

COMUNITY RENEWAL TEAM

555 WINDSOR ST. HARTFORD, CT 06120

McKINNEY SHELTER RENOVATIONS

ALTERATION LEVEL 2 207 BRAINARD RD. HARTFORD, CT 06114

> PROJECT # 21570 MAY. 31ST 2022



WILLIAM M. LAPOINT PE

STRUCTURAL ENGINEERS

1379 MAIN STREET, EAST HARTFORD, CT 06108

LIFECARE DESIGNINC.

designing for life

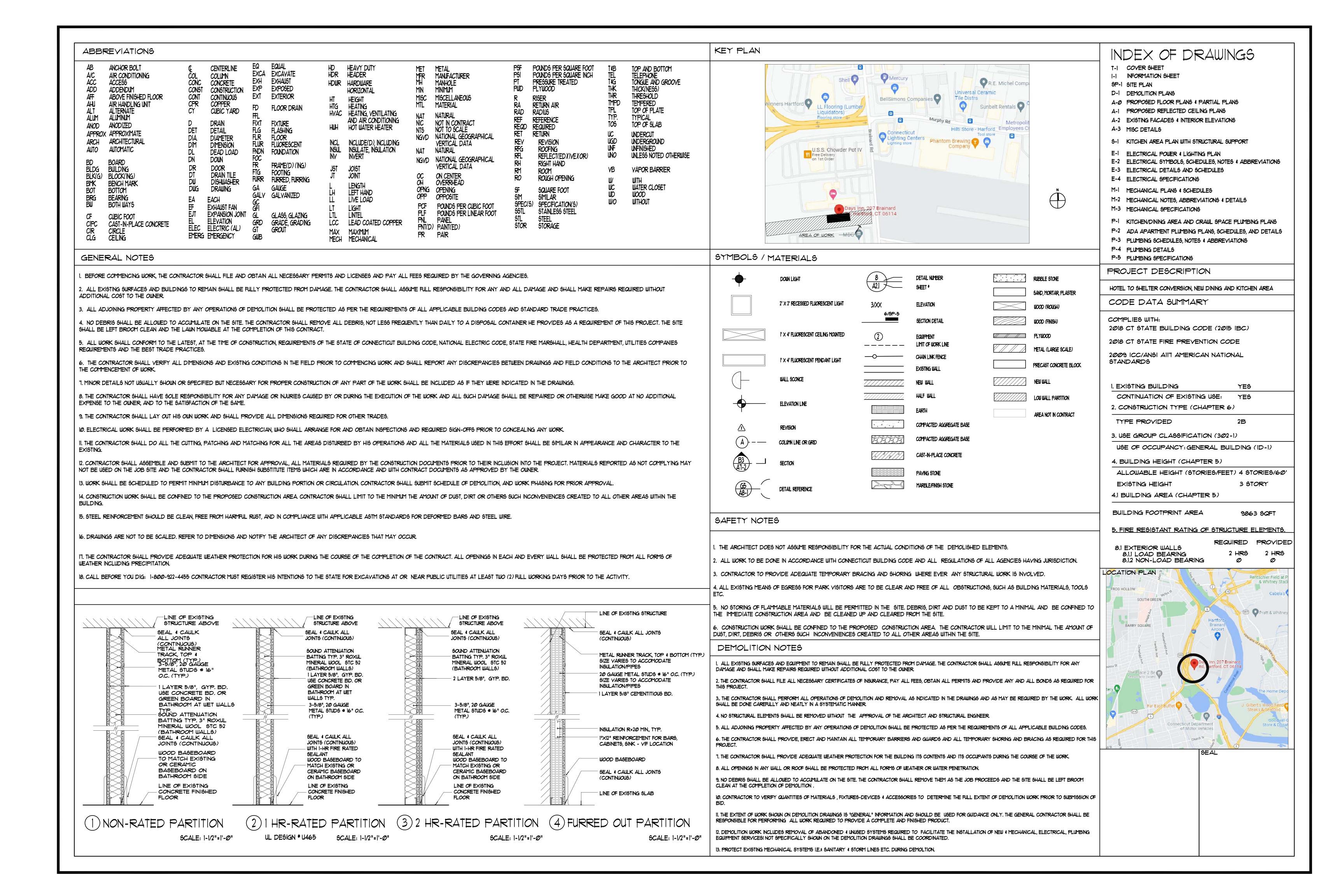
architecture - planning - interior design

1429 park street, suite 201, hartford, ct 06106 860 726 4672 www. lifecaredesign.com @lifecaredesign

AZTECH ENGINEERING INC.

