECHANICAL ROOMS, OTHER NON-OCCUPIED SPACES, NON-AIR CONDITIONED SPACES, PASSING THROUGH AIR CONDITIONED SPACES.	MINERAL FIBER BOARD WITH REFLECTIVE VAPOR BARRIER.	R-6	3 LB/FT³
INDOOR DUCT/PLENUM EXPOSED OA, ALL SPACES OTHER THAN ATTICS AND CRAWLSPACES	MINERAL FIBER BOARD WITH REFLECTIVE VAPOR BARRIER.	R-6	3 LB/FT³
INDOOR DUCT/PLENUM EXPOSED SA, RA, OA, EA, ALL ATTIC SPACES AND CRAWL SPACES	MINERAL FIBER BLANKET	R-12	3/4 LB/FT³
	MINERAL FIBER BOARD WITH REFLECTIVE VAPOR BARRIER.	R-12	3 LB/FT³
INDOOR DUCT/PLENUM EXPOSED SA AND RA LOCATED WITHIN THE AIR-CONDITIONED SPACE IT SERVES.	NONE, UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE SPECIFICATION.	--	--
DUCT LINING DUCTS INSTALLED OUTDOORS, ALL ATTIC SPACES AND CRAWL SPACES SA AND RA, SA AND RA DUCTWORK WHERE INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION, 15 FT DOWNSTREAM OF SUPPLY FANS, RETURN FANS AND 10 FT DOWNSTREAM OF TERMINAL BOXES WHETHER INDICATED OR NOT.	FIBROUS-GLASS DUCT LINER WITH CLEANABLE COMPOSITE COATING ON AIRSTREAM SIDE. METAL NOSING SHALL BE FURNISHED ON ALL LEADING AND LEAVING EDGES. (REFER TO NOTES #2, #4)	R-12	3 LB/FT³
DUCT LINING DUCTS INSTALLED IN INDOOR SPACES EXPOSED AND CONCEALED SA OR RA DUCTWORK WHERE INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION, 15 FT DOWNSTREAM OF SUPPLY FANS, RETURN FANS AND 10 FT DOWNSTREAM OF TERMINAL BOXES WHETHER INDICATED OR NOT.	FIBROUS-GLASS DUCT LINER WITH CLEANABLE COMPOSITE COATING ON AIRSTREAM SIDE. METAL NOSING SHALL BE FURNISHED ON ALL LEADING AND LEAVING EDGES. (REFER TO NOTES #2, #4)	R-6	3 LB/FT³
EXHAUST AIR SYSTEMS DRYER, LABORATORY FUME HOOD, KILN AND ALL OTHER EXHAUST SYSTEMS WHERE FIRE, SMOKE AND FIRE/SMOKE DAMPERS ARE NOT PERMITTED TO BE INSTALLED WITHIN THE DUCTWORK.	FIRE-RATED BLANKET OR BOARD (REFER TO NOTE #5)	THICKNESS REQUIRED FOR 2-HR FIRE RATING	--
FIELD FABRICATED BOILER BREECHING CONCEALED OR EXPOSED BOILER BREACHING & CONNECTORS.	CALCIUM SILICATE	4"	--
	HIGH-TEMP MINERAL FIBER BLANKET	3"	3 LB/FT³
	HIGH-TEMP MINERAL FIBER BOARD	3"	3 LB/FT³

1. FOR OUTDOOR DUCTWORK PROVIDE A PRE-MANUFACTURED SELF ADHERING PRODUCT WITH AN UV RESISTANT, STUCCO EMBOSSED FACING, WATER VAPOR TRANSMISSION OF THE INSTALLED PRODUCT SHALL BE .020 PERMS OR LESS. PRODUCT SHALL BE SUITABLE FOR CONTINUOUS USE IN LOW TEMPERATURES OF -10°F. MANUFACTURERS SHALL BE SIMILAR TO FLEX-CLAD 400, MFM BUILDING PRODUCTS CORP. OR ALLMASGUARD 60, POLYGUARD PRODUCTS, INC.
2. DUCT LINING SHALL NOT BE INSTALLED WITHIN 10 FT UPSTREAM OR DOWNSTREAM OF A DUCT MOUNTED HUMIDIFIER DISPERSION TUBE OR DISPERSION GRID.
3. INSULATION TYPES INDICATED IN THE SCHEDULE SHALL USED UNLESS OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
4. CLOSED CELL, FIBER FREE, ANTI-MICROBIAL COATED, LOW VOC CERTIFIED, MOISTURE AND MOLD RESISTANT DUCT LINING SHALL BE PROVIDED IN DUCTWORK AND EQUIPMENT WITHIN HOSPITAL AND HEALTHCARE FACILITIES AND ROOMS CLASSIFIED AS MOIST OR WET ENVIRONMENTS WHERE THIS SCHEDULE, DRAWINGS AND SPECIFICATION INDICATE DUCT LINING.
5. DUCTWORK SHALL BE FIRE WRAPPED FROM THE APPLIANCE CONNECTION TO THE TERMINATION POINT.

ABBREVIATIONS:

OA = OUTDOOR AIR DUCTWORK
SA = SUPPLY AIR DUCTWORK
RA = RETURN AIR DUCTWORK
EA = EXHAUST AIR DUCTWORK

ELECTRIC RADIATION SCHEDULE

MARK	LOCATION	ELECTRICAL				HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	MAKE/ MODEL	REMARKS
		WATTS	AMPS	VOLTS	Ø					
EFT-1-1	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-1-2	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-2-1	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-2-2	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-2-3	REFER TO PLAN	1000	-	120	1	7	5	48	QMARK / 2514W	SEE BELOW
EFT-3-1	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-3-2	REFER TO PLAN	400	-	120	1	7	5	24	QMARK / 2512W	SEE BELOW
EFT-3-3	REFER TO PLAN	1000	-	120	1	7	5	48	QMARK / 2514W	SEE BELOW

REMARKS:

1. PROVIDE WALL MOUNTED RADIATION WITH FRONT OUTLET AND ASSOCIATED END CAPS.
2. PROVIDE INTEGRAL THERMOSTATS FOR ALL UNITS.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

PIPE/TUBE PIPING AND FITTING SCHEDULE

SYSTEM	PIPE SIZE	CONSTRUCTION	PIPING	FITTINGS	UNIONS	FLANGES
COOLING COIL CONDENSATE DRAINS	2" AND SMALLER	SOLDER JOINT CONSTRUCTION WITH THREADED ADAPTERS AS REQUIRED. 95-5 TIN/ANTIMONY SOLDER.	COPPER, TYPE L, HARD DRAWN, ANSI H23.1, ASTM B88.	CAST BRONZE OR WROUGHT COPPER, SOLDER ENDS, ANSI B16.9 OR ANSI B16.22.	BRONZE SOLDER ENDS, GROUND JOINTS, ANSI B16.39 OR ANSI B16.22.	USE UNIONS
	2 1/2" AND LARGER	SOLDER JOINT CONSTRUCTION WITH THREADED ADAPTERS AS REQUIRED. 95-5 TIN/ANTIMONY SOLDER.	COPPER, TYPE L, HARD DRAWN, ANSI H23.1, ASTM B88.	CAST BRONZE OR WROUGHT COPPER, SOLDER ENDS, ANSI B16.9 OR ANSI B16.22.	BRONZE SOLDER ENDS, GROUND JOINTS, ANSI B16.39 OR ANSI B16.22.	USE UNIONS
MAKE UP WATER	2" AND SMALLER	SOLDER JOINT CONSTRUCTION WITH THREADED ADAPTERS AS REQUIRED. 95-5 TIN/ANTIMONY SOLDER.	COPPER, TYPE L, HARD DRAWN, ANSI H23.1, ASTM B88.	CAST BRONZE OR WROUGHT COPPER, SOLDER ENDS, ANSI B16.9 OR ANSI B16.22.	BRONZE SOLDER ENDS, GROUND JOINTS, ANSI B16.39 OR ANSI B16.22.	USE UNIONS
	2 1/2" AND LARGER	SOLDER JOINT CONSTRUCTION WITH THREADED ADAPTERS AS REQUIRED. 95-5 TIN/ANTIMONY SOLDER.	COPPER, TYPE L, HARD DRAWN, ANSI H23.1, ASTM B88.	CAST BRONZE OR WROUGHT COPPER, SOLDER ENDS, ANSI B16.9 OR ANSI B16.22.	BRONZE SOLDER ENDS, GROUND JOINTS, ANSI B16.39 OR ANSI B16.22.	USE UNIONS
REFRIGERANT SUCTION, HOT GAS AND LIQUID PIPING AND TUBING	2" AND SMALLER	BRAZED JOINT CONSTRUCTION, AWS A5.8 FILLER METAL.	COPPER, ACR TUBING, STRAIGHT LENGTHS, DRAWN H58, ASTM B 280.	WROUGHT COPPER, BRAZED ENDS, ANSI B16.22.	WROUGHT COPPER, BRAZED ENDS, ANSI B16.22.	USE UNIONS
	2 1/2" AND LARGER	BRAZED JOINT CONSTRUCTION, AWS A5.8 FILLER METAL.	COPPER, ACR TUBING, STRAIGHT LENGTHS, DRAWN H58, ASTM B 280.	WROUGHT COPPER, BRAZED ENDS, ANSI B16.22.	WROUGHT COPPER, BRAZED ENDS, ANSI B16.22.	USE UNIONS

PIPE/TUBE INSULATION SCHEDULE

SYSTEM	LOCATION	PIPE SIZE	CELLULAR GLASS	FLEXIBLE ELASTOMERIC	MINERAL-FIBER TYPE 1	CALCIUM SILICATE
CONDENSATE & EQUIPMENT DRAIN, BELOW 60°F	INDOOR	ALL	1-1/2"	--	1/2"	--
	OUTDOOR	ALL	1-1/2"	--	--	--
REFRIGERANT (ALL) SUCTION, HOT GAS, VAPOR, & LIQUID PIPING	INDOOR	ALL	2"	2"	2"	--
	OUTDOOR	ALL	2"	2"	2"	--
REFRIGERANT (ALL) SUCTION, HOT GAS, VAPOR, & LIQUID FLEXIBLE TUBING	INDOOR	ALL	--	1"	--	--
	OUTDOOR	ALL	--	2"	--	--
REFRIGERANT (ALL) SUCTION, HOT GAS, VAPOR, & LIQUID FLEXIBLE TUBING	INDOOR	ALL	--	2"	--	--
	OUTDOOR	ALL	--	2"	--	--

BLANKS (-) INDICATE INSULATION TYPE SHALL NOT BE USED.
THICKNESS BASED ON INSULATION HAVING A CONDUCTIVITY (K) NOT EXCEEDING 0.27 BTU PER INCH/HR FT²R °F

1. ALL EXPOSED INDOOR PIPING/TUBING AND FITTINGS WITHIN OCCUPIED SPACES, CORRIDORS, MECHANICAL ROOMS AND OTHER NON-CONCEALED LOCATIONS SHALL BE FITTED WITH PVC FITTING COVERS AND PVC PIPE COVERS FROM THE FLOOR LEVEL TO 12 ABOVE THE FINISHED FLOOR. PVC FITTING AND PIPE COVERS SHALL BE 25/50 FLAME AND SMOKE SPREAD RATED. COVERS AND JACKETING COLOR TO BE SELECTED BY ARCHITECT. PROVIDE TEMPLATE OF JACKET COLORS FOR THE ARCHITECT'S REVIEW.
2. ALL ELBOWS: CONCEALED OR EXPOSED, SHALL BE INSULATED WITH PRE-MOLDED, FACTORY FORMED FIBROUS GLASS WITH 3.5 PCF MINIMUM DENSITY AS MANUFACTURED BY MAMFAB OR APPROVED EQUAL. ALL ELBOWS: CONCEALED OR EXPOSED, SHALL BE COVERED WITH PVC FITTING COVERS. PVC FITTING COVERS SHALL BE 25/50 FLAME AND SMOKE SPREAD RATED. COVER COLOR TO BE SELECTED BY ARCHITECT. PROVIDE TEMPLATE OF JACKET COLORS FOR THE ARCHITECT'S REVIEW.
3. DIAPER AND LOOSE FILL STYLE INSULATION ON PIPE FITTINGS IS NOT ACCEPTABLE. ELBOWS WITHOUT PVC COVERS ARE NOT ACCEPTABLE.
4. INSULATE ALL COILS MOUNTED IN DUCTWORK OR TERMINAL BOXES. INSULATION THICKNESS SHALL BE EQUAL TO THE ASSOCIATED DUCT INSULATION THICKNESS.
5. ALL OUTDOOR PIPING/TUBING SHALL BE FITTED WITH A PRE-MANUFACTURED ALUMINUM JACKET PRODUCT. 0.024" ALUMINUM JACKET LOCK-ON OR SLIP-ON TYPE JACKETING TO BE COVERED WITH ACRYLIC COATING ON THE OUTER SURFACE AND A BAKED EPOXY MOISTURE BARRIER ON THE INNER SURFACE. MANUFACTURER SHALL BE SIMILAR TO CHILDERS PRODUCTS, DIVISION OF ITW; METAL JACKETING SYSTEMS. ALL EXPOSED JOINTS IN THE JACKET PRODUCT SHALL BE INSTALLED IN SUCH A WAY AS TO PREVENT THE INFILTRATION OF MOISTURE AND WATER.
6. ALL BURIED PIPING/TUBING SHALL BE FITTED WITH A PRE-MANUFACTURED ALUMINUM JACKET PRODUCT. 0.024" ALUMINUM JACKET LOCK-ON OR SLIP-ON TYPE JACKETING TO BE COVERED WITH ACRYLIC COATING ON THE OUTER SURFACE AND A BAKED EPOXY MOISTURE BARRIER ON THE INNER SURFACE. MANUFACTURER SHALL BE SIMILAR TO CHILDERS PRODUCTS, DIVISION OF ITW; METAL JACKETING SYSTEMS.

VIBRATION-CONTROL AND SEISMIC-RESTRAINT DEVICE SCHEDULE

EQUIPMENT	BASE	ISOLATOR*	SEISMIC RESTRAINT	DEFLECTION
CONDENSING UNITS (GRADE AND ROOF MOUNTED)	24" HIGH EQUIPMENT RAILS	NP	LAG BOLT TO RAIL. RAIL TO BE ATTACHED TO STRUCTURE.	0.2"
SUSPENDED CABINET UNIT HEATERS	--	HN	CABLE RESTRAINTS	0.25"
SUSPENDED INLINE FANS	--	HSN	CABLE RESTRAINTS	1.5"
INDOOR FLOOR MOUNTED AIR HANDLING UNITS	4" HOUSEKEEPING PAD	NP	RESILIENT ISOLATION WASHERS AND MECHANICAL ANCHOR BOLTS	0.2"
INDOOR CEILING MOUNTED AIR HANDLING UNITS	--	HSN	CABLE RESTRAINTS	1.2"
CEILING MOUNTED FAN COIL UNITS	--	HSN	CABLE RESTRAINTS	1.2"
ROOF MOUNTED FANS	SRC	--	--	--
PIPING WITHIN SOFT OF CONNECTION TO ANY PIECE OF EQUIPMENT WITH A MOTOR	--	HSN	--	1.2"
DUCTWORK IN MECH. ROOMS OR WITHIN SOFT OF CONNECTED VIBRATION-ISOLATED EQUIPMENT	--	HN	--	0.25"
BOILERS	--	--	SNUBBERS	--
PIPE TO PUMP CONNECTION	--	FPC-SS	--	--

REMARKS:
1. REFER TO SPECIFICATION SECTION (230548) - VIBRATION AND SEISMIC CONTROLS FOR HVAC PIPING AND EQUIPMENT FOR A DESCRIPTION OF EACH VIBRATION CONTROL DEVICE.
2. (NP) - NEOPRENE PAD, (DNP) - DOUBLE NEOPRENE PAD, (FNC) - FLOOR NEOPRENE RESTRAINED MOUNTS, (FSN) - FLOOR SPRING AND NEOPRENE SPRING ISOLATOR, (FSNTL) - FLOOR SPRING AND NEOPRENE TRAVEL LIMITED RESTRAINED SPRING ISOLATOR, (HN) - NEOPRENE HANGER, (HSN) - SPRING AND NEOPRENE HANGER, (RC2) - ROOF CURB, TYPE 2, (BSF) - BASE, STEEL FRAME, (BIB) - BASE, INERTIA BASE, (FPC) - FLEXIBLE PIPE CONNECTIONS, (SRC) - SEISMIC ROOF CURB.