MEP ENGINEERS

901 WETHERSFIELD AVE., HARTFORD, CT 06114

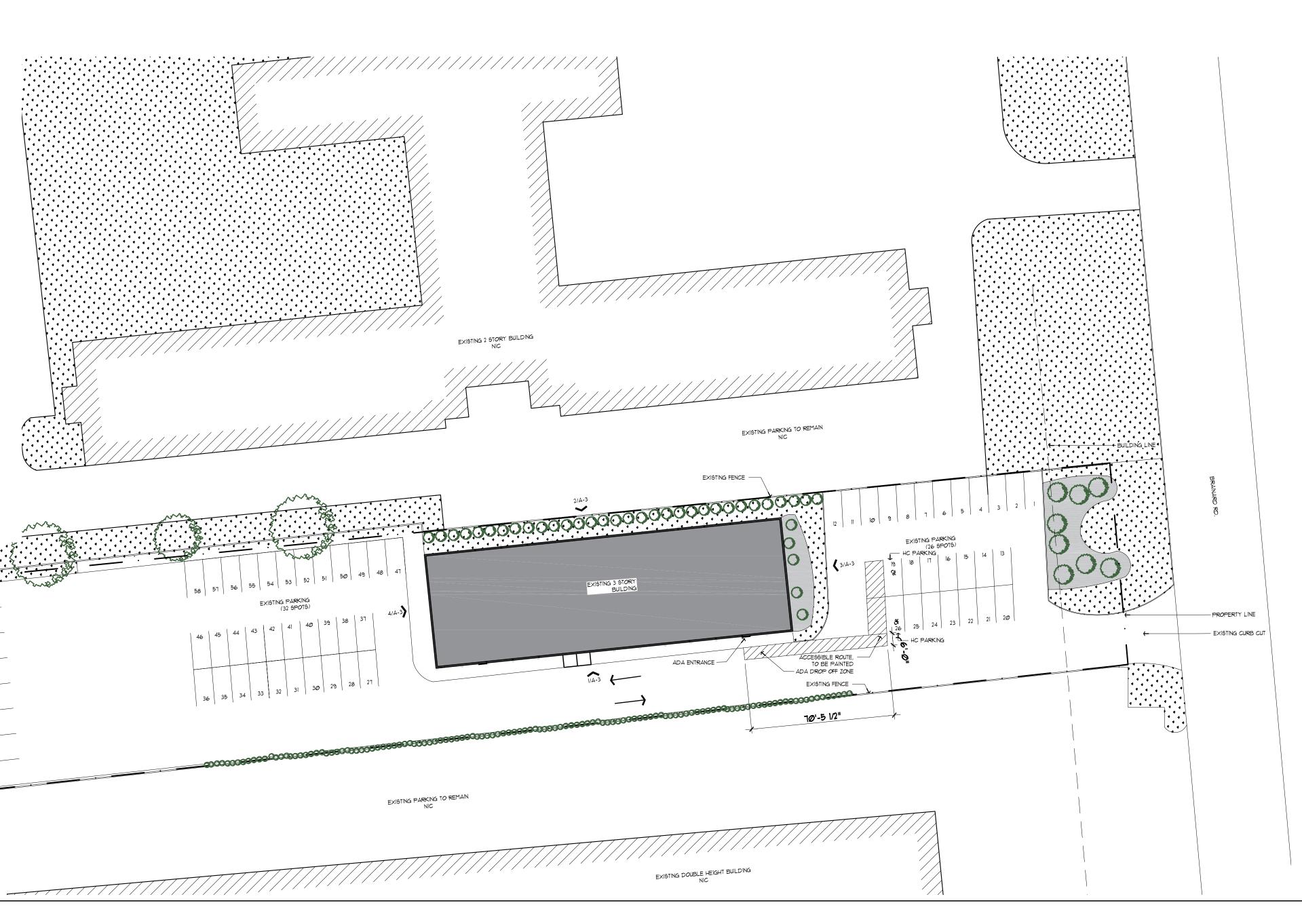


Form 2: ID-1; Section 4.8.2 - General Building Type

Property Address:	 207 Brainard Rd.
Area of Property in SF and Acres:	87,120 SF - 2 Acres
Length of Front Lot Line:	102 Feet

Instructions: Complete each shaded box with the appropriate amount of information to demonstrate how the applicable section of the zoning regulation is

	Section 4.11.2			
No.	Title	Requirement (General)	Proposed	
A. Buildir	ng Siting			
1	Multiple Principal Buildings		permitted	
2	Min Front Lot Line Coverage	65%	55%	
3	Occupation of Corner		required	
4	Front Build-to Zone	between 5' & 15' from front lot line	no	
5	Comer Build-to Zone	between 5' & 10' from front lot line	n/a	
6	Minimum Side Setback	5'	0'	
7	Minimum Rear Setback	5'	5'	
8	Minimum Lot Width		no minimum	
8	Maximum Building Width		no limitation	
9	Maximum Building Coverage	60%	12%	
9	Maximum Impervious Area	75%	77%	
9	Add'l Semi-Pervious Area	15%	0%	
10	Parking/Loading Locations	rear & side yard	rear & front yard	
11	Permitted Vehicular Access	one driveway per lot; one additional driveway for lots with over 160' feet in street frontage; shared driveways encouraged	side entrance	
B. Height				
12	Minimum Överall Height	2 storles	2 stories	
13	Maximum Overall Height	4 stories	3 stories	
14	Ground Story	9' min - 24' max	7.75'	
15	Upper Stories	9' min - 16' max	7.75'	
C. Uses				
16	Ground Story	any use permitted by district, except retail and service uses are limited to no more than 25% of the ground floor area and shall be located along street façade	Hotel rooms, and ammenities	
17	Upper Stories	any use permitted by district, except retail and service uses, except eating places and drinking places as permitted in the district are allowed on the second story	Hotel rooms	
18	Parking within Building	permitted fully in any basement and in rear of upper floors	None	
19	Entrance to Parking within Building	corner side, rear, interior side façade	Interior side façade	
20	Required Occupied Space	minimum 30' deep on all full floors from the front façade	Yes	
D. Street	Façade Requirements			
21	Min Transparency per each story	15%	20%	
22	Blank Wall Limits	required per floor on all stories	yes	
23	Front Façade Entrance Type	stoop, arcade	None	
24	Principal Entrance Location	front or courtyard façade	side	
25	Required # Street Entrances	1 per each 100' of front façade	1	
			yes	
26	Ground Story Vertical Façade Divisions	every 100' of façade width	yes	
	Ground Story Vertical Façade Divisions Horizontal Façade Divisions	every 100' of façade width required within 3' of the top of any visible basement or the ground story, and width 3' of the top of any fifth floor above the first floor	yes	





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Hartford, CT 06120

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Renovation
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1429 Park St. Ste 201

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architecture - planning - interior design

AZTEC ENGINEERING INC. 901 Wethersfield Ave. Hartford, CT 06114

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



key plan	
issue or revision	date

drawing title

SITE PLAN

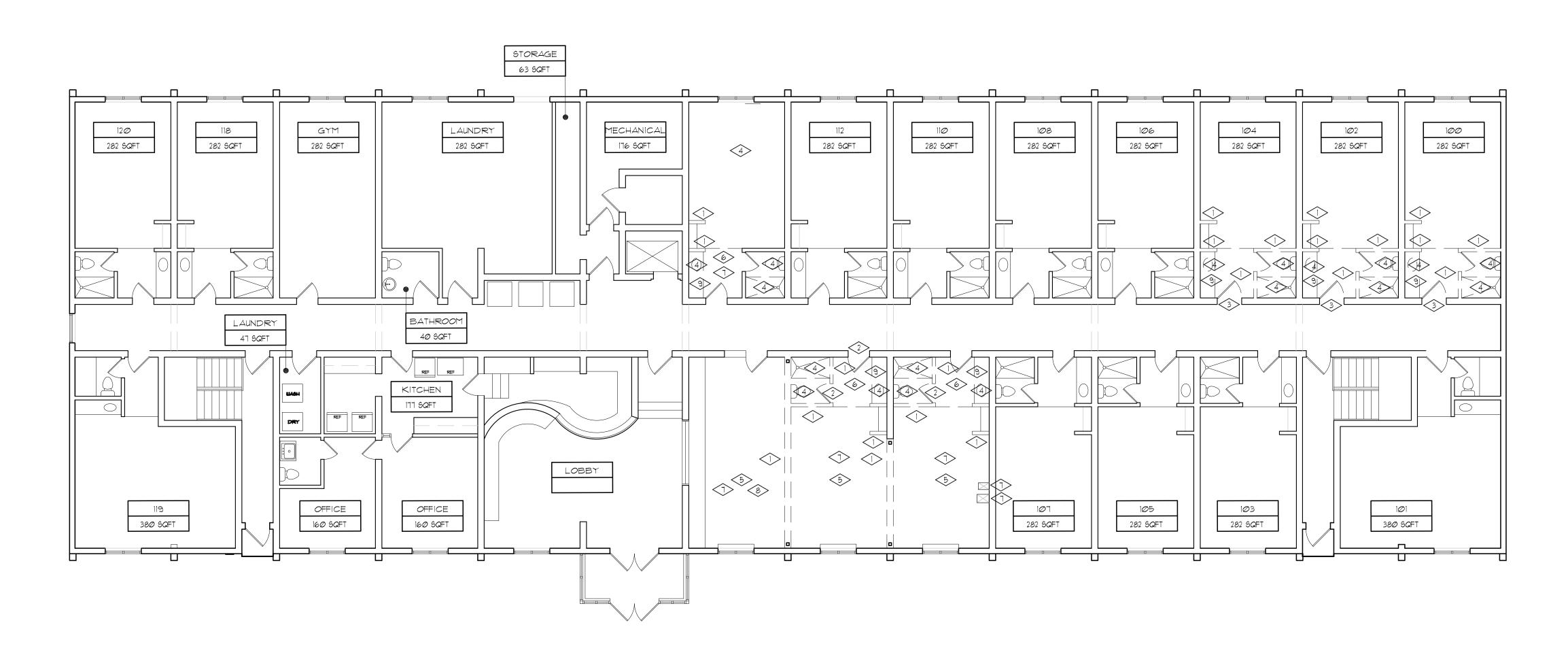
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as indicated h.c.b.