* IN ADDITION TO ANY INTERNAL VIBRATION ISOLATION.
" SYSTEM SHALL BE DESIGNED TO BE 90% EFFICIENT.

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
SCHEDULES
MECHANICAL

Date: 4/13/2022
Scale: AS NOTED
Drawn By: WJY
Project Number: 21.081

Drawing Number:
M301

GENERAL NOTES

GENERAL

1. WHEN A CONFLICT BETWEEN THE DRAWINGS, NOTES AND/OR SPECIFICATIONS OCCUR, THE MORE STRINGENT, AND/OR LARGER QUANTITY AND/OR MORE EXPENSIVE SHALL APPLY. THE REQUIREMENTS LISTED WITHIN NOTES OR SPECIFICATIONS SHALL BE REQUIRED, PROVIDED AND INSTALLED WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT.
2. ALL WORK AND ACTION DEPICTED AND DESCRIBED SHALL BE PERFORMED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.
3. REPAIR AND/OR REPLACE AT NO COST TO OWNER ALL EQUIPMENT AND MATERIALS DAMAGED DURING CONSTRUCTION.
4. ALL EQUIPMENT SHALL BE LOCATED IN ACCESSIBLE LOCATIONS. WHEN A PIECE OF EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING OR WALL, THEN THE APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. THESE SHALL BE COORDINATED WITH THE ARCHITECT.
5. ANY COP REQUEST FOR ELECTRICAL WORK AFTER AWARD MUST BE BASED ON NORMAL NECA COMMERCIAL LABOR UNITS & NATIONAL AVERAGE MATERIAL AMP MATERIAL COST PRICES. NATIONAL AVERAGE AMP DATA BASE FOR MATERIAL AND NECA LABOR RATES MUST BE SUBMITTED TO THE ENGINEER OF RECORD AT THE TIME OF AWARD.

WIRING & RACEWAY:

1. THE DRAWINGS SHOW THE GENERAL LAYOUT AND TYPICAL DETAILS. PROVIDE COMPLETE SYSTEMS. DRAWINGS ARE BASED ON THE SPECIFIED EQUIPMENT. RACEWAY LAYOUTS, BOXES, AND WIRING OF THE SYSTEMS ARE SUBJECT TO APPROVED SHOP DRAWINGS.
2. ENSURE THAT ITEMS TO BE FURNISHED FIT THE SPACE AVAILABLE. MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS, AND PROVIDE SUCH SIZES AND SHAPES OF EQUIPMENT THAT FINAL INSTALLATION SHALL SATISFY THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
3. LOCATIONS OF OUTLETS, SWITCHES, APPLIANCES, ETC. AS SHOWN ON ELECTRICAL PLANS ARE APPROXIMATE. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS AND DETAILS, AND WITH JOB CONDITIONS. INSTALL SWITCHES WITH 'OFF' POSITION DOWN. INSTALL RECEPTACLES WITH GROUNDING POLE IN THE UP POSITION FOR VERTICAL MOUNTING AND AT RIGHT FOR HORIZONTAL MOUNTING.
4. LOCATE AND INSTALL ELECTRICAL EQUIPMENT, JUNCTION AND PULL BOXES, PANELBOARDS, SWITCHES, CONTROLS, AND OTHER APPARATUS REQUIRING MAINTENANCE, INSPECTION, AND OPERATION SO AS TO BE READILY ACCESSIBLE.

RACEWAY INSTALLATION:

1. IN ALL ARCHITECTURALLY FINISHED SPACES, CONDUITS AND CABLES SHALL BE RUN CONCEALED IN HUNG OR FURRED CEILINGS, SLABS, MASONRY, AND PARTITIONS UNLESS OTHERWISE INDICATED. SAW CUTTING AND FINISHED PATCHING SHALL BE REQUIRED IN EXISTING SLABS AND MASONRY WALLS. IN UNFINISHED SPACES, RACEWAYS MAY BE RUN EXPOSED.
2. UNLESS OTHERWISE INDICATED, EXACT ROUTING OF RACEWAYS SHALL BE DETERMINED BY THE CONTRACTOR TO SUIT PROJECT REQUIREMENTS AND FIELD CONDITIONS.
3. PROVIDE SEPARATE RACEWAYS, JUNCTION BOXES, PULL BOXES AND WIREWAYS FOR ALL EMERGENCY SYSTEM WIRING.
4. CONTRACTORS SHALL PROVIDE ALL REQUIRED SLEEVES AND SEALS FOR PIPES OR CONDUIT PENETRATING WALLS OR FLOOR SLABS WITH UL LISTED FIRE STOPPING SEALANT WHERE REQUIRED.
5. ELECTRICAL CONDUITS AND BOXES TO BE CONCEALED IN WALLS OR ABOVE CEILING WHEREVER POSSIBLE. WHERE SURFACE CONDUIT IS REQUIRED IT MUST MATCH THE WALL COLOR THAT IT IS BEING ATTACHED TO. REFER TO RACEWAY & BOX SPECIFICATION FOR FURTHER DETAILS.

WIRING INSTALLATION

1. DO NOT USE WIRE SMALLER THAN NO. 12 AWG FOR ANY POWER OR LIGHTING CIRCUIT. USE LARGER SIZES WHERE INDICATED, AS REQUIRED BY CODES, AND AS FOLLOWS:

   30 AMPERE CIRCUIT:NO. 10
   40 AMPERE CIRCUIT:NO. 8
   50 AMPERE CIRCUIT:NO. 6
   60 AMPERE CIRCUIT:NO. 6

A. MINIMUM HOMERUN AND BRANCH CIRCUIT WIRING SIZES AND MAXIMUM HOMERUN CONDUIT FILL FOR 120 VOLT, 20 AMPERE CIRCUITS SHALL BE AS FOLLOWS:

LENGTH	CIRCUIT WIRE SIZE	HOME RUN WIRE SIZE	CONDUIT SIZE (3 WIRES/CONDUIT)
0 TO 50	#12	#12	3/4"
51 TO 100	#12	#10	3/4"
101 TO 200	#10	#8	1"

GREATER THAN 200 - REQUEST DIRECTION FROM ARCHITECT.

NOTE. PROVIDE DERATING PER CODE WHEN INSTALLING MORE THAN 3 CURRENT CARRYING CONDUCTORS IN CONDUIT.

2. DO NOT USE WIRE SMALLER THAN NO. 14 AWG FOR CONTROL CIRCUITS UNLESS OTHERWISE RECOMMENDED BY THE EQUIPMENT OR SYSTEM MANUFACTURER ON WIRING SHOP DRAWINGS, AND SO APPROVED BY THE ARCHITECT.
3. WHERE GREATER THAN THREE (3) CURRENT-CARRYING CONDUCTORS ARE INSTALLED IN ANY ONE CONDUIT OR CABLE, CONDUCTORS MUST BE DERATED AND SIZES INCREASED, IF NEEDED, TO ACCOMMODATE CONDUCTOR DERATING AS REQUIRED BY NEC ARTICLE 310.
4. CONDUCTORS SHALL BE COMPLETELY INSTALLED AND CONNECTED. PROVIDE ALL TERMINALS, LUGS, AND CONNECTORS TO SUIT THE APPLICATION, AND IN COMPLIANCE WITH EQUIPMENT MANUFACTURERS RECOMMENDATIONS.
5. UNDER NO CIRCUMSTANCES SHALL ANY SWITCH OR CIRCUIT BREAKER BREAK A NEUTRAL CONDUCTOR.
6. THE CIRCUIT NUMBERS INDICATED ON THE DRAWINGS ARE INTENDED AS A GUIDE FOR PROPER CONNECTION OF CIRCUITS AT PANELS. HOWEVER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE FINAL CIRCUITING WORK FULFILLS THE FOLLOWING CONDITIONS:

A. LOADS ON PANEL BUSSES SHALL BE PHASE-BALANCED AS EVENLY AS POSSIBLE.

GROUNDING INSTALLATION:

1. EQUIPMENT GROUNDING

A. INSTALL AN INSULATED GROUND CONDUCTOR, RUN IN THE RACEWAY WITH THE PHASE CONDUCTORS, FOR EACH FEEDER SERVING: PANELBOARDS, LIGHTING DIMMER BOARDS, MOTOR CONTROL CENTERS, MOTORS, EQUIPMENT AND APPLIANCES UNLESS OTHERWISE NOTED.

B. INCLUDE AN INSULATED GROUND CONDUCTOR IN ALL CONDUIT RUNS CONTAINING SECTIONS OF FLEXIBLE CONDUIT UNLESS OTHERWISE NOTED.

C. INCLUDE AN INSULATED GROUND CONDUCTOR IN ALL BRANCH CIRCUIT RACEWAYS OR CABLES UNLESS OTHERWISE NOTED.

RACEWAYS FOR TELECOMMUNICATION SYSTEMS:

1. PROVIDE EMPTY CONDUIT SYSTEMS FOR TELECOMMUNICATION WORK. REFER TO 'T' SERIES DRAWINGS FOR SIZE OF CONDUIT AND BACK BOXES REQUIRED.
2. PROVIDE MINIMUM INSIDE BENDING RADIUS OF 10 TIMES CONDUIT INSIDE DIAMETER FOR TELECOMMUNICATIONS RACEWAYS.
3. WHEN COMPLETED THE CONDUIT SYSTEMS SHALL BE READY FOR THE INSTALLATION OF WIRING AND EQUIPMENT.
4. FROM EACH OUTLET PROVIDE AN EMPTY EMT CONDUIT ROUTED INTO THE CEILING CAVITY OR TO THE CLOSEST TELECOMMUNICATIONS CLOSET. PROVIDE A DRAG LINE IN EACH RUN AND TERMINATE IN A BUSHED ELBOW.

MECHANICAL EQUIPMENT WIRING:

1. UNLESS OTHERWISE INDICATED OR SPECIFIED HEREIN, ALL MOTORS, MOTOR STARTERS, MOTOR CONTROLLERS, VARIABLE SPEED/FREQUENCY DRIVES, AND ASSOCIATED CONTROL DEVICES ARE FURNISHED AND INSTALLED UNDER THIS DIVISION. COORDINATE INSTALLATION AND LOCATIONS WITH OTHER DIVISION CONTRACTORS.
2. POWER WIRING FROM THE INDICATED SOURCE TO THE STARTER/CONTROLLER/DRIVE UNIT, AND FROM THE STARTER/CONTROLLER/DRIVE UNIT TO THE MOTOR, INCLUDING ANY LOCAL DISCONNECT SWITCHES PROVIDED AND INSTALLED BY THIS DIVISION, AND ALL ASSOCIATED LUGS, TERMINALS, AND CONNECTIONS, IS THE WORK OF THIS DIVISION.
3. CONTROL CIRCUIT WIRING IS GENERALLY FURNISHED AND INSTALLED UNDER OTHER DIVISIONS, EXCEPT THAT ANY SUCH WIRING SHOWN ON ELECTRICAL DRAWINGS IS WORK OF THIS DIVISION.
4. PROVIDE 120 VOLT POWER TO ALL TEMPERATURE CONTROL PANELS (TCPS) SUPPLIED AND INSTALLED BY DIVISION 23. USE EMERGENCY POWER SOURCES WHEN AVAILABLE. COORDINATE ALL POWER REQUIREMENTS AND PANEL LOCATIONS WITH DIVISION 23 TEMPERATURE CONTROLS CONTRACTOR.
5. COOPERATE AND COORDINATE WITH THE OTHER TRADES IN THE INSTALLATION, CONNECTION, AND TESTING OF MECHANICAL EQUIPMENT. PERFORM WORK OF THIS SECTION IN ACCORDANCE WITH EQUIPMENT MANUFACTURERS' INSTRUCTIONS.

COORDINATION DRAWINGS:

1. DEVELOP AND SUBMIT COORDINATION DRAWINGS AS OUTLINED.

A. SHEET METAL, PLUMBING AND FIRE PROTECTION SHOP DRAWINGS THAT HAVE BEEN COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW. DRAWINGS MUST BE RETURNED FROM ENGINEER EITHER 'REVIEWED' OR 'FURNISH AS CORRECTED' PRIOR TO BEING USED AS BASIS FOR COORDINATION DRAWINGS.

B. AFTER SHEET METAL AND PIPING DRAWINGS HAVE BEEN REVISED PER ENGINEERS COMMENTS, REPRODUCIBLE COPIES SHALL BE SENT TO THE TRADES IN THE FOLLOWING SEQUENCE FOR THE INCLUSION OF THEIR WORK:

   -MECHANICAL SHEET METAL
   -PLUMBING PIPING
   -MECHANICAL PIPING
   -SPRINKLER PIPING
   -ELECTRICAL WORK

2. AFTER ALL TRADES HAVE INCLUDED THEIR WORK ON THE COORDINATION DRAWING AND NOTED CONFLICTS, ALL TRADES SHALL MEET TO RESOLVE CONFLICTS AND AGREE TO ACCEPTABLE SOLUTIONS. EACH TRADE SHALL SIGN COORDINATION DRAWINGS. ITEMS NOT SHOWN ON COORDINATION DRAWING IS RESPONSIBILITY OF OMITTING CONTRACTOR AND CONTRACTOR IS SUBJECT TO ADDITIONAL COSTS INCURRED BY OTHER TRADES.
3. THE ARCHITECT AND ENGINEER ARE NOT PART OF THE COORDINATION DRAWING PROCESS. THE ENGINEER WILL PROVIDE ASSISTANCE FOR NOTED CONFLICTS ONLY. COORDINATION DRAWINGS ARE NOT TO BE CONSIDERED PIPING OR DUCT SHOP DRAWINGS. THE CONTRACTOR IS REQUIRED TO SUBMIT INDIVIDUAL PIPING AND DUCTWORK SHOP DRAWINGS FOR REVIEW BY THE ENGINEER. PIPING AND DUCTWORK SHOP DRAWINGS SHALL FOLLOW THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.
4. SUBMIT FINAL SIGNED COORDINATION DRAWING TO ENGINEER FOR REVIEW. ENGINEER WILL REVIEW COORDINATION DRAWINGS FOR GENERAL ARRANGEMENT AND FOR NOTED CONFLICTS ONLY. SPECIFIC INSTALLATION REQUIREMENTS WILL BE REVIEWED ONLY IN INDIVIDUAL TRADE SHOP DRAWINGS.
5. ANY WORK FABRICATED OR INSTALLED PRIOR TO SIGN OFF BY ALL TRADES WHICH IS DEEMED TO BE IN CONFLICT WITH COORDINATION DRAWINGS SHALL BE REMOVED AND RE-INSTALLED IN CONFORMANCE WITH COORDINATION DRAWINGS.
6. EACH CONTRACTOR (MENTIONED ABOVE) IS RESPONSIBLE FOR THE COORDINATION OF HIS SUB-CONTRACTORS.
7. THE OVERALL COORDINATION OF THE COORDINATION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER IS NOT RESPONSIBLE FOR THE COORDINATION PROCESS. THE ENGINEER WILL RESPOND TO QUESTIONS THAT ARISE FROM THE COORDINATION PROCESS. DRAWINGS SUBMITTED WILL BE REVIEWED FOR CLEARLY IDENTIFIED CONFLICTS ONLY. SOLUTIONS TO CONFLICTS WILL NOT BEAR ADDITIONAL COST.