project no.: drawn by:
21570 s.m.

date: checked by:
5/20/2022 h.c.b.

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3 of 21

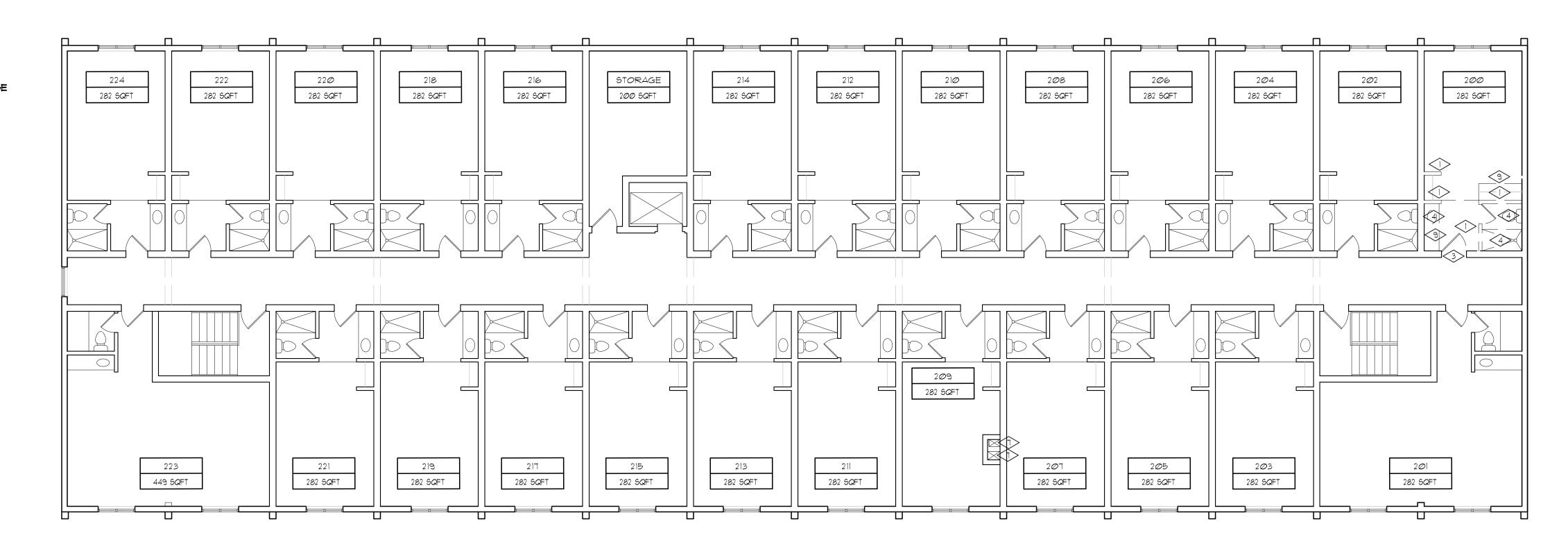


1) 1ST FLOOR DEMOLITION PLAN

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

SPECIFIC DEMOLITION NOTES

- DEMOLISH WALL
- REMOVE DOORS
- REMOVE DOOR, STORE FOR REUSE
- REMOVE PLUMBING FIXTURES
- REMOVE CARPET, STORE FOR REUSE
- REMOVE WOOD/TILE FLOORING
- REMOVE CEILING
- REMOVE LIGHTING
 REMOVE COUNTER





RENEWAL TEAM
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Hartford, CT 06120

McKinney Shelter Renovation 207 Brainard Rd



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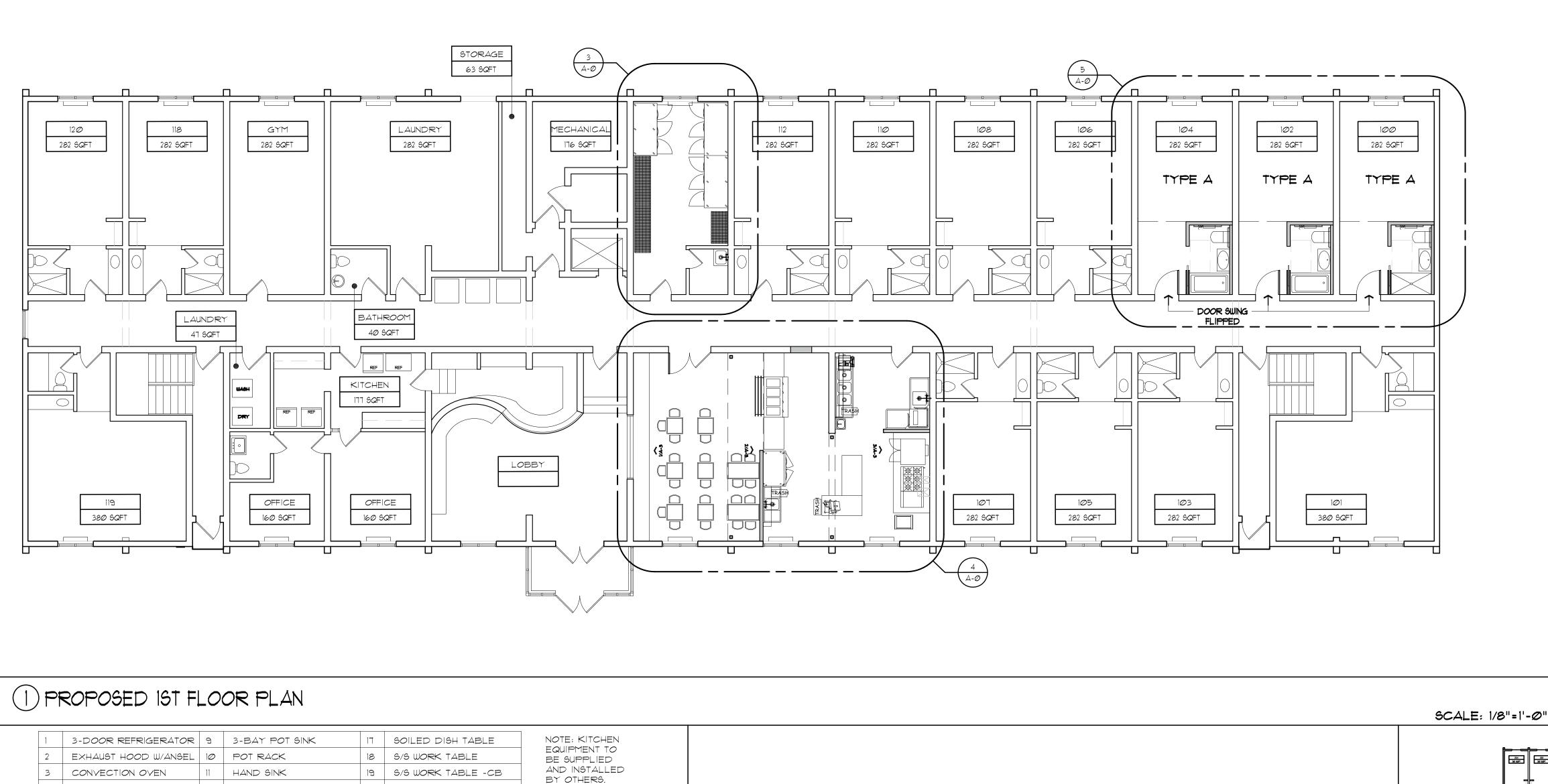
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as indicated	h.c.b.	
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21570	s.m.	
date:	checked by:	
5/20/2022	h.c.b.	

DEMOLITION PLANS

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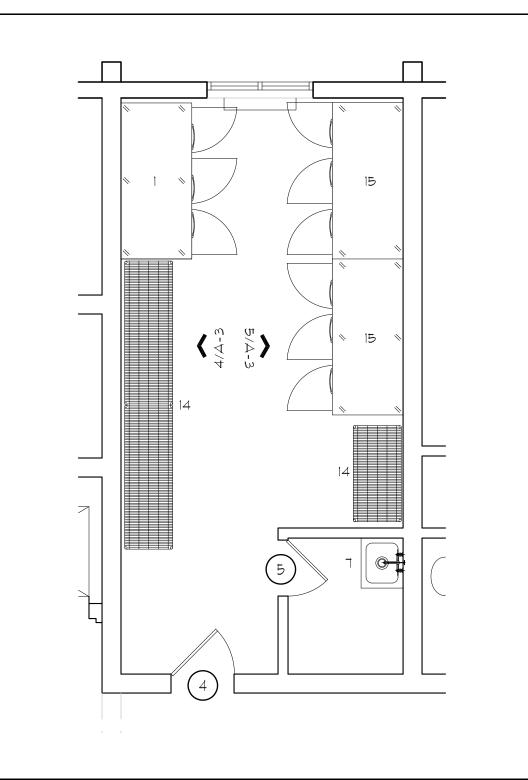
4 of 21

sheet number



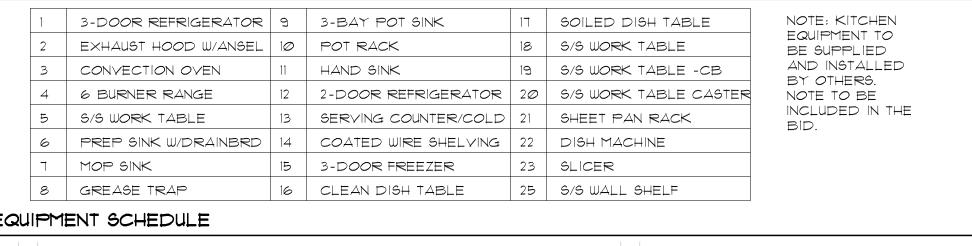
NEW TO MATCH EXISTING *2 2 DINING AREA EXISTING TO REMAIN
3 KITCHEN EXISTING TO REMAIN
4 STORAGE ROOM EXISTING TO REMAIN EXISTING TO REMAIN 6 ROOM 104 ENTRY EXISTING TO REMAIN, DOOR SWING FLIPPS 1 ROOM 104 WC NEW POCKET DOOR, 3'X1' 8 ROOM 102 ENTRY EXISTING TO REMAIN, DOOR SWING FLIPPEI 9 ROOM 102 WC NEW POCKET DOOR , 3'XT' 10 ROOM 100 ENTRY EXISTING TO REMAIN, DOOR SWING FLIPPED 11 ROOM 100 WC NEW POCKET DOOR, 3'X1'
12 ROOM 200 ENTRY EXISTING TO REMAIN, DOOR SWING FLIPPED
13 ROOM 200 WC NEW POCKET DOOR, 3'X1'