AS BUILT DRAWINGS

1. PROVIDE A COMPLETE SET OF AS-BUILT DRAWINGS REFLECTING AS INSTALLED CONDITIONS. AS-BUILT DRAWINGS SHALL INDICATE ALL INSTALLED CONDITIONS OF SYSTEMS WITHIN THIS DISCIPLINE. DRAWINGS SHALL BE OF SIMILAR SCALE AS THE CONSTRUCTION DOCUMENTS AND INCLUDE DETAILS AS NECESSARY TO CLEARLY REFLECT THE INSTALLED CONDITION. DRAWINGS SHALL BE BOUND IN A COMPLETE AND CONSECUTIVE SET. SUPPLEMENTAL SKETCHES AND LOOSE PAPERWORK WILL NOT BE ACCEPTABLE AND WILL BE RETURNED FOR REVISION. THE CONTRACTOR SHALL COMPLY WITH THE ENGINEERS COMMENTS TO PRODUCE A CLEAR AND CONCISE SET OF DRAWINGS. DRAWINGS SHALL BE SUBMITTED IN BOTH HARD COPY AND ELECTRONIC (AUTO-CAD VERSION AS REQUIRED BY THE OWNER) VERSION. NUMBER OF COPIES OF EACH AS REQUESTED BY THE OWNER.
2. PROVIDE 'AS-BUILT DRAWINGS' INDICATING IN A NEAT AND ACCURATE MANNER A COMPLETE RECORD OF ALL REVISIONS OF THE ORIGINAL DESIGN OF THE WORK. INDICATE THE FOLLOWING INSTALLED CONDITIONS:

A. INCLUDE ALL CHANGES AND AN ACCURATE RECORD, ON REPRODUCTIONS OF THE CONTRACT DRAWINGS OR APPROPRIATE SHOP

B. DRAWINGS, OF ALL DEVIATIONS, BETWEEN THE WORK SHOWN AND WORK INSTALLED.

C. EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED), DIMENSIONED FROM PROMINENT BUILDING LINES.

D. APPROVED SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

E. CONTRACT MODIFICATIONS, ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

F. SUBMIT FOR REVIEW BOUND SETS OF THE REQUIRED DRAWINGS, MANUALS AND OPERATING INSTRUCTIONS.

G. SUBMIT A COMPLETE MAINTENANCE MANUAL OF ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.

3.

DEMOLITION AND REMOVALS

1. THE EXISTING FACILITY WILL BE OCCUPIED AND IN OPERATION DURING THE PERFORMANCE OF THE WORK.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING FEEDER OR BRANCH CIRCUIT SUPPLYING OCCUPIED FACILITIES, CONFER WITH THE OWNER, AND SCHEDULE A MUTUALLY AGREEABLE PERIOD OF INTERRUPTION.
3. WHERE REPLACEMENT, RELOCATION OR MODIFICATION OF EXISTING EQUIPMENT IS INDICATED, PROVIDE AND MAINTAIN ALL TEMPORARY FEEDERS, CONNECTIONS, CIRCUIT PROTECTION, AND ANY OTHER MATERIALS AND APPURTENANCES REQUIRED TO MAINTAIN SERVICES TO OCCUPIED AREAS.
4. NO WORK SHALL BE LEFT INCOMPLETE, NOR ANY HAZARDOUS SITUATION CREATED, WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS, AT NO TIME SHALL THE WORK INTERFERE WITH OR CUT OFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNERS PRIOR WRITTEN PERMISSION.
5. THE OWNER RESERVES THE RIGHT TO OPERATE ALL EXISTING ELECTRICAL AND MECHANICAL EQUIPMENT NOT INCLUDED IN THIS WORK AND TO PERFORM ALL REQUIRED SERVICING AND REPAIRS TO SAME, AT ALL TIMES.
6. IT IS REQUIRED THAT THE WORK INDICATED AND/OR SPECIFIED SHALL BE CARRIED OUT WITH A MINIMUM OF INTERFERENCE TO THE ESTABLISHED OPERATIONS OF THE BUILDING.
7. REMOVE, ABANDON, REROUTE, OR RELOCATE ANY CONDUIT, WIRING, LIGHTING FIXTURES, OUTLETS, AND OTHER ELECTRICAL ITEMS, WHICH ARE LIKELY TO BE IN THE COURSE OF, OR INTERFERE WITH, THE ALTERATIONS. REMOVE ALL EXPOSED OUTLETS, CONDUIT, AND BRANCH CIRCUIT WORK WHICH INTERFERE WITH THE ALTERATIONS.
8. IT IS THE INTENTION OF THESE SPECIFICATIONS TO PROVIDE FOR THE CONTINUANCE OF ALL ELECTRICAL SERVICES PRESENTLY INSTALLED IN THE UNALTERED AREAS. PROVIDE ALL CONDUIT, WIRING, AND DEVICES NECESSARY TO MAINTAIN SERVICES TO THESE AREAS.
9. COMPARE THE PLANS WITH THE EXISTING CONDITIONS TO DETERMINE THE AMOUNT OF WORK AFFECTED. REMOVE ALL UNUSED EXPOSED CIRCUIT WORK, OUTLETS, FIXTURES AND THE LIKE NOT REQUIRED BY THE ALTERATIONS.
10. ALL MATERIALS REQUIRED TO BE REMOVED AND NOT REINSTALLED UNDER THIS DIVISION OF THE WORK, UNLESS OTHERWISE INDICATED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE SITE.
11. WHERE FEEDERS AND BRANCH CIRCUITS OR DEVICES AND EQUIPMENT ARE INDICATED TO BE REMOVED, CONDUCTORS AND CABLES SHALL BE COMPLETELY REMOVED BACK TO THEIR SOURCE. EXPOSED OR ACCESSIBLE CONDUITS SHALL BE REMOVED COMPLETELY. CONDUITS EMBEDDED IN CONCRETE OR MASONRY SHALL BE CUT OFF FLUSH AND THE SURFACE PATCHED SMOOTH AND LEVEL.
12. REMOVED MATERIALS SHALL BE DISPOSED OF USING LICENSED CARTING SERVICE.
13. HAZARDOUS MATERIALS - CONTAINING PCB'S (BALLASTS), AND THE LIKE SHALL BE DISPOSED OF BY AN EPA APPROVED, LICENSED DISPOSAL SERVICE. CONTRACTOR SHALL OBTAIN AND HAVE ON FILE, AFFIDAVIT, AND RECEIPTS STATING HOW AND WHERE THE WASTE WAS DISPOSED OF OR CONVERTED.
14. CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT IN OR ON WALLS THAT ARE TO BE REMOVED - MAINTAIN CONTINUITY OF ALL EXISTING BRANCH CIRCUITRY TO EXISTING ROOMS NOT BEING RENOVATED. REWIRE ALL EXISTING BRANCH CIRCUITS (THAT ARE TO REMAIN) AS REQUIRED. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR WALLS BEING REMOVED - REFER TO CONSTRUCTION SCHEDULE FOR TIME DELAY.
15. CONDUIT IN EXISTING OR NEW CEILINGS THAT IS NOT INTENDED FOR REUSE SHALL BE REMOVED BACK TO THE PANEL FROM WHICH IT ORIGINATES.
16. CONDUCTORS THAT ARE NOT DEEMED REUSABLE SHALL BE REMOVED BACK TO THE NEAST JUNCTION BOX WHERE THE ENTIRE CIRCUIT IS TO BE REMOVED, THE CONDUCTORS SHALL BE REMOVED BACK TO THE PANELBOARD FROM WHICH THEY ORIGINATE.
17. OUTAGES OF EXISTING ELECTRICAL (LIGHTING, POWER, AND SIGNAL) SYSTEMS NECESSITATED BY WORK OF ALL TRADES SHALL BE IN ACCORDANCE WITH FIELD SCHEDULES BY THE GENERAL CONTRACTOR AND OWNER - INCLUDE ALL ELECTRIC WORK OVERTIME AND SUPERVISION TO COMPLY - CONTRACTOR SHALL OBTAIN OWNERS GENERAL CONTRACTORS APPROVAL PRIOR TO DISRUPTING OF EXISTING ELECTRICAL SYSTEM.
18. CONTRACTOR TO MAINTAIN CONTINUITY AND ACCESSIBILITY OF ALL EXISTING SYSTEMS AND SYSTEM EQUIPMENT FEEDERS WHICH MAY BE DISRUPTED FOR WORK OF ANY TRADE.
19. CONTRACTOR TO MAINTAIN CONTINUITY AND ACCESSIBILITY OF ALL EXISTING ELECTRICAL (POWER, LIGHTING, AND SIGNAL) SYSTEMS, EQUIPMENT FEEDERS AND BRANCH CIRCUITS ON FLOORS OR AREAS THAT ARE NOT AFFECTED BY DEMOLITION OR NEW CONSTRUCTION - REFER TO CONSTRUCTION SCHEDULE FOR ADDITIONAL INFORMATION.
20. ANY EXISTING ELECTRICAL WORK WHICH IS PULLED OUT OR CUT AWAY SHALL BE REMOVED FROM THE SITE AS DIRECTED BY THE GENERAL CONTRACTOR AND THE OWNER.
21. EXISTING ELECTRICAL EQUIPMENTS WHICH IS NOT TO BE REUSED SHALL BE REMOVED FROM DRYWALL PARTITIONS. ANY OPENING IN EXISTING PARTITIONS LEFT BY REMOVAL OF EXISTING ELECTRICAL EQUIPMENT SHALL BE PATCHED BY THIS CONTRACTOR WITH MATERIALS TO MATCH EXISTING.
22. FOR PURPOSES OF THE CONTRACT, WHAT IS NOTED OR SHOWN ON DRAWINGS INDICATES THE SCOPE OF WORK REQUIRED AND QUALITY OF MATERIALS REQUIRED.
23. CONTRACTOR TO EXAMINE ALL CONTRACT DOCUMENTS AND PERFORM ALL DEMOLITION BOTH FOR AREAS BEING RENOVATED AND FOR AREAS WHICH MUST BE REWORKED TO PERMIT THE INSTALLATION OF WORK BY THE VARIOUS TRADES.
24. CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE EXTENT OF DEMOLITION AND REMOVALS PRIOR TO THE SUBMISSION OF BIDS. NO CONSIDERATION SHALL BE GIVEN FOR FAILURE TO VISIT THE SITE.
25. CONTRACTOR SHALL UTILIZE ALL THE BREAKERS IN THE EXISTING PANELS THAT BECOME AVAILABLE WHEN BRANCH CIRCUITS ASSOCIATED WITH THEM ARE DISCONNECTED AND REMOVED DUE TO DEMOLITION OF THE ELECTRICAL WORK.

ELECTRICAL LEGEND

(NOT ALL SYMBOLS ARE USED)

- DISTRIBUTION PANEL, 480/277 VOLT OR 120/208 VOLT
- ELECTRICAL PANEL, 480/277 VOLT
- ELECTRICAL PANEL, 120/208 VOLT
- PANELBOARD FLUSH MOUNTED
- PANELBOARD SURFACE MOUNTED
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- MOTOR STARTER, COORDINATE EXACT REQUIREMENTS WITH MOTOR FURNISHED
- WALL MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
- CEILING MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
- FLOOR MOUNTED JUNCTION BOX, ACCORDING TO NEC REQUIREMENTS
- TYPICAL RECESSED/SURFACE MOUNTED LIGHT FIXTURE, LETTER INDICATES FIXTURE TYPE
- RECESSED/SURFACE MOUNTED LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
- SURFACE MOUNTED LIGHT FIXTURE, LETTER INDICATES FIXTURE TYPE
- RECESSED DOWN LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
- WALL MOUNTED LIGHT FIXTURE, LETTER INDICATES FIXTURE TYPE
- WALL MOUNTED LIGHT FIXTURE WITH EMERGENCY BATTERY UNIT
- CEILING/WALL/END MOUNTED EXIT SIGN, SHADING INDICATES DIRECTION OF FIXTURE FACE, ARROW INDICATES DIRECTION OF CHEVRON, PROVIDE UNSWITCHED POWER FROM AREA LIGHTING CIRCUIT
- DOUBLE FACE EXIT SIGN
- TWIN HEAD EMERGENCY LIGHT WITH INTEGRAL BATTERY FOR 90 MINUTE EMERGENCY LIGHTING
- SINGLE POLE SWITCH, MOUNT AT 48" AFF
- 3-WAY SWITCH, MOUNT AT 48" AFF
- 4-WAY SWITCH, MOUNT AT 48" AFF
- DUAL TECHNOLOGY, MOTION SENSOR SWITCH, MOUNT AT 48" AFF
- SINGLE POLE SWITCH WITH PILOT LIGHT
- DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
- SINGLE RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
- QUAD RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
- SPLIT-WIRED DUPLEX RECEPTACLE (HALF SWITCHED AND HALF CONSTANT ON), MOUNT AT 18" AFF UNLESS OTHERWISE SPECIFIED
- DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER/COMPUTER SHELF TO BOTTOM OF DEVICE, OR 48" TO CENTER OF OUTLET NOT LOCATED ABOVE A COUNTER UNLESS OTHERWISE SPECIFIED. 'MM' DENOTES DEVICE TO BE HORIZONTALLY MOUNTED
- QUAD RECEPTACLE MOUNTED 6" ABOVE COUNTER TO BOTTOM OF DEVICE, OR 48" TO CENTER OF OUTLET NOT LOCATED ABOVE A COUNTER UNLESS OTHERWISE SPECIFIED
- WP RECEPTACLE WITH OUTDOOR RATED IN-USE COVER PLATE, PROVIDE FLUSH MOUNTED BOX
- GFI GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
- USB DUPLEX RECEPTACLE WITH TWO INTEGRAL POWERED USB OUTLETS
- TR TAMPER RESISTANT DUPLEX RECEPTACLE
- SPECIAL OUTLET CONFIGURATION, SEE NEMA #
- FLOOR MOUNTED DUPLEX RECEPTACLE, 'FT' INDICATES POKE THROUGH TYPE RECEPTACLE, SEE SPECIFICATION FOR DETAILS
- FLOOR MOUNTED SINGLE RECEPTACLE, SEE SPECIFICATION FOR DETAILS
- FLOOR MOUNTED DOUBLE DUPLEX RECEPTACLE, 'BT' INDICATES BENCH TOP MOUNTED, SEE SPECIFICATION FOR DETAILS
- CKT BRANCH CIRCUIT HOMERUN (VOLTAGE, BRANCH CIRCUIT POLES)
- FIRE ALARM MANUAL PULL STATION - 48" AFF U.O.N.
- FIRE ALARM AUDIO/VISUAL DEVICE - 80" AFF U.O.N., 'SG' INDICATES SECURITY GRADE WIRE GUARD
- FIRE ALARM STROBE LIGHT - 80" AFF U.O.N., 'SG' INDICATES SECURITY GRADE WIRE GUARD
- SMOKE DETECTOR (PROVIDE LOW FREQUENCY SOUNDER BASE ONLY IN APARTMENTS)
- CO COMBINATION SMOKE/CARBON MONOXIDE DETECTOR WITH LOW FREQUENCY SOUNDER BASE
- HEAT DETECTOR
- HT HIGH TEMPERATURE HEAT DETECTOR
- FACP FIRE ALARM CONTROL PANEL
- FAA FIRE ALARM REMOTE ANNUNCIATOR PANEL
- CO CARBON MONOXIDE DETECTOR
- DOOR BELL CHIME UNIT
- DOOR BELL PUSH BUTTON
- J HOOD 120VAC CONNECTION TO KITCHEN RANGE HOOD (LIGHT & FAN)
- TELEPHONE OUTLET
- W WALL MOUNTED TELEPHONE OUTLET (APPROX. 48" AFF)
- CTV CABLE TV OUTLET, WITH COAX CABLE TO HEAD-END UNIT IN BASEMENT, ACTIVATION BY TENANT
- INTERCOM ENTRY STATION WITH INTERFACE WITH ELECTRIC DOOR LOCK ON FRONT ENTRY DOOR
- INTERCOM REMOTE STATION (TENANT APT.) WITH INTERFACE WITH FRONT ENTRY DOOR LOCK RELEASE
- FURNACE EMERGENCY OFF SWITCH
- J BH 120VAC CONNECTION TO GENERATOR BLOCK HEATER (FURNISHED BY GENERATOR MANUFACTURER)
- J BC 120VAC CONNECTION TO GENERATOR BATTERY CHARGER (FURNISHED BY GENERATOR MANUFACTURER)
- J EL 120VAC CONNECTION TO ELECTRIC DOOR LOCK (FURNISHED BY DOOR HARDWARE MANUFACTURER, WIRED AND INSTALLED BY E.C., COORDINATE WITH INTERCOM SYSTEM)
- FIXED DOME CAMERA (PER AHA STANDARDS) - WALL MOUNTED - EXTERIOR WITH 2-GANG 2 1/2" DEEP OUTLET BOX, 3/4" C., CAT 6 PLENUM RATED CABLE, RJ45 PLUG - CAT 6, HUBBELL #SB1XX PORT (USE INDOOR/OUTDOOR RATED CABLING FOR ALL EXTERIOR CAMERAS) RUN CABLE FROM CAMERA TO HEAD-END EQUIP. IN BASEMENT
- 2-POLE TOGGLE DISCONNECT SWITCH MOUNTED 66" AFF ADJACENT TO DOOR SERVING NEW MECHANICAL UNITS (FCU-X-XX), COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER

ABBREVIATIONS

A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
C	CONDUIT
C/B	CIRCUIT BREAKER
CPW	COLD POOL WELL
CKT	CIRCUIT
CR	CASH REGISTER
EC	ELECTRICAL CONTRACTOR
ETBR	ENSTING TO BE REMOVED & RELOCATED
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	ENSTING TO REMAIN
EXP	EXPLOSION-PROOF
REM	ENSTING TO BE REMOVED
HPW	HOT POOL WELL
HT	HEAT TRACE
JB	JUNCTION BOX
M/B	MAIN BREAKER
M.O	MAIN LUG ONLY
MTD	MOUNTED
OHD	OVER HEAD DOOR
PNL	PANELBOARD
RELOC	RELOCATED ENSTING DEVICE/FIXTURE
SG	SNEEZE GUARD
UCR	UNDER COUNTER REFRIGERATOR
U.O.N.	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

ELECTRICAL DRAWING LIST

DRAWING NUMBER	DRAWING DESCRIPTION
E001	ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS
E002	LIGHT FIXTURE SCHEDULE, DETAILS & FIRE ALARM RISER DIAGRAM - ELECTRICAL
E010	DEMOLITION FLOOR PLANS (1ST, 2ND & 3RD) - ELECTRICAL
E011	DEMOLITION FLOOR PLANS (BASEMENT, ATTIC & ROOF) - ELECTRICAL
E101	FLOOR PLANS (1ST, 2ND & 3RD) - ELECTRICAL
E102	FLOOR PLANS (BASEMENT, ATTIC & ROOF) - ELECTRICAL
E401	ONE LINE DIAGRAMS - ELECTRICAL
E501	ELECTRICAL PANEL SCHEDULES

Project Title:
Ansonia Housing Authority
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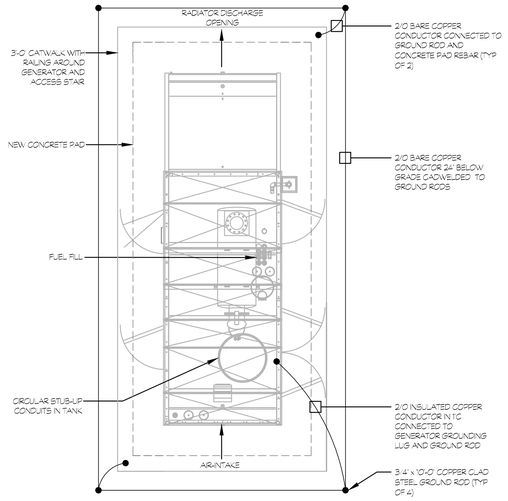
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Drawing Title:
ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS

Date: 4/13/2022
Scale: NONE
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Drawing Number:
E001

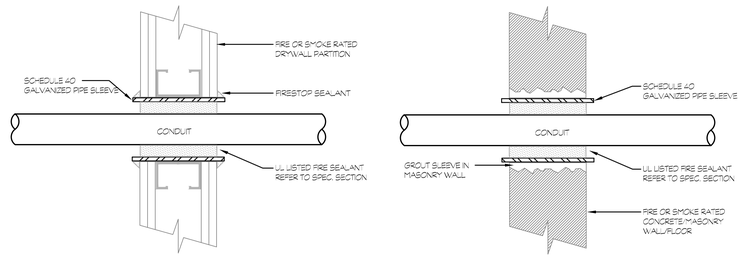


1 GENERATOR GROUNDING DETAIL
NTS

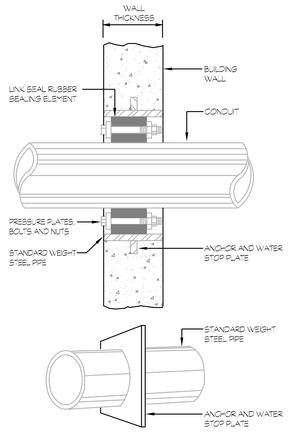
GENERAL NOTES:

PROVIDE UL LISTED FIRE/SMOKE PENETRATION ASSEMBLY IN ACCORDANCE W/ UL1479, ASTM E814 REQUIREMENTS FOR WALL TYPE, RATING, PIPE SIZE INSTALLED.

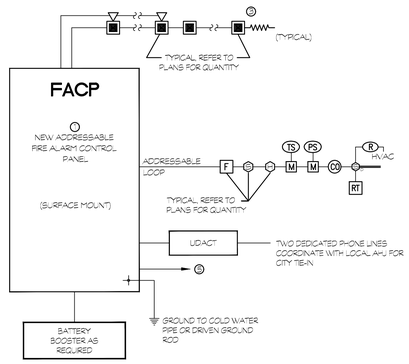
FIRE STOPPING SHALL HAVE A RATING EQUAL TO OR GREATER THAN THE WALL/FLOOR BEING PENETRATED - SEE SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL/FLOOR RATINGS AND LOCATIONS.



2 WALL/FLOOR PENETRATION W/FIRE-SMOKE SEAL DETAIL
NTS



3 WATER-TIGHT WALL SLEEVE
NTS



NOTES:

1. REFER TO SPECIFICATION 28311 FOR SYSTEM REQUIREMENTS. (SYSTEM BASED ON NOTIFIER)
2. PANEL WILL BE FURNISHED WITH DIALER FOR FIRE SERVICE NOTIFICATION. PROVIDE TWO PHONE LINES FROM D-MARC.
3. PROVIDE WIRING AS REQUIRED TO ALLOW FOR SILENCING OF AUDIBLE DEVICES WITH STROBES STILL ACTIVE. ALL STROBES SHALL BE SYNCHRONIZED.
4. SEPARATE BUILDING INTO A MINIMUM OF 2 LOGICAL SECTIONS BY USE OF NOTIFIER ISO-X FAULT ISOLATOR MODULES.
5. PROVIDE 120V, 20A DEDICATED BRANCH CIRCUIT WITH BREAKER LOCK.
6. ALL WIRING TO BE PER SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS.
7. FURNISH DEVICES WITH ALL NECESSARY MATERIALS AND ACCESSORIES FOR COMPLETE INSTALLATION TO BE FULLY OPERATIONAL.
8. CONTRACTOR SHALL COORDINATE LOCATION OF ALL DUCT SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. ALL DEVICES SHALL BE WIRED TO THE FIRE ALARM SYSTEM.
9. MOUNT NOTIFICATION DEVICES 80" AFF OR 6" BELOW CEILING, WHICH EVER IS LOWER. MOUNT PULL STATIONS AT 48" AFF.
10. PROVIDE FRAMED BUILDING LAYOUT ADJACENT TO CONTROL PANEL.
11. REFER TO POWER PLANS TO CONFIRM DEVICE QUANTITIES. ALL FIRE ALARM WORK SHALL BE INCLUDED IN THE BASE BID.

4 FIRE ALARM RISER DIAGRAM
NTS

LIGHTING FIXTURE SCHEDULE

DESIGNATION	DESCRIPTION	MANUFACTURER/ MODEL NUMBER	LAMP			ELECTRICAL			NOTES
			TYPE	COLOR TEMP	NO	DRIVER	VOLTAGE	WATTS	
A	SURFACE MOUNTED 11" DIAMETER LED LIGHT FIXTURE WITH OPAL ACRYLIC LENS AND SATIN NICKEL FINISH (1600 LUMEN PACKAGE)	SUNPARK ELECTRONICS CORP. #2-02480-3500K	LED	3500K		ELECTRONIC	120	17	
B	SLIM SURFACE MOUNTED 7" DIAMETER LED LIGHT FIXTURE WITH OPAL LENS AND ALUMINUM FINISH (1000 LUMEN PACKAGE)	LIGHTOLIER LIGHTING #SR7835K10AL	LED	3500K		ELECTRONIC	120	14.4	
C	SURFACE MOUNTED 13" DIAMETER LED LIGHT FIXTURE WITH OPAL ACRYLIC LENS AND SATIN NICKEL FINISH (3280 LUMEN PACKAGE)	SUNPARK ELECTRONICS CORP. #2-02477-3500K	LED	3500K		ELECTRONIC	120	35	
D	SLIM SURFACE MOUNTED 5" DIAMETER LED LIGHT FIXTURE WITH OPAL LENS AND ALUMINUM FINISH (850 LUMEN PACKAGE)	LIGHTOLIER LIGHTING #SR7835K7AL	LED	3500K		ELECTRONIC	120	14.4	
E1	SINGLE FACE WALL/CEILING MOUNTED LED EXIT SIGN WITH RED LETTERS AND WHITE THERMOPLASTIC HOUSING	EVENLITE TLX-EM-R-W-SD	LED			ELECTRONIC	120/277	5	(1)(6)
E2	SINGLE FACE RECESSED MOUNTED LED EXIT SIGN WITH RED LETTERS,WHITE BODY AND POLYCARBONATE COVER	EVENLITE CCDS-EM-R-W-WW-REC-SD	LED			ELECTRONIC	120/277	5	(1)(6)
E3	WALL/SURFACE MOUNTED TWIN HEAD REMOTE LED EMERGENCY LIGHT FIXTURE WITH BLACK FINISH. (ALL REMOTE HEADS TO BE POWERED BY INVERTER IN BASEMENT)	EVENLITE PRW-LED-2-MV-BHL-SD	LED			ELECTRONIC	120/277	3 (1.5W EA.)	
E4	20 WATT WALL MOUNTED EMERGENCY MICRO INVERTER TO POWER ALL TYPE E3 FIXTURES WITH SELF DIAGNOSTICS	EVENLITE EM-S-20-NCAD-V3-B-SD	LED			ELECTRONIC	120/277		(6)
F	18"L WALL MOUNTED LED VANITY LIGHT FIXTURE W/RIBBED WHITE ACRYLIC LENS AND WHITE HOUSING (1557 LUMEN PACKAGE)	ASL LIGHTING #VAR 17 ND 35K L18	LED	3500K		ELECTRONIC	120	17	
G	4FT. SURFACE/PENDANT MOUNTED LENSED LED STRIP LIGHT FIXTURE WITH SMOOTH WHITE DIFFUSER, WHITE FINISH (4000 LUMEN PACKAGE)	DAY-BRITE LIGHTING #FSS40L840-UNV-DIM	LED	4000K		ELECTRONIC	120	31	
G1	SAME AS TYPE G EXCEPT (3000 LUMEN PACKAGE)	DAY-BRITE LIGHTING #FSS430L840-UNV-DIM	LED	4000K		ELECTRONIC	120	26	
G2	SAME AS TYPE G EXCEPT 2FT. AND (2000 LUMEN PACKAGE)	DAY-BRITE LIGHTING #FSS220L840-UNV-DIM	LED	4000K		ELECTRONIC	120	17	
H	4FT. SURFACE MOUNTED LED STAIRWELL LIGHT FIXTURE WITH SMOOTH WHITE DIFFUSER, WHITE FINISH AND LOW LEVEL OCCUPANCY SENSOR - 20% (4650 LUMEN PACKAGE)	ADVANTAGE ENVIRONMENTAL LIGHTING #LSWV0740SLSW**W4D10	LED	4000K		ELECTRONIC	120	33	(8)
H1	SAME AS TYPE H EXCEPT 2FT. (2325 LUMEN PACKAGE)	ADVANTAGE ENVIRONMENTAL LIGHTING #LSWV0740SLSW**W2D10	LED	4000K		ELECTRONIC	120	16.5	(8)
HE	SAME AS TYPE H EXCEPT WITH A 1200 LUMEN EMERGENCY BATTERY	ADVANTAGE ENVIRONMENTAL LIGHTING #LSWV0740SLSW**W4EBSJD10	LED	4000K		ELECTRONIC	120	33	(8)
J	SMALL WALL MOUNTED LED EXTERIOR SCONCE FIXTURE W/OPAL RIBBED POLYCARBONATE LENS & BLACK FINISH (1216 LUMEN PACKAGE)	ASL LIGHTING #CRA 12 ND 40K W7	LED	4000K		ELECTRONIC	120	12	
K	WALL MTD FULL CUT-OFF LED FIXTURE WITH INTEGRAL MOTION/AMBIENT SENSOR, WIDE THROW DISTRIBUTION (TYPE 2) & DARK BRONZE FINISH (1567 LUMEN PACKAGE)	GARDCO LIGHTING #10L16L-200-NW-G2-2-120-BL-MR12-PCB-BZ	LED	4000K		ELECTRONIC	120	12	(11)
KE	SAME AS TYPE K EXCEPT WITH 10 WATT EMERGENCY BATTERY	GARDCO LIGHTING #10L16L-200-NW-G2-2-ESPC-120-BL-MR12-PCB-BZ	LED	4000K		ELECTRONIC	120	12	(11)
L	11" DIA. CEILING/SURFACE MOUNTED LED FIXTURE W/WHITE POLYCARBONATE LENS, BLACK FINISH, PHOTO CELL & LOW LEVEL OCC. SENSOR (10% (3200 LUMEN PACKAGE)	ASL LIGHTING #PLU 20 DVD 40K D11 PC OSCD	LED	4000K		ELECTRONIC	120	31	(12)
L1	SAME AS TYPE L EXCEPT (1995 LUMEN PACKAGE)	ASL LIGHTING #PLU 15 DVD 40K D11 PC OSCD	LED	4000K		ELECTRONIC	120	18	(12)

LIGHT FIXTURE NOTES:

1. PROVIDE W/ FEATURES AND ACCESSORIES NECESSARY FOR UNIVERSAL MOUNTING AND DIRECTIONAL ARROW KNOCKOUTS. ARROWS ON PLANS INDICATE DIRECTION OF CHEVRONS. SHADING INDICATES QUANTITY AND LOCATION OF FIXTURE FACE.
2. ALL EXTERIOR FIXTURES AND INTERIOR FIXTURES IN UNHEATED SPACES SHALL BE CAPABLE OF OPERATING IN COLD TEMP (0° F).
3. ALL ELECTRONIC DRIVERS SHALL HAVE A MAXIMUM TOTAL HARMONIC DISTORTION BETWEEN TEN - FIFTEEN PERCENT (10-15%).
4. ALL INTERIOR FIXTURES SHALL BE FURNISHED WITH 4000K COLOR LAMPS, AND ALL EXTERIOR LAMPS SHALL BE 4000K.
5. FURNISH ALL ADDITIONAL MATERIALS AND ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION TO BE FULLY OPERATIONAL.
6. FURNISH WITH NICKEL CADMIUM BATTERY FOR MINIMUM 90 MINUTE EMERGENCY LIGHTING OPERATION.
7. FIXTURE SHALL BE MADE UP OF ONE LONG SIGN WITH THE WORDING "EXIT" AND THE HANDICAP LOGO ADJACENT TO IT.
8. STAIRWELL FIXTURE SHALL BE PANEL SWITCHED FOR THE BASE 20% LIGHT OUTPUT. OCCUPANCY SENSOR WHEN ACTIVATED WILL TURN ON THE REMAINING 80% OUTPUT. THIS OUTPUT WILL STAY ON AS LONG AS THE SENSOR IS ACTIVATED.
9. ALL EQUALS MUST BE APPROVED BY THE EA. ELECTRICAL DESIGNER VIA A POINT BY POINT CALCULATION. IES FILES HAVE TO BE PROVIDED FOR EACH ALTERNATE FIXTURE. THERE WILL BE NO EXCEPTIONS GRANTED. ENERGY MODELS HAVE BEEN BASED ON PRODUCT SHOWN. ANY ALTERNATES SUBMITTED MUST NOT CONSUME MORE THEN THE WATTAGE SHOWN ON THE FIXTURE SCHEDULE. THERE WILL BE NO EXCEPTIONS GRANTED. ALTERNATE EQUALS MAY VARY IN APPEARANCE AND AESTHETICS PROVIDED THEY MEET THE PERFORMANCE REQUIREMENTS SHOWN ON FIXTURE SCHEDULE (FINAL APPROVAL BY ELECTRICAL DESIGNER AND ARCHITECT). POINT BY POINT CALCULATIONS NEED TO BE PERFORMED AND APPROVED PRIOR TO PRODUCT SUBMITTAL PACKAGE SUBMISSION.
10. CONTRACTOR TO INCLUDE IN THEIR BASE BID THE FOLLOWING EXTRAS:
    2 PIECES - OCCUPANCY SENSORS.
    2 PIECES - LIGHT FIXTURES (EACH TYPE).
    2 PIECES - WALL SWITCH WITH J-BOX.
    2 PIECES - EXIT SIGN (EACH TYPE).
11. FIXTURE MOUNTED PHOTO CELL WILL CONTROL 50% OF THE FIXTURES LIGHT OUTPUT (1-DRIVER/BOARD) WIRED TO PANEL 'H'. THE INTEGRAL MOTION SENSOR WILL CONTROL THE OTHER 50% OUTPUT (1-DRIVER/BOARD) WIRED TO THE 'HOUSE' PANEL. BRANCH CIRCUIT SERVING EXTERIOR FIXTURES. NORMAL OPERATION OF FIXTURE: PHOTO CELL WILL TURN LIGHT ON (50%) AT DUSK AND WHEN SOMEONE COMES IN RANGE OF THE MOTION SENSOR THE FIXTURE WILL COME ON TO 100% OUTPUT AND WILL STAY ON UNTIL THERE IS NO MOTION FOR THE PRESET PERIOD OF TIME. THEN IT WILL GO BACK TO 50% OUTPUT UNTIL MOTION IS ACTIVATED AGAIN OR DAWN. IF POWER IS LOST THE LIGHTS WILL COME ON (50% OUTPUT) AUTOMATICALLY AND RUN UNTIL POWER IS RESTORED.
12. THE INTEGRAL PHOTO CELL WILL TURN ON 10% LIGHT OUTPUT FROM THE FIXTURE AT DUSK. WHEN THE MOTION DETECTOR IS ACTIVATED THE REMAINING 90% LIGHT OUTPUT WILL COME AND STAY ON AS LONG AS MOTION IS DETECTED. ONCE THE PRESET TIME EXPIRES FROM NO MOTION BEING DETECTED, THE LIGHTS WILL REDUCE BACK TO 10% UNTIL THEY ARE ACTIVATED BY MOTION AGAIN OR UNTIL DAWN WHEN THEY WILL GO OFF.

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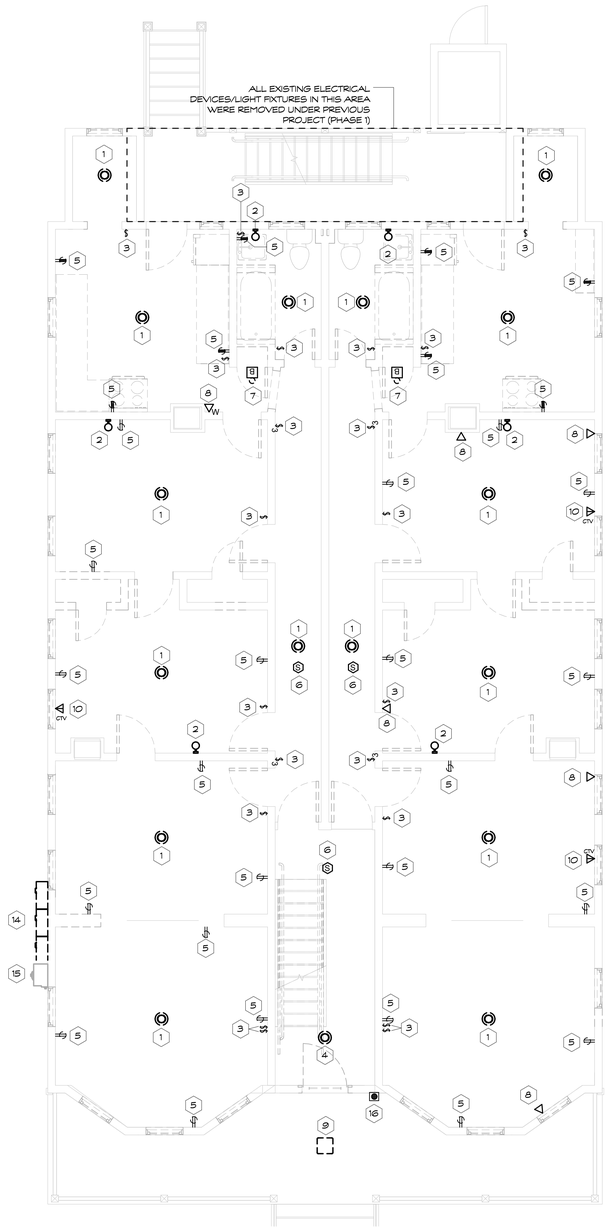
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
LIGHT FIXTURE SCHEDULE, ELECTRICAL DETAILS & FIRE ALARM RISER DIAGRAM

Date: 4/13/2022
Scale: NONE
Drawn By: SEC
Project Number: 21.081

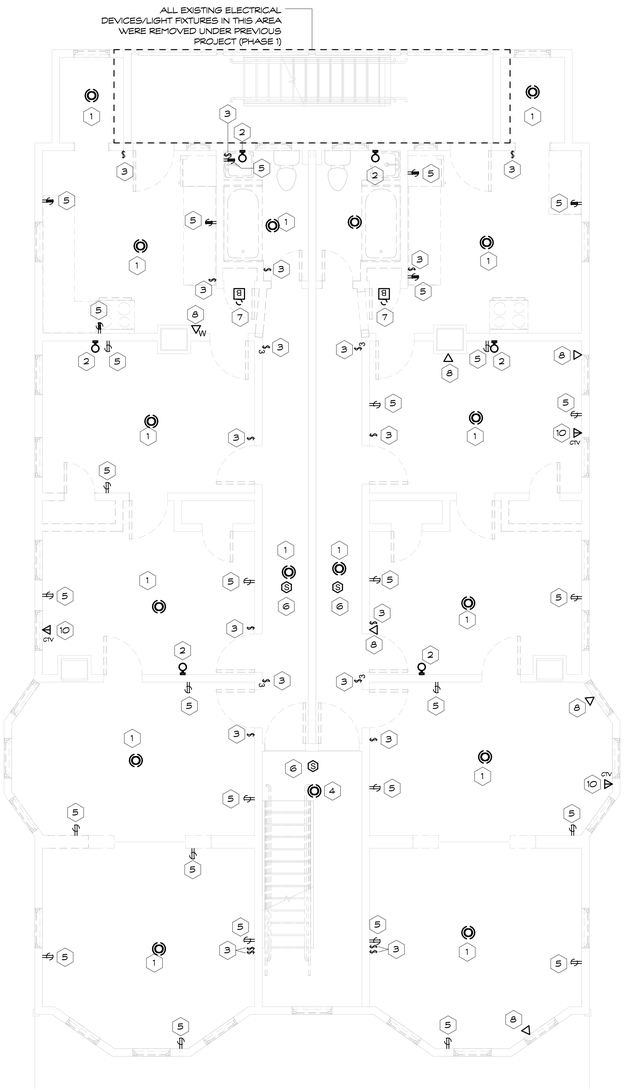
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FIRST FLOOR ELECTRICAL DEMO PLAN

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

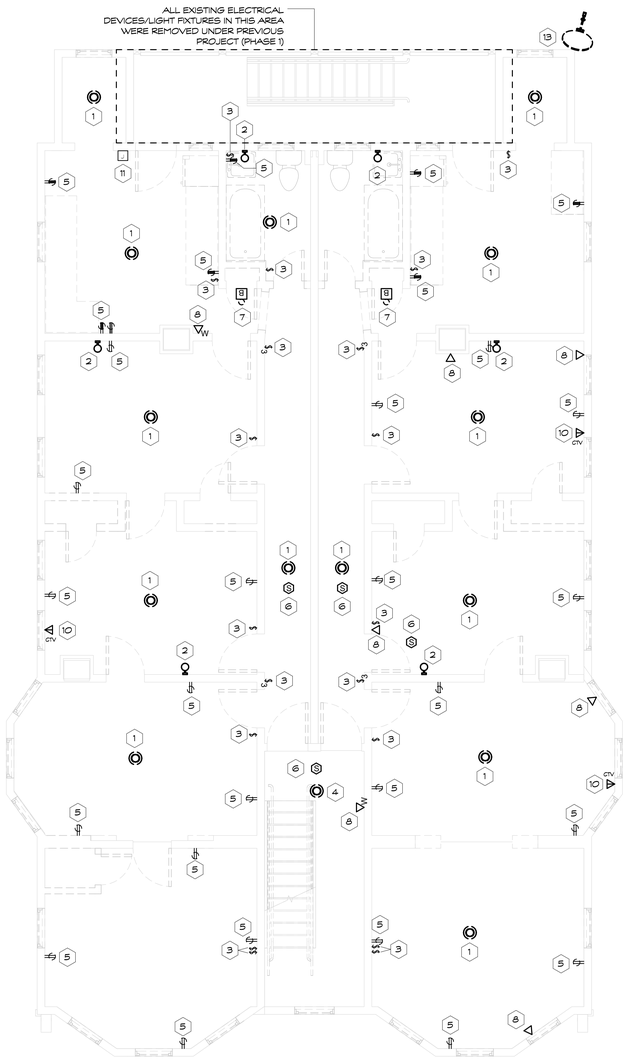
1 E010



SECOND FLOOR ELECTRICAL DEMO PLAN

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

2 E010



THIRD FLOOR ELECTRICAL DEMO PLAN

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

3 E010

GENERAL NOTES

1. ALL SIX EXISTING APARTMENTS WERE NOT ABLE TO BE FIELD SURVEYED, SO DEVICES INDICATED ARE BASED ON THE APARTMENTS THAT WERE REVIEWED. THERE MAYBE DEVICES SHOWN ON THE PLANS THAT ARE NOT IN SOME APARTMENTS AND OTHERS THAT ARE NOT SHOWN BUT ARE THERE. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING ELECTRICAL SYSTEMS BOTH LINE AND LOW VOLTAGE (LIGHT FIXTURES, SWITCHES, RECEPTACLES, FIRE ALARM DEVICES, DOOR BELL SYSTEM, TELEPHONE OUTLETS, CABLE TV WIRING, ETC.) AND ALL ASSOCIATED WIRING, BACK BOXES, SUPPORTS, ETC. SO AS TO COMPLETELY REMOVE ALL EXISITNG SYSTEMS.
2. THE EXISTING 400 AMP EXTERIOR BUILDING MAIN BREAKER AND ALL SIX APARTMENT PANELS ARE TO REMAIN. THE SIX APARTMENT PANELS WILL BE RELOCATED TO EACH RESPECTIVE APARTMENT.

DEMOLITION KEY NOTES

1. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED LIGHT FIXTURE, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO ASSOCIATED PANEL IN THE BASEMENT.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING WALL MOUNTED LIGHT FIXTURE, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO ASSOCIATED PANEL IN THE BASEMENT.
3. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING RECESSED MOUNTED LIGHT SWITCH, BACK BOX, COVER PLATE AND ALL ASSOCIATED CONDUIT AND WIRING COMPLETELY.
4. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING RECESSED MOUNTED LED DOWN LIGHT FIXTURE, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRE TO ASSOCIATED PANEL IN THE BASEMENT.
5. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING RECESSED MOUNTED RECEPTACLE, BACK BOX, COVER PLATE AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO ASSOCIATED PANEL IN THE BASEMENT.
6. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING CEILING MOUNTED FIRE ALARM SMOKE DETECTOR (STAND ALONE, NON SYSTEM).
7. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING WALL MOUNTED DOOR BELL/CHIME, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRING COMPLETELY.
8. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED ANALOG TELEPHONE OUTLET AND ALL ASSOCIATED WIRING BACK TO POINT OF ORIGIN.
9. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SQUARE SURFACE MOUNTED EXTERIOR LIGHT FIXTURE, BACK BOX AND CONDUIT & WIRE SHALL REMAIN (MAKE SAFE) TO BE USED FOR NEW FIXTURE IN THIS LOCATION.
10. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING COAXIAL CABLE TV WIRING, CONNECTORS, BRACKETS, ETC., BOTH INSIDE AND OUTSIDE THE BUILDING ALL THE WAY BACK TO THE UTILITY POLE. THERE SHOULD BE NOTHING REMAINING OF THIS SYSTEM AT THE COMPLETION OF THE DEMOLITION PHASE.
11. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISITNG RECESSED BACK BOX AND COVER PLATE ALONG WITH ALL ASSOCIATED CONDUIT AND WIRE COMPLETELY BACK TO POINT OF ORIGIN.
12. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED DRYER OUTLET AND ALL ASSOCIATED WIRING BACK TO PANEL LOCATED IN BASEMENT.
13. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING WALL MOUNTED DISH ANTENNA (CABLE TV), MOUNTING BRACKET AND ALL ASSOCIATED HARDWARE AND CABLING (BOTH INTERIOR AND EXTERIOR) AND ALL MISCELLANIOUS CONNECTORS, FITTINGS, OUTLETS, ETC. COMPLETELY FROM BUILDING.
14. CONTRACTOR SHALL DISCONNECT AND REMOVE (6) EXISTING SURFACE MOUNTED TENANT MAIN BREAKER/METER ENCLOSURES AND (1) HOUSE MAIN BREAKER/METER ENCLOSURE AND ASSOCIATED SECONDARY FEEDER (CONDUIT & WIRE) TO PANELS LOCATED IN THE BASEMENT.
15. EXISTING INCOMING OVERHEAD UTILITY PRIMARY FEEDER AND EXTERIOR WALL MOUNTED 400 AMP MAIN BREAKER ENCLOSURE TO REMAIN.
16. CONTRACTOR SHALL DISCONNECT AND REMOVE ALL (6) APARTMENT DOOR BELL PUSH BUTTONS AND ALL ASSOCIATED WIRING COMPLETELY.