(2) DOOR SCHEDULE



3 STORAGE ROOM PLAN

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

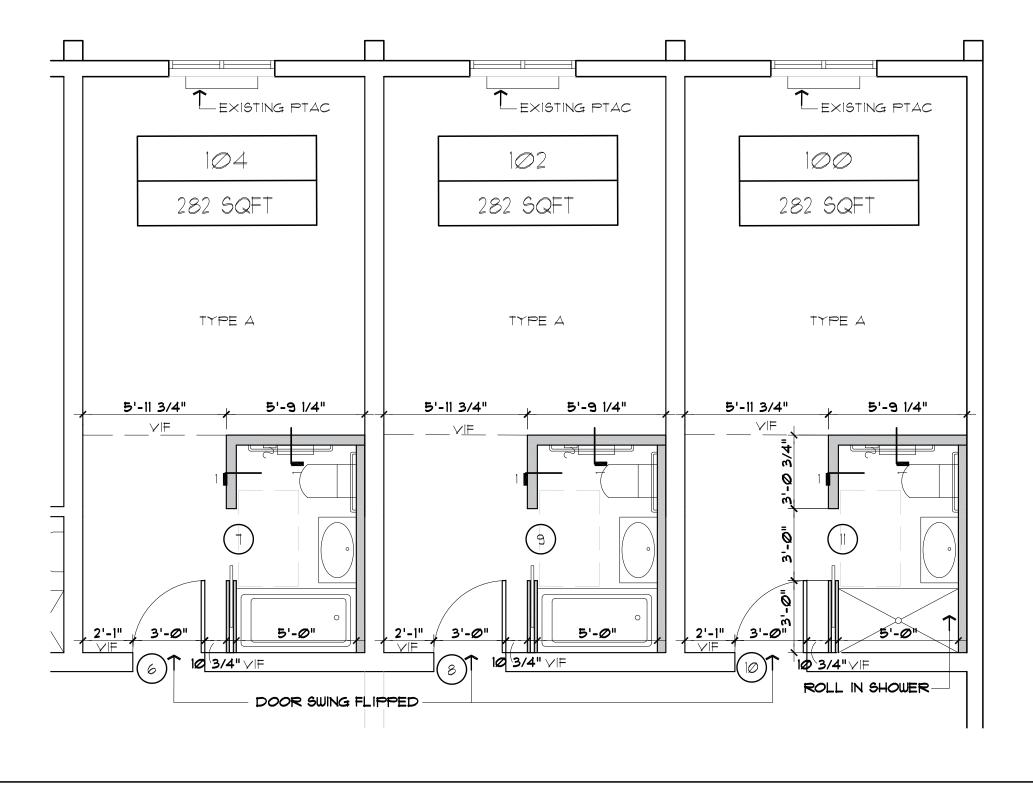


EQUIPMENT SCHEDULE FNEW COLUMN SEE 5-1.01 NEW COLUMN— SEE S-1.0 -EXISTING PTAC EXISTING PTAC NEW COLUMN SEE S-1.0

NOTE: ALL NEW COLUMNS TO BE PAINTED IN 2 HR INTUMESCENT PAINT

(4) KITCHEN PARTIAL PLAN

NOTE: ALL KITCHEN WALLS TO HAVE FRP PANELS, UNLESS OTHERWISE NOTED



5 ADA APARTMENTS PARTIAL PLAN

2ND FLOOR KEY PLAN

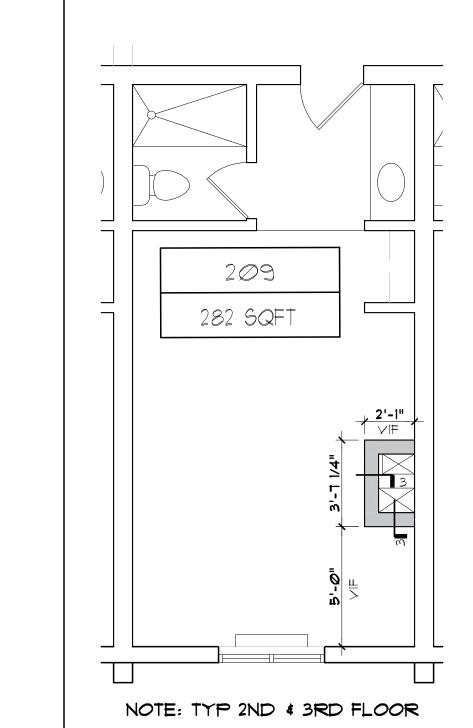
LEXISTING PTAC

200

282 SQFT

5'-11 3/4"

TYPE A



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6 ADA APARTMENT 2ND FLR

- DOOR SWING FLIPPED

7 DUCT ENCLOSURE SCALE: 1/4"=1'-0"

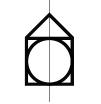
COMMUNITY

555 Windsor St. Hartford, CT 06120 McKinney Shelter

RENEWAL TEAM

207 Brainard Rd Hartford, CT 06114

Renovation



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PROPOSED FLO	

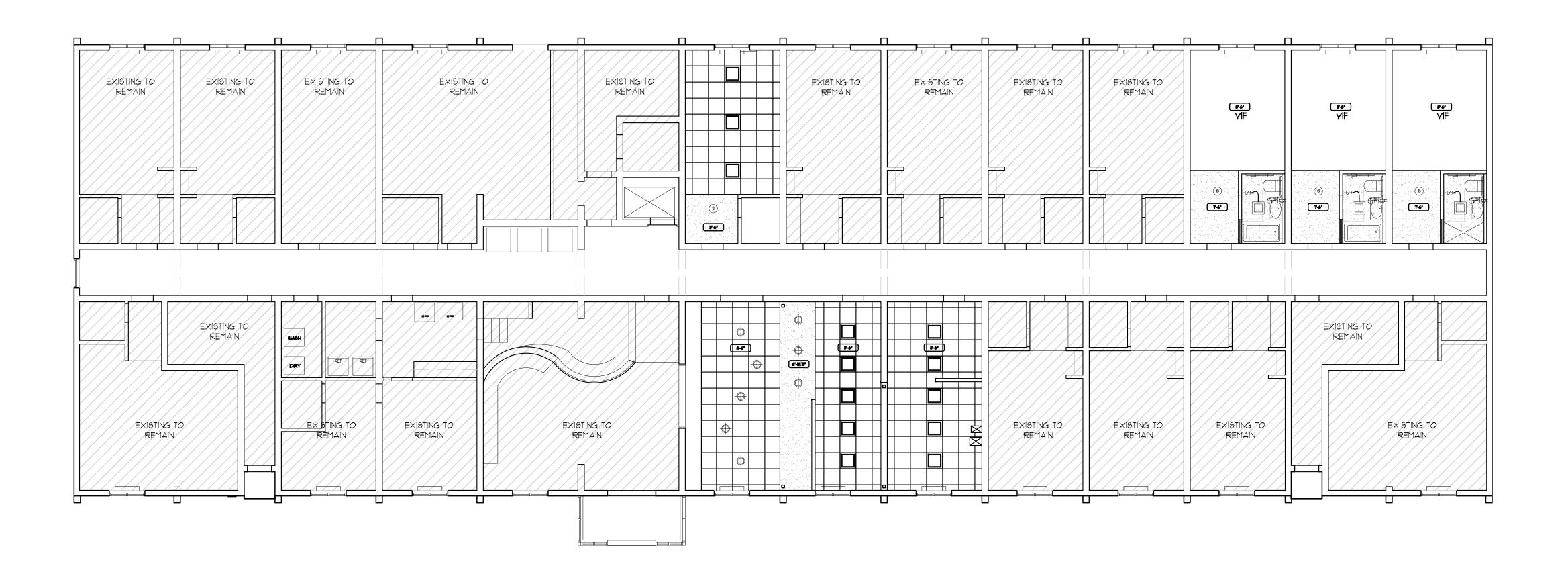
PLANS & PARTIAL PLANS

	scale:	designer	
as indicated		h.c.b.	
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	21570	s.m.	
	date:	checked by:	
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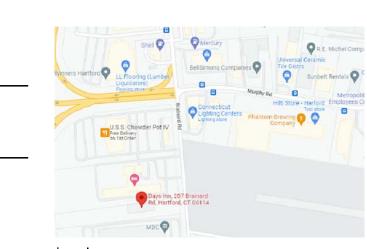