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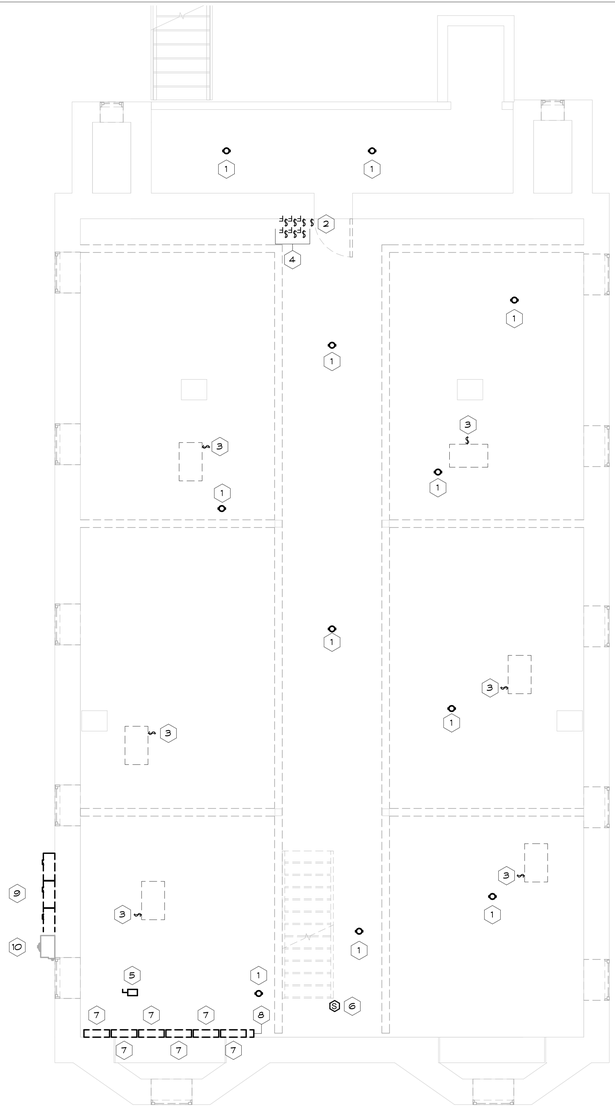
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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

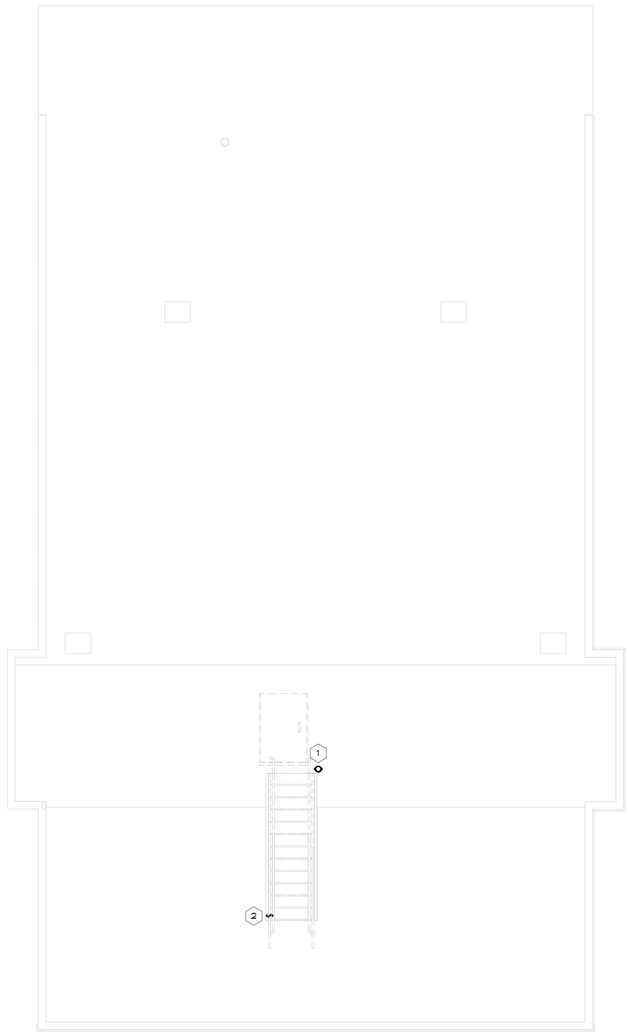
Drawing Title:
DEMOLITION FLOOR PLANS
(1st, 2nd & 3rd) - ELECTRICAL

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: SEC
Project Number: 21.081

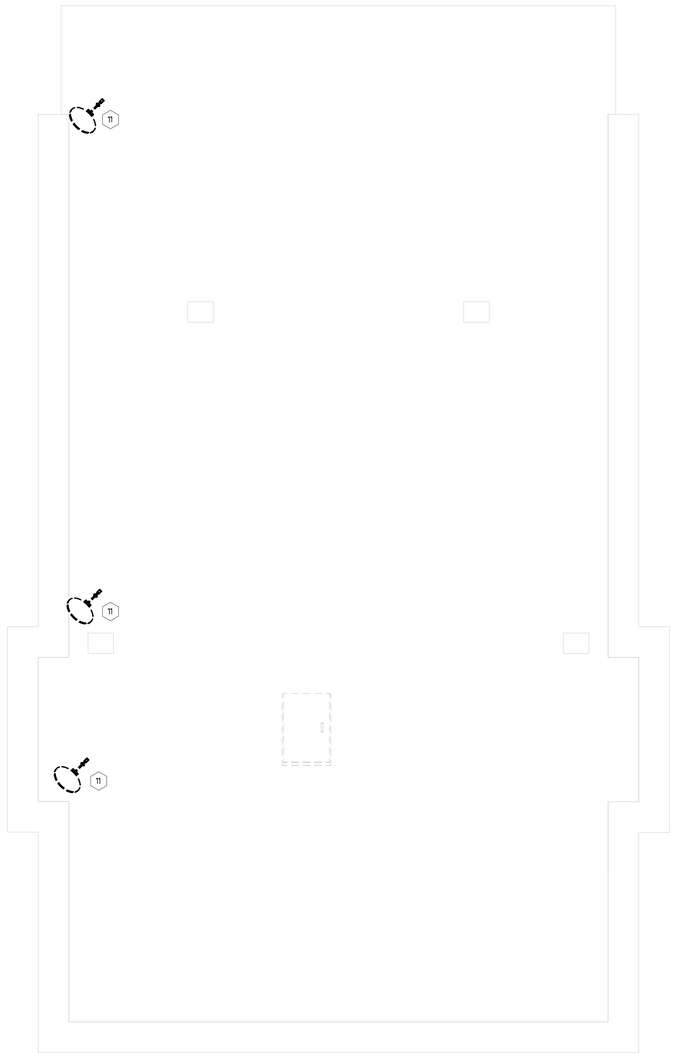
Drawing Number: E010



BASEMENT ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1'-0"
1 E011



ATTIC ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1'-0"
2 E011



ROOF ELECTRICAL DEMO PLAN
SCALE: 1/4" = 1'-0"
3 E011

GENERAL NOTES

1. ALL SIX EXISTING APARTMENTS WERE NOT ABLE TO BE FIELD SURVEYED, SO DEVICES INDICATED ARE BASED ON THE APARTMENTS THAT WERE REVIEWED. THERE MAYBE DEVICES SHOWN ON THE PLANS THAT ARE NOT IN SOME APARTMENTS AND OTHERS THAT ARE NOT SHOWN BUT ARE THERE. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING ELECTRICAL SYSTEMS BOTH LINE AND LOW VOLTAGE (LIGHT FIXTURES, SWITCHES, RECEPTACLES, FIRE ALARM DEVICES, DOOR BELL SYSTEM, TELEPHONE OUTLETS, CABLE TV WIRING, ETC.) AND ALL ASSOCIATED WIRING, BACK BOXES, SUPPORTS, ETC. SO AS TO COMPLETELY REMOVE ALL EXISTING SYSTEMS.
2. THE EXISTING 400 AMP EXTERIOR BUILDING MAIN BREAKER AND ALL SIX APARTMENT PANELS ARE TO REMAIN. THE SIX APARTMENT PANELS WILL BE RELOCATED TO EACH RESPECTIVE APARTMENT.

DEMOLITION KEY NOTES

1. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED PORCELAIN SOCKET TYPE LIGHT FIXTURE, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO ASSOCIATED PANEL IN THE BASEMENT.
2. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED LIGHT SWITCH, BACK BOX, COVER PLATE AND ALL ASSOCIATED CONDUIT AND WIRING COMPLETELY.
3. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED TOGGLE SWITCH TYPE DISCONNECT SERVING GAS FIRED FURNACE, BACK BOX AND ALL ASSOCIATED CONDUIT AND WIRE BACK TO POINT OF ORIGIN.
4. CONTRACTOR SHALL DISCONNECT AND REMOVE (6) EXISTING SURFACE MOUNTED TOGGLE SWITCHES (EMERGENCY OFF) SERVING GAS FIRED FURNACE, BACK BOXES AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO POINT OF ORIGIN.
5. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED DISCONNECT SWITCH AND ALL ASSOCIATED CONDUIT AND WIRING BACK TO POINT OF ORIGIN.
6. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING CEILING MOUNTED FIRE ALARM SMOKE DETECTOR,BASE, BACK BOX AND ALL ASSOCIATED WIRING.
7. CONTRACTOR SHALL DISCONNECT, REMOVE AND RELOCATE EXISTING SURFACE MOUNTED TENANT PANEL. ALL EXISTING BRANCH CIRCUIT WIRING AND FEEDER FROM EXTERIOR METER/MAIN BREAKER SHALL BE DISCONNECTED AND REMOVED COMPLETELY.
8. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING SURFACE MOUNTED HOUSE PANEL. ALL EXISTING BRANCH CIRCUIT WIRING AND FEEDER FROM EXTERIOR METER/MAIN BREAKER SHALL BE DISCONNECTED AND REMOVED COMPLETELY.
9. CONTRACTOR SHALL DISCONNECT AND REMOVE (6) EXISTING SURFACE MOUNTED TENANT MAIN BREAKER/METER ENCLOSURES AND (1) HOUSE MAIN BREAKER/METER ENCLOSURE AND ASSOCIATED SECONDARY FEEDER (CONDUIT & WIRE) TO PANELS LOCATED IN THE BASEMENT.
10. EXISTING INCOMING OVERHEAD UTILITY PRIMARY FEEDER AND EXTERIOR WALL MOUNTED 400 AMP MAIN BREAKER ENCLOSURE TO REMAIN.
11. CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING WALL MOUNTED DISH ANTENNA (CABLE TV), MOUNTING BRACKET AND ALL ASSOCIATED HARDWARE AND CABLING (BOTH INTERIOR AND EXTERIOR) AND ALL MISCELLANIOUS CONNECTORS, FITTINGS, OUTLETS, ETC. COMPLETELY FROM BUILDING.

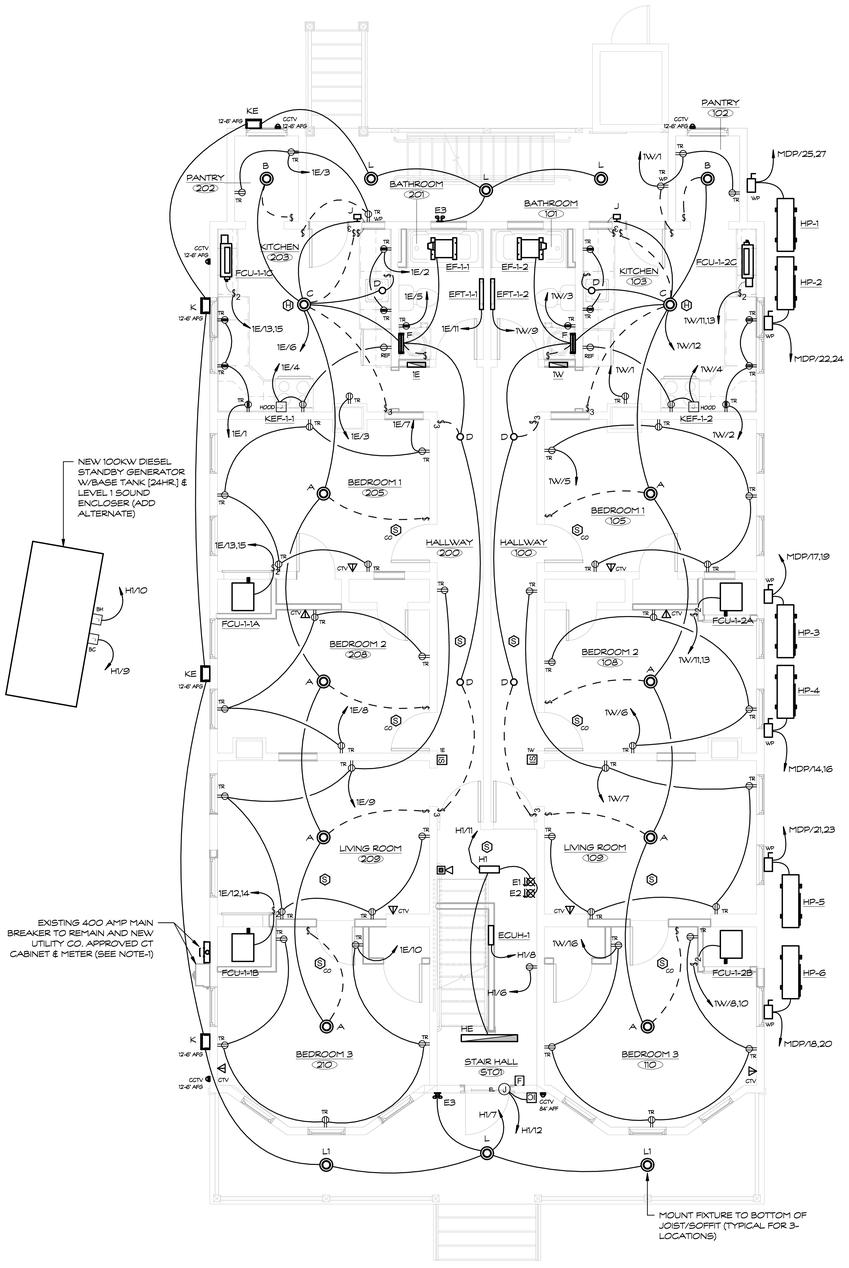
Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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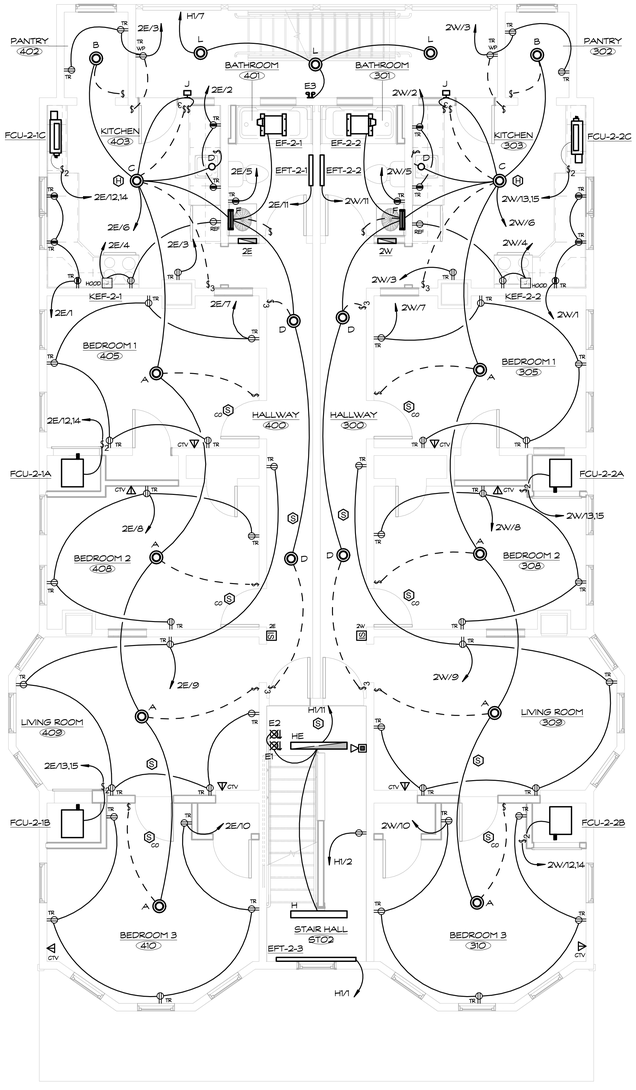
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Drawing Title:
DEMOLITION FLOOR PLANS (BASEMENT, ATTIC & ROOF) - ELECTRICAL

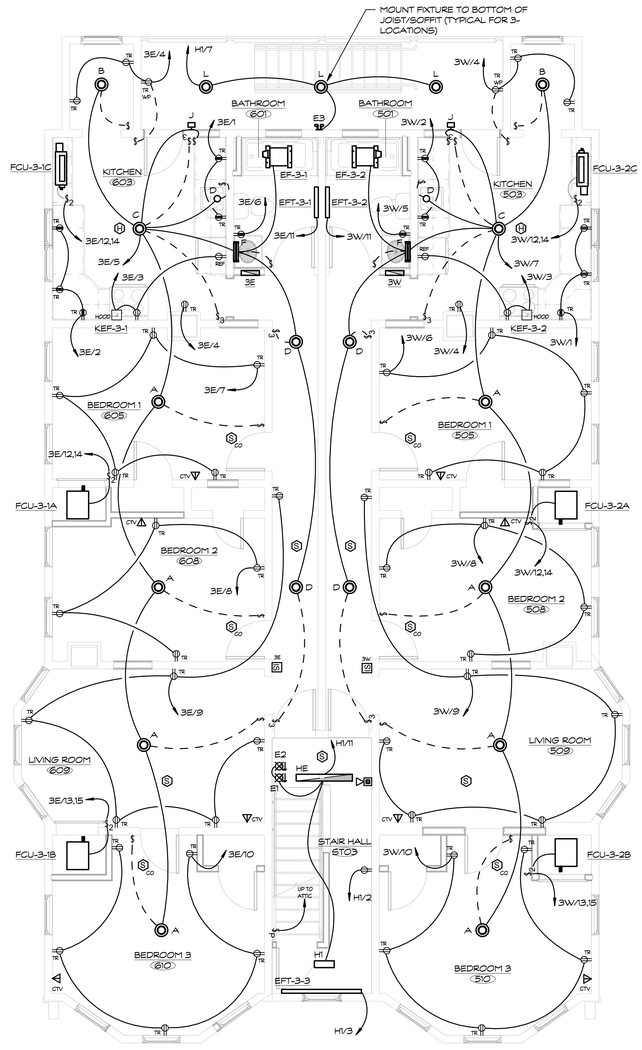
Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: SEC
Project Number: 21.081
Drawing Number: E011



FIRST FLOOR ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
1 / E101



SECOND FLOOR ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
2 / E101



THIRD FLOOR ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
3 / E101

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL NEW 400 AMP WEATHERPROOF CT CABINET AND METER ADJACENT TO EXISTING 400 AMP DISCONNECT TO REMAIN. COORDINATE WIRING REQUIREMENTS WITH UTILITY COMPANY.
2. CONTRACTOR SHALL MOUNT THE TYPE 'F' LIGHT FIXTURE IN THE BATHROOM OF EACH APARTMENT JUST ABOVE THE TOP OF THE MIRROR. COORDINATE EXACT MOUNTING HEIGHT OF FIXTURE WITH ARCHITECTURAL ELEVATIONS.
3. ALL RECEPTACLE BRANCH CIRCUITS IN THE KITCHEN, LIVING ROOM AND BED ROOMS THAT ARE 15 OR 20 AMP - 120V SINGLE PHASE SHALL BE ARC FAULT CIRCUIT INTERRUPTING TYPE BREAKERS. THE SAME CIRCUITS IN THE KITCHEN SHALL BE COMBINATION ARC FAULT AND GFCI (GROUND FAULT) TYPE BREAKERS. THE BRANCH CIRCUIT SERVING THE BATHROOM RECEPTACLE SHALL BE A GFCI TYPE BREAKER.

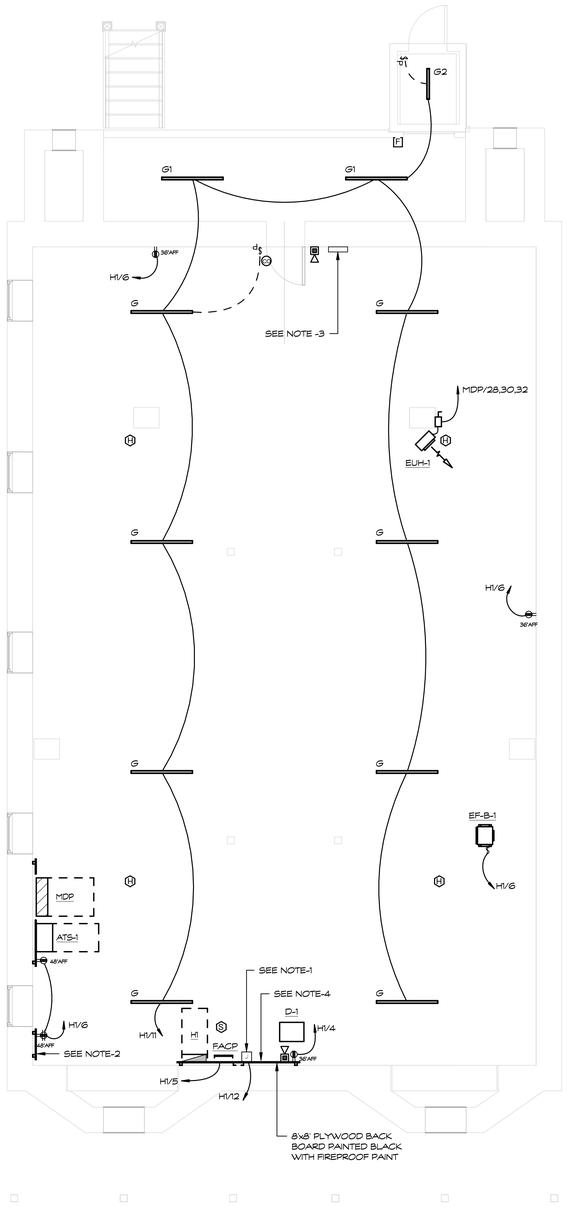
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Ansonia, CT 06401

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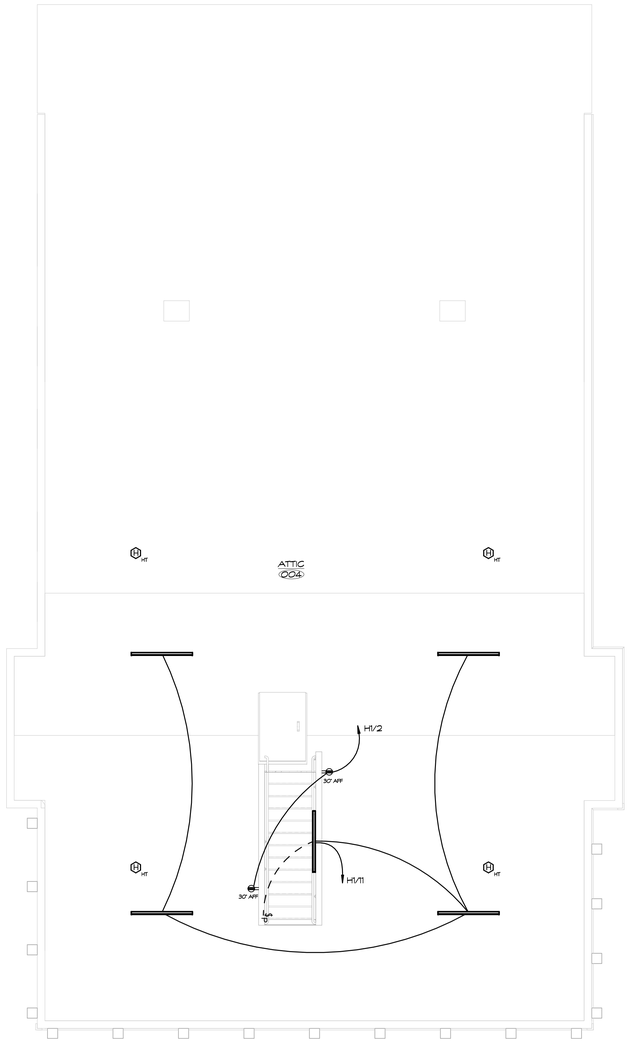
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Drawing Title:
FLOOR PLANS (1ST, 2ND & 3RD) - ELECTRICAL

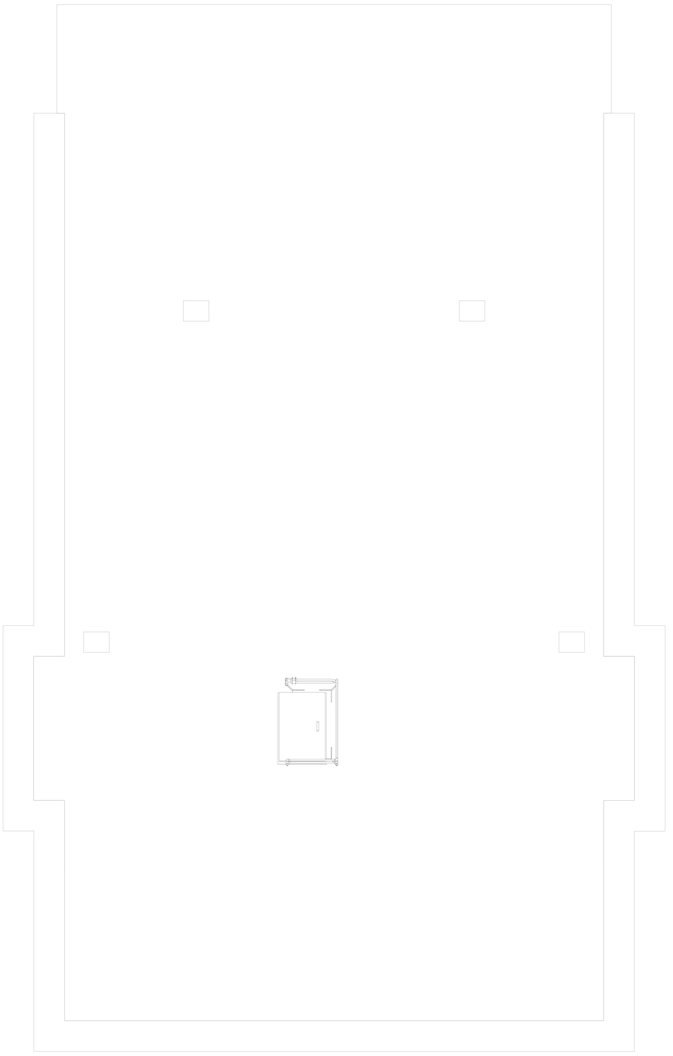
Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: SEC
Project Number: 21.081
Drawing Number: E101



BASEMENT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
1 E102



ATTIC ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
2 E102



ROOF ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"
3 E102

GENERAL NOTES

1. POWER FOR BUILDING INTERCOM SYSTEM, REFER TO ONE LINE DIAGRAM ON DRAWING E401 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. CONTRACTOR SHALL INSTALL NEW CABLE TV HEAD-END EQUIPMENT ON NEW 2x4' PLYWOOD BACK BOARD PAINTED BLACK WITH FIREPROOF PAINT.
3. CONTRACTOR SHALL INSTALL A BATTERY INVERTER (EVENLITE #EMS-20-NICAD-V3-S OR APPROVED EQUAL) TO SERVE THE FOUR TYPE E3 EMERGENCY LIGHTS.
4. CONTRACTOR SHALL FURNISH AND INSTALL VIDEO SURVEILANCE HEAD END EQUIPMENT INCLUDING: WALL MOUNTED CABINET FOR MOUNTING OF ALL EQUIPMENT, CAT 6 PATCH PANEL FOR TERMINATION OF ALL CABLES FROM THE CAMERAS, CAT 6 PATCH CORDS, NETWORK POE SWITCH WITH CAPACITY FOR THE NUMBER OF CAMERAS INSTALLED, NETWORK VIDEO RECORDER WITH CAPACITY FOR 30 DAY STORAGE OF VIDEO, VIDEO MANAGEMENT SERVER AND SOFTWARE, MONITOR, WIRELESS KEYBOARD AND MOUSE FOR LOCAL VIEWING OF IMAGES, AND RACK MOUNTED UPS TO BACKUP POWER TO THE SYSTEM. INSTALLATION SHALL INCLUDE REVIEW OF ALL CAMERA IMAGES WITH THE OWNER AND ADJUSTMENTS AS NEEDED, PROGRAMMING OF SERVER FOR COMPLETE OPERATION AND TRAINING OF THE OWNER IN USE OF ALL EQUIPMENT.

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Revision:	Description:	Date:	Revised By:
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Drawing Title:
FLOOR PLANS (BASEMENT, ATTIC & ROOF)

Date: 4/13/2022
Scale: 1/4" = 1'-0"
Drawn By: SEC
Project Number: 21.081
Drawing Number: E102

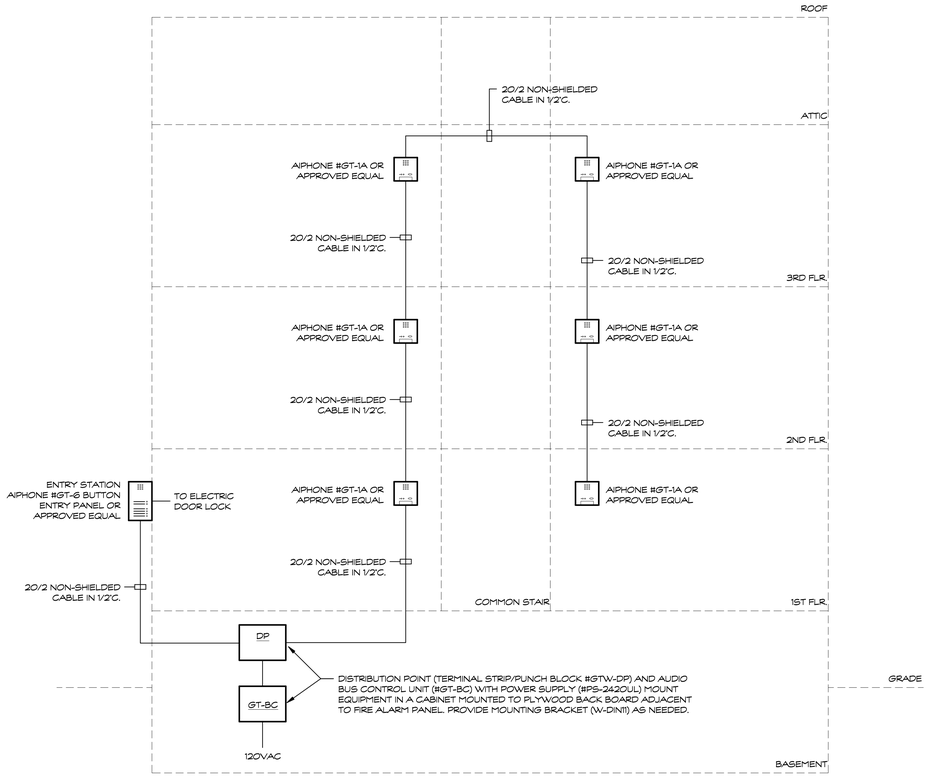
CONDUCTOR AND CONDUIT SIZING TABLE - 3 PHASE

NOTE	CIRCUIT BREAKER	CONDUCTOR (THWN/THHN) (3PH, 3W) WITH GROUND	CONDUCTOR (THWN/THHN) (3PH, 4W) WITH GROUND	CONDUIT SIZE	NOTE	CIRCUIT BREAKER	CONDUCTOR (THWN/THHN) (3PH, 3W) WITH GROUND	CONDUCTOR (THWN/THHN) (3PH, 4W) WITH GROUND	CONDUIT SIZE
(1)	20 AMP	3 #12 & 1 #12 GND	4 #12 & 1 #12 GND	3/4"	(11)	225 AMP	3 #4/0 & 1 #4 GND	4 #4/0 & 1 #4 GND	2 1/2"
(2)	25,30 AMP	3 #10 & 1 #10 GND	4 #10 & 1 #10 GND	3/4"	(12)	250 AMP	3 #250KCMIL & 1 #4 GND	4 #250KCMIL & 1 #4 GND	3"
(3)	35,40,45,50 AMP	3 #8 & 1 #10 GND	4 #8 & 1 #10 GND	1"	(13)	300 AMP	3 #350KCMIL & 1 #4 GND	4 #350KCMIL & 1 #4 GND	3 1/2"
(4)	60 AMP	3 #6 & 1 #10 GND	4 #6 & 1 #10 GND	1"	(14)	400 AMP	3 #600KCMIL & 1 #3 GND	4 #6 & 1 #10 GND	4"
(5)	70,80 AMP	3 #4 & 1 #8 GND	4 #4 & 1 #8 GND	1 1/4"	(15)	500 AMP	(2 SETS) @ 3 #250KCMIL & 1 #2 GND	(2 SETS) @ 4 #250KCMIL & 1 #2 GND	(2) 3"
(6)	90 AMP	3 #3 & 1 #8 GND	4 #3 & 1 #8 GND	1 1/2"	(16)	600 AMP	(2 SETS) @ 3 #350KCMIL & 1 #1 GND	(2 SETS) @ 4 #350KCMIL & 1 #1 GND	(2) 3 1/2"
(7)	100 AMP	3 #2 & 1 #6 GND	4 #2 & 1 #6 GND	1 1/2"	(17)	800 AMP	(2 SETS) @ 3 #600KCMIL & 1 #1/0 GND	(2 SETS) @ 4 #600KCMIL & 1 #1/0 GND	(2) 4"
(8)	125 AMP	3 #1 & 1 #6 GND	4 #1 & 1 #6 GND	2"	(18)	1000 AMP	(3 SETS) @ 3 #400KCMIL & 1 #2/0 GND	(3 SETS) @ 4 #400KCMIL & 1 #2/0 GND	(3) 3 1/2"
(9)	150 AMP	3 #1/0 & 1 #6 GND	4 #1/0 & 1 #6 GND	2"	(19)	1200 AMP	(3 SETS) @ 3 #600KCMIL & 1 #3/0 GND	(3 SETS) @ 4 #600KCMIL & 1 #3/0 GND	(3) 4"
(10)	200 AMP	3 #3/0 & 1 #6 GND	4 #3/0 & 1 #6 GND	2 1/2"	(20)	1600 AMP	(4 SETS) @ 3 #600KCMIL & 1 #4/0 GND	(4 SETS) @ 4 #600KCMIL & 1 #4/0 GND	(4) 4"