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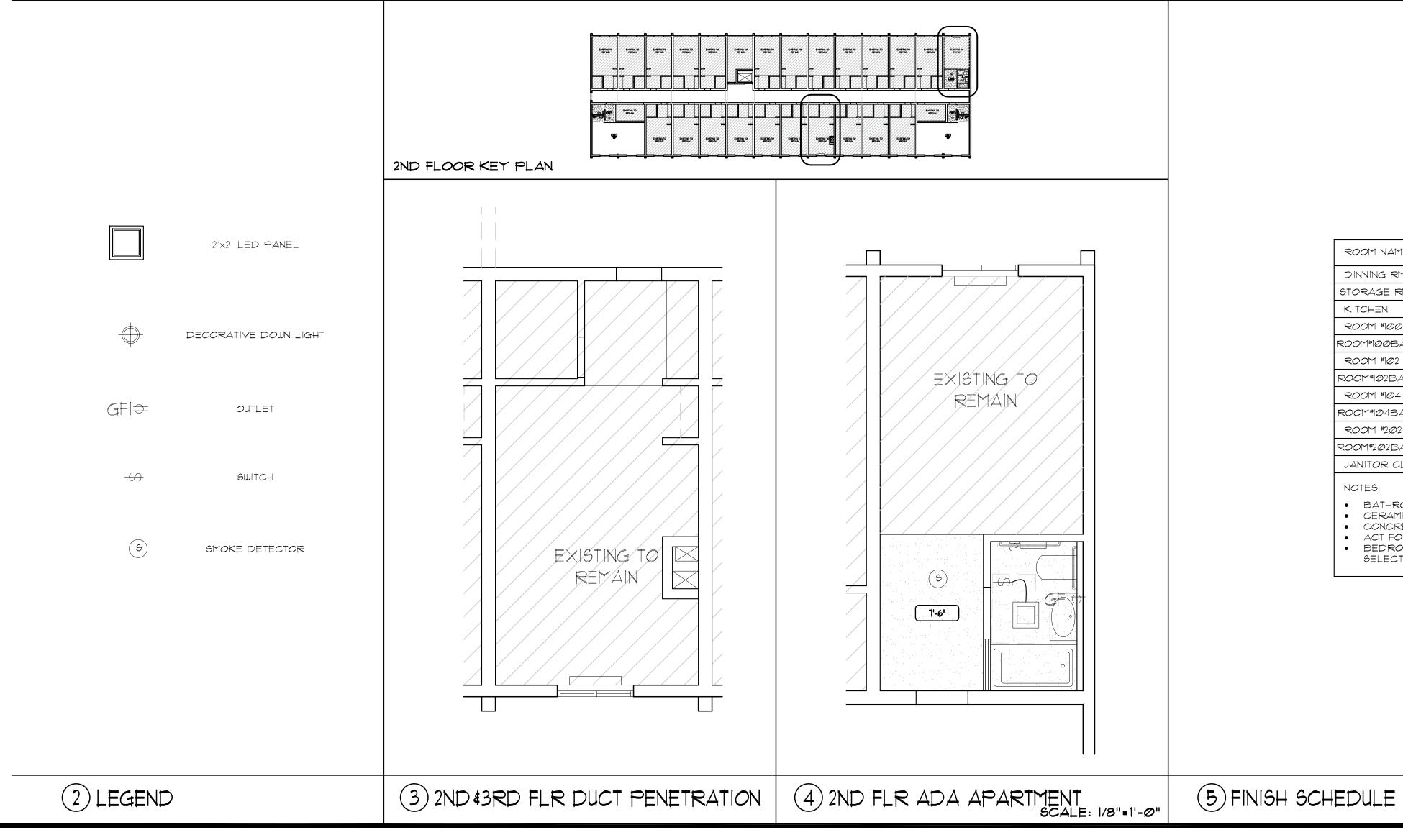
PROPOSED REFLECTED CEILING PLANS as indicated drawn by: s.m.

checked by: 5/20/2022 sheet number

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(1) IST FLOOR REFLECTED CEILING PLAN

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



ROOM NAME	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	FLOORING	NOTES
DINNING RM	EXISTING	EXISTING	-	EXISTING	EXISTING	EXISTING	FOR NEW
STORAGE RM	EXISTING	EXISTING	EXISTING	EXISTING	ACT	CONCRETE	SOFFITS SEE DETAILS &
KITCHEN	FRP	EXISTING	FRP	FRP	ACT	CONCRETE	RCP
ROOM #100	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	
ROOM#100BATH	PAINTED GYP.	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINTED GYP.	C.TILE 12"×24"	
ROOM #102	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	
ROOM#102BATH	PAINTED GYP.	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINTED GYP.	C.TILE 12"×24"	
ROOM #104	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	
ROOM#104BATH	PAINTED GYP.	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINTED GYP.	C.TILE 12"×24"	
ROOM #202	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	
ROOM#202BATH	PAINTED GYP.	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	PAINTED GYP.	C.TILE 12"×24"	
JANITOR CL	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	FLOORING	

NOTES:

- BATHROOMS TO GET EPOXY PAIN
- CERAMIC TILE FOR WALLS & FLOORS @ BATHROOMS TO BE 12"X24" CONCRETE FLOORS TO BE STAINED & MACHINE BUFFED
- ACT FOR KITCHEN TO BE WASHABLE, TEGULAR, WHITE, 24"X24" ON SLIM GRID
 BEDROOMS & BATHROOMS TO GET NEW PAINT ON EXISTING WALLS. COLOR TO BE
- SELECTED BY THE ARCHITECT.



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1) SOUTH FACADE 3 EAST FACADE

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

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Hartford, CT 06114

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



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drawing title

EXISTING FACADES & INTERIOR ELEVATIONS

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date:	checked by:	
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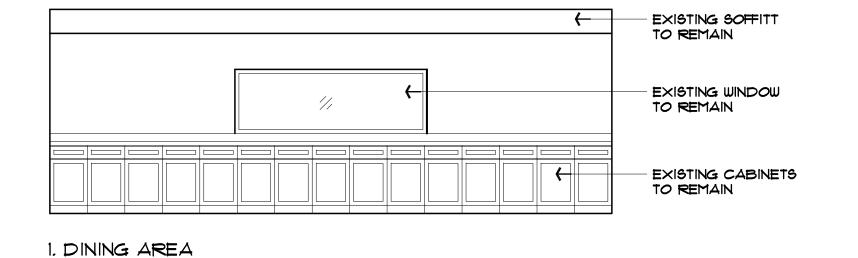
7 of 21

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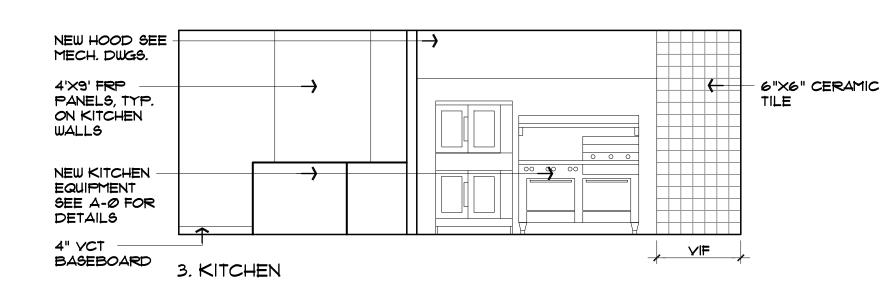
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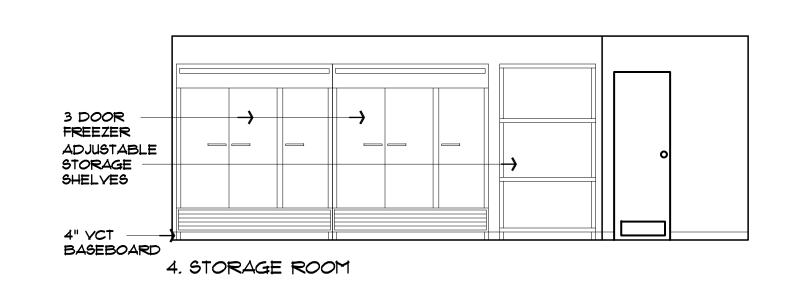


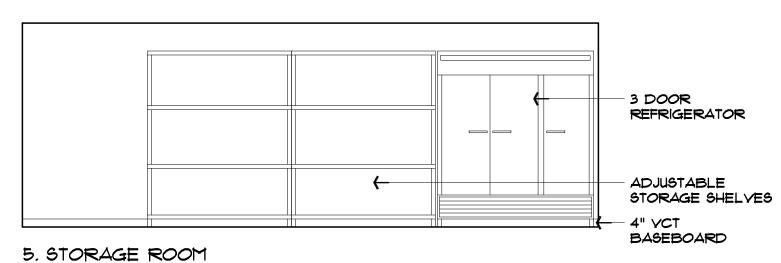
2 NORTH FACADE 4 WEST FACADE SCALE: 1/8"=1'-0"

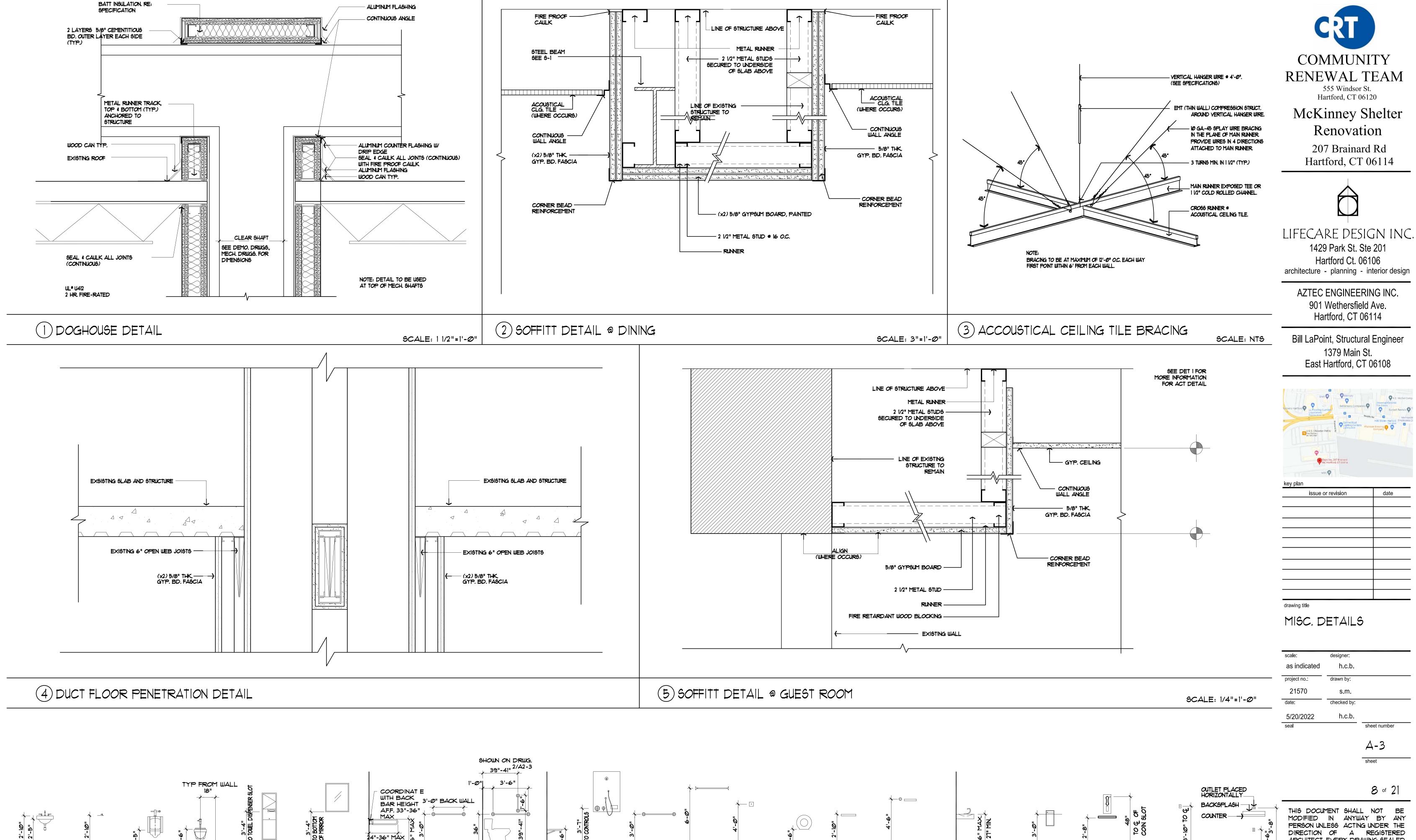


NEW SOFFITT FOOD SERVICE — ISLAND, WITH HOT PLATES FRP PANEL BEYOND WORK TABLE WITH STAINLESS STEEL FRONT COVER MOVEABLE TABLE ON CASTERS 4" VCT -BASEBOARD 2. DINING AREA