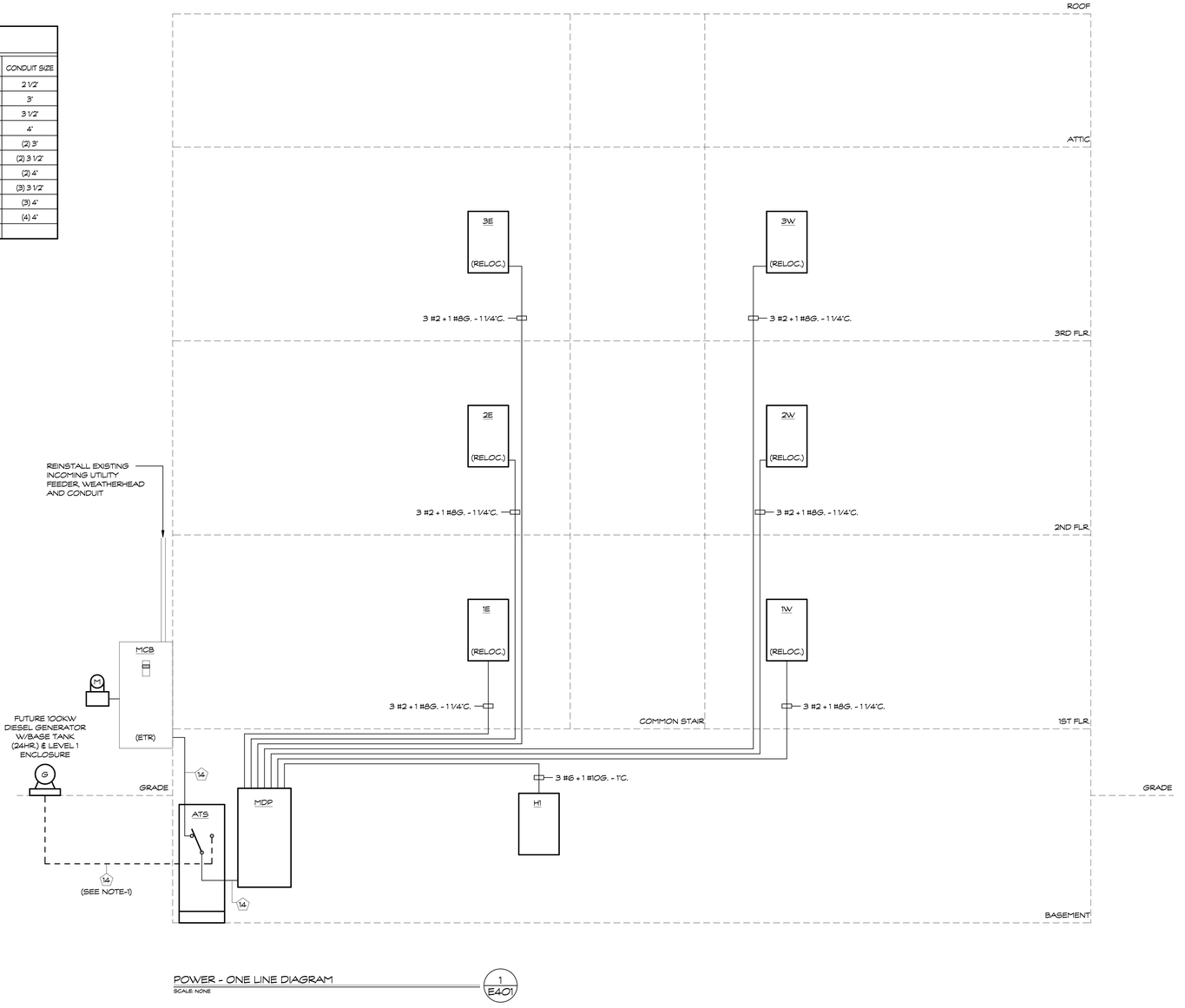
CONDUCTOR NOTES:

1. ALL VALUES BASED ON COPPER CONDUCTORS.
2. FEEDERS
   UPGRADE WIRE TO MAINTAIN MAXIMUM OF 2% VOLTAGE DROP.

   BRANCH CIRCUITS
   UPGRADE WIRE TO MAINTAIN MAXIMUM OF 3% VOLTAGE DROP.
3. NUMBER OF WIRES SHALL BE DETERMINED WITH EQUIPMENT ELECTRICAL NAMEPLATE CHARACTERISTICS.
4. WHERE NEUTRALS ARE REQUIRED, IT SHALL MATCH FEEDER CONDUCTOR SIZE.
5. USE CONDUCTOR (THWN/THHN) (3PH, 3W) WITH GROUND PRIMARY FEEDER FOR TRANSFORMERS.



INTERCOM - ONE LINE DIAGRAM
SCALE: NONE
2 / E401



POWER - ONE LINE DIAGRAM
SCALE: NONE
1 / E401

GENERAL NOTES

1. CONTRACTOR SHALL INSTALL CONDUIT ONLY UNDER BASE BID SCOPE AND ONLY INSTALL FEEDER IF ADD ALATERNATE IS APPROVED. COORDINATE TERMINATION LOCATION OF CONDUIT IN CONCRETE PAD WITH A GENERATOR VENDOR, SO CONDUIT IS IN AREA OF OUTPUT BREAKER.

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Revision:	Description:	Date:	Revised By:
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Drawing Title:
ONE LINE DIAGRAM - ELECTRICAL

Date: 4/13/2022
Scale: NONE
Drawn By: SEC
Project Number: 21.081
Drawing Number: E401

Branch Panel: MDP

Location: BASEMENT 003 | **Supply From:** | **Mounting:** Surface | **Enclosure:** Type 1
Volts: 120/208 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 400 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		C		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Panel 3W		100 A	2	4905	4186					2	100 A		Panel 3E	2
3	--	--	--	--			4446	5165			--	--	--	--	4
5	Panel 2W		100 A	2					4186	4186	2	100 A		Panel 2E	6
7	--	--	--	--	5125	5165					--	--	--	--	8
9	Panel 1E		100 A	2			4187	4625			2	100 A		Panel 1W	10
11	--	--	--	--					5165	4727	--	--	--	--	12
13	Panel H1		100 A	2	5550	3016					2	40 A		HP-4	14
15	--	--	--	--			5692	3016			--	--	--	--	16
17	HP-3		40 A	2					3016	3016	2	40 A		HP-6	18
19	--	--	--	--	3016	3016					--	--	--	--	20
21	HP-5		40 A	2			3016	3016			2	40 A		HP-2	22
23	--	--	--	--					3016	3016	--	--	--	--	24
25	HP-1		40 A	2	3016										26
27	--	--	--	--			3016	2520			3	30 A		EUH-1	28
29										2520	--	--	--	--	30
31						2520					--	--	--	--	32
33															34
35															36
37															38
39															40
41															42
			Total Load:		39515 VA		38697 VA		32847 VA						
			Total Amps:		337 A		330 A		274 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	738 VA	125.00%	923 VA		
Other	12880 VA	101.40%	13060 VA	**Total Conn. Load:**	111059 VA
Power	96362 VA	100.00%	96362 VA	**Total Est. Demand:**	111424 VA
Lighting - Dwelling Unit	1135 VA	100.00%	1135 VA	**Total Conn. Current:**	308 A
				Total Est. Demand Current:	309 A

Notes:

Branch Panel: H1

Location: BASEMENT 003 | **Supply From:** MDP | **Mounting:** Surface | **Enclosure:** Type 1
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	EFT-2-3		20 A	1	1000 VA	720 VA			1	20 A		Receptacles	2
3	EFT-3-3		20 A	1			1000 VA	1400 VA	1	20 A		Recept. (Dehumid.)	4
5	FACP		20 A	1	720 VA	1120 VA			1	20 A		Recept. & EF-B-1	6
7	Lighting		15 A	1			832 VA	1000 VA	1	20 A		ECUH-1	8
9	Gen. Battery Charger		15 A	1	720 VA	1270 VA			1	20 A		Gen. Block Heater	10
11	Lighting		15 A	1			486 VA	980 VA	1	20 A		Intercom & Door Release	12
13													14
15													16
17													18
19													20
21													22
23													24
			Total Load:		5550 VA		5692 VA						
			Total Amps:		53 A		55 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	498 VA	125.00%	623 VA		
Other	1240 VA	114.52%	1420 VA	**Total Conn. Load:**	11241 VA
Power	9170 VA	100.00%	9170 VA	**Total Est. Demand:**	11546 VA
Lighting - Dwelling Unit	350 VA	100.00%	350 VA	**Total Conn. Current:**	54 A
				Total Est. Demand Current:	56 A

Notes:

Branch Panel: 1E

Location: HALLWAY 200 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	540	360			1	20 A		Receptacles	2
3	Receptacles		20 A	1			760	1440	1	20 A		Recept. (Ref./Range/Hood)	4
5	Recept. (Bath Rm.)		20 A	1	180	185			1	15 A		Lights & EF-1-1	6
7	Receptacles		20 A	1			900	720	1	20 A		Receptacles	8
9	Receptacles		20 A	1	1080	900			1	20 A		Receptacles	10
11	EFT-1-1		15 A	1			400	315	2	15 A		FCU-1-1B	12
13	FCU-1-1A & C		15 A	2	630	315			--	--	--	--	14
15	--	--	--	--			630						16
17													18
19													20
21													22
23													24
			Total Load:		4187 VA		5165 VA						
			Total Amps:		40 A		48 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1960 VA	108.04%	2118 VA	**Total Conn. Load:**	9352 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9519 VA
Lighting - Dwelling Unit	117 VA	100.00%	117 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Branch Panel: 2E

Location: HALLWAY 400 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	540	360			1	20 A		Receptacles	2
3	Receptacles		20 A	1			760	1440	1	20 A		Recept. (Ref/Range/Hood)	4
5	Recept. (Bath Rm.)		20 A	1	180	186			1	15 A		Lighting - Dwelling Unit	6
7	Receptacles		20 A	1			900	720	1	20 A		Receptacles	8
9	Receptacles		20 A	1	1080	900			1	20 A		Receptacles	10
11	EFT-2-1		15 A	1			400	630	2	15 A		FCU-2-1A & 1C	12
13	FCU-2-1B		15 A	2	315	630			--	--	--	--	14
15	--	--	--	--			315						16
17													18
19													20
21													22
23													24
			Total Load:		4186 VA		5165 VA						
			Total Amps:		40 A		48 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1940 VA	108.12%	2098 VA	**Total Conn. Load:**	9351 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9518 VA
Lighting - Dwelling Unit	138 VA	100.00%	138 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Branch Panel: 3E

Location: HALLWAY 600 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	360 VA	540 VA			1	20 A		Receptacles	2
3	Recept. (Ref.)		20 A	1			1440 VA	760 VA	1	20 A		Receptacles	4
5	Lighting - Dwelling Unit		15 A	1	186 VA	180 VA			1	20 A		Recept. (Bath Rm.)	6
7	Receptacles		20 A	1			900 VA	720 VA	1	20 A		Receptacles	8
9	Receptacles		20 A	1	1080 VA	900 VA			1	20 A		Receptacles	10
11	EFT-3-1		15 A	1			400 VA	630 VA	2	15 A		FCU-3-1A & 1C	12
13	FCU-3-1B		15 A	2	315 VA	630 VA			--	--	--	--	14
15	--	--	--	--			315 VA						16
17													18
19													20
21													22
23													24
			Total Load:		4186 VA		5165 VA						
			Total Amps:		40 A		48 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1940 VA	108.12%	2098 VA	**Total Conn. Load:**	9351 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9518 VA
Lighting - Dwelling Unit	138 VA	100.00%	138 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Branch Panel: 1W

Location: HALLWAY 100 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	760	540			1	20 A		Receptacles	2
3	Recept. (Bath Rm.)		20 A	1			180	1440	1	20 A		Recept. (Ref./Range/Hood)	4
5	Receptacles		20 A	1	900	720			1	20 A		Receptacles	6
7	Receptacles		20 A	1			1080	315	2	15 A		FCU-1-2B	8
9	EFT-1-2		15 A	1	400	315			--	--	--	--	10
11	FCU-1-2A & C		15 A	2			630	185	1	15 A		Lights & EF-1-2	12
13	--	--	--	--	630	360			1	20 A		Receptacles	14
15								900	1	20 A		Receptacles	16
17													18
19													20
21													22
23													24
			Total Load:		4625 VA		4727 VA						
			Total Amps:		44 A		45 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1960 VA	108.04%	2118 VA	**Total Conn. Load:**	9352 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9519 VA
Lighting - Dwelling Unit	117 VA	100.00%	117 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Branch Panel: 2W

Location: HALLWAY 300 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	540	360			1	20 A		Receptacles	2
3	Receptacles		20 A	1			720	1440	1	20 A		Recept. (Ref./Rang/Hood)	4
5	Recept. (Bath Rm.)		20 A	1	180	186			1	15 A		Lights & EF-2-2	6
7	Receptacles		20 A	1			900	720	1	20 A		Receptacles	8
9	Receptacles		20 A	1	1080	900			1	20 A		Receptacles	10
11	EFT-2-2		15 A	1			400	315	2	15 A		FCU-2-2B	12
13	FCU-2-2A & 2C		15 A	2	630	315			--	--	--	--	14
15	--	--	--	--			630						16
17													18
19													20
21													22
23													24
			Total Load:		4186 VA		5125 VA						
			Total Amps:		40 A		48 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1900 VA	108.29%	2058 VA	**Total Conn. Load:**	9311 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9478 VA
Lighting - Dwelling Unit	138 VA	100.00%	138 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Branch Panel: 3W

Location: HALLWAY 500 | **Supply From:** MDP | **Mounting:** Recessed | **Enclosure:**
Volts: 120/208 Single | **Phases:** 1 | **Wires:** 3
A.I.C. Rating: 10 KA | **Mains Type:** MLO | **Mains Rating:** 100 A | **MCB Rating:**

Notes:

CKT	Circuit Description	Wire & Conduit	Trip	Poles	A		B		Poles	Trip	Wire & Conduit	Circuit Description	CKT
1	Receptacles		20 A	1	540 VA	360 VA			1	20 A		Receptacles	2
3	Recept. (Ref.)		20 A	1			1440 VA	760 VA	1	20 A		Receptacles	4
5	Recept. (Bath Rm.)		20 A	1	180 VA	900 VA			1	20 A		Receptacles	6
7	Lights & EF-3-2		15 A	1			186 VA	720 VA	1	20 A		Receptacles	8
9	Receptacles		20 A	1	1080 VA	900 VA			1	20 A		Receptacles	10
11	EFT-3-2		15 A	1			400 VA	630 VA	2	15 A		FCU-3-2A & 2C	12
13	FCU-3-2B		15 A	2	315 VA	630 VA			--	--	--	--	14
15	--	--	--	--			315 VA						16
17													18
19													20
21													22
23													24
			Total Load:		4905 VA		4446 VA						
			Total Amps:		47 A		43 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	40 VA	125.00%	50 VA		
Other	1940 VA	108.12%	2098 VA	**Total Conn. Load:**	9351 VA
Power	7240 VA	100.00%	7240 VA	**Total Est. Demand:**	9518 VA
Lighting - Dwelling Unit	138 VA	100.00%	138 VA	**Total Conn. Current:**	45 A
				Total Est. Demand Current:	46 A

Notes:

Project Title:
Ansonia Housing Authority
Apartment Building Renovations
1 Holbrook Place
Ansonia, CT 06401

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Revision:	Description:	Date:	Revised By:
	ISSUED FOR BID	4/13/2022	

Drawing Title:
ELECTRICAL PANEL SCHEDULES

Date: 4/13/2022
Scale:
Drawn By: SEC
Project Number: 21.081

Drawing Number: E501