TOWEL BAR CURTAIN ROD PULL STATION

H.C. CONTROL SHOWER PANEL

6 TYPICAL ADA MOUNTING HEIGHTS

SWING-AWAY GRAB BAR

S.S. PAPER TOWEL DISP. W/ WASTE RECEPTACLE

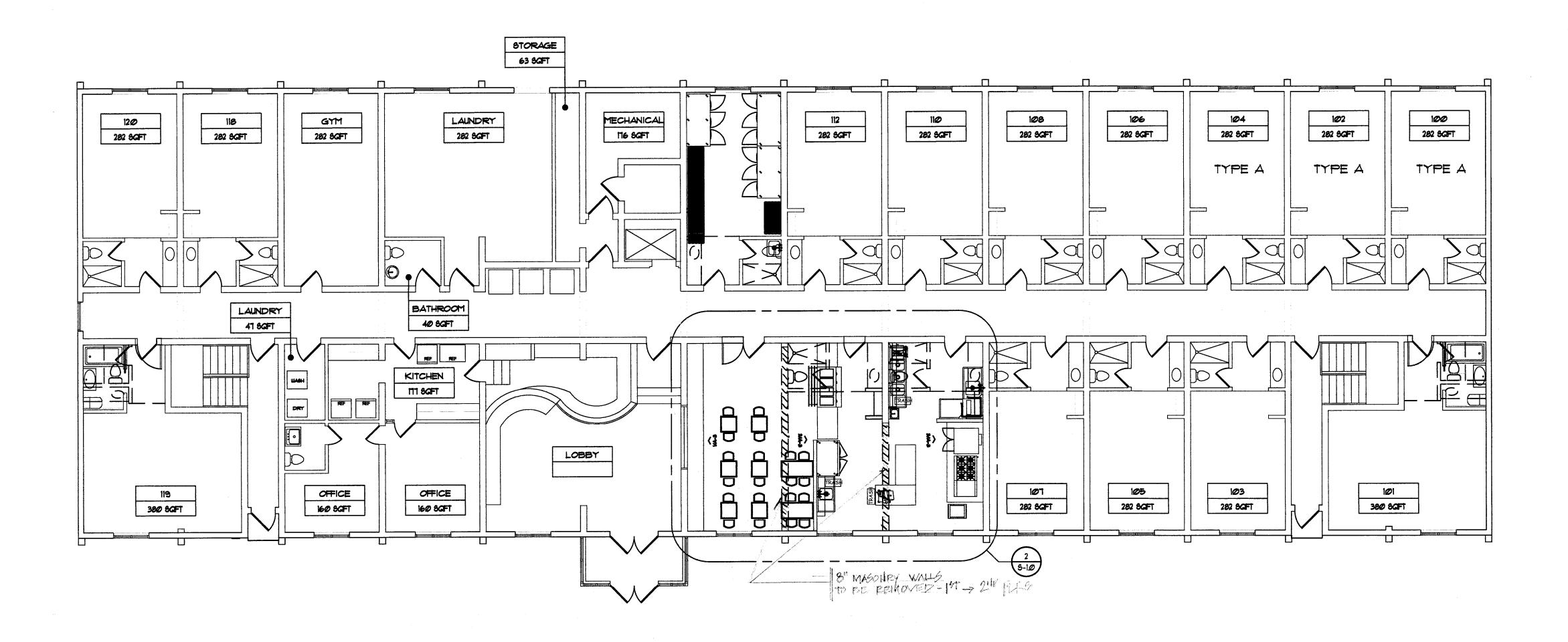
SCALE: 1/4"=1'-0"

LIGHT SWITCH

SHELF AND TELEPHONE

DRINKING FOUNTAIN / ELECTRIC WATER COOLER

SHELYING AND HANGING ROD



COMMUNITY RENEWAL TEAM

> 555 Windsor St. Hartford, CT 06120

DAYS INN RENOVATION

207 Brainard Rd Hartford, CT 06114



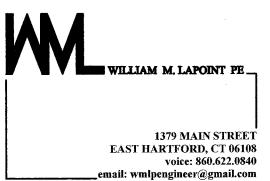
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key plan
issue or revision date

drawing title

KITCHEN AREA PLAN with STRUCTURAL SUPPORT

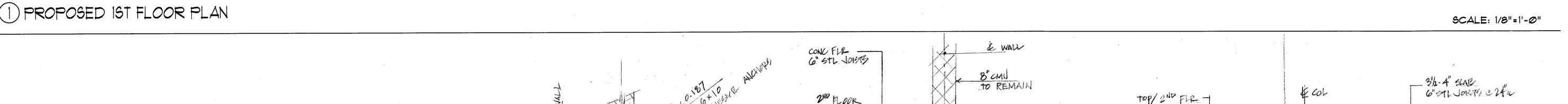
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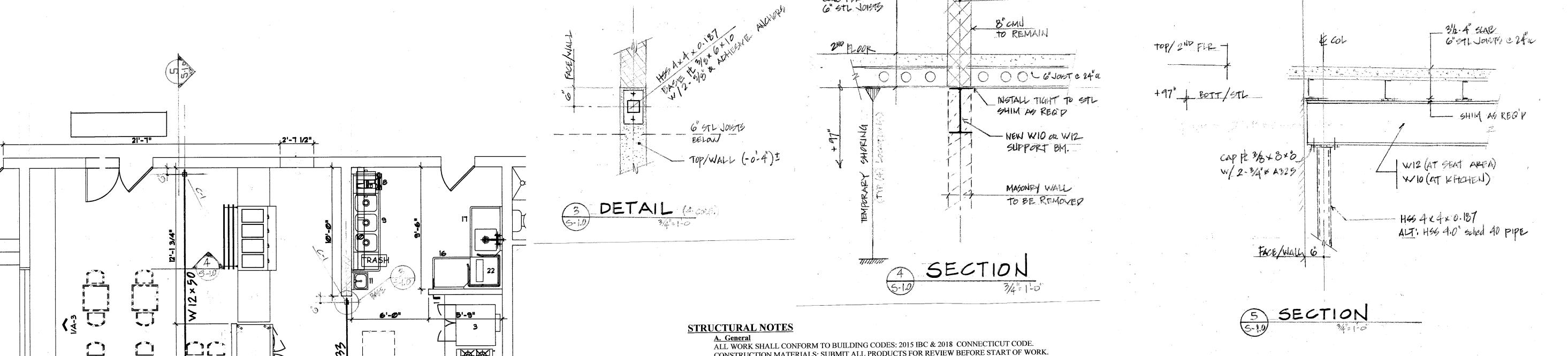
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S-1.0

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A. General
ALL WORK SHALL CONFORM TO BUILDING CODES: 2015 IBC & 2018 CONNECTICUT CODE.
CONSTRUCTION MATERIALS: SUBMIT ALL PRODUCTS FOR REVIEW BEFORE START OF WORK.

B. Sequence
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED TO MAINTAIN STRUCTURAL STABILITY OF THE EXISTING STRUCTURE DURING CONSTRUCTION.

Before Start of Work, Provide Temporary Shoring from (1st Floor - 3rd Floor) – Each Side of Masonry Walls to

a. Before Start of Work, Provide Temporary Shoring from (1st Floor - 3rd Floor) – Each Side of Masonry Walls to be Removed. Support 1st / 2nd Floor Slabs & Metal Joists Until Steel Beams are installed.
 C. Concrete

1. CONCRETE MATERIALS ARE AS FOLLOWS: 3000 psi - STRUCTURAL SLAB.

2. PATCH INTERIOR FLOOR SLAB AT MASONRY WALL REMOVAL AS REQUIRED.

D. Steel

MATERIALS:

W Sections.........ASTM A992, Grade 50

PLATES, ANGLES, misc......ASTM A36, Fy = 36 ksi.

ANCHOR BOLTS.......ASTM A307.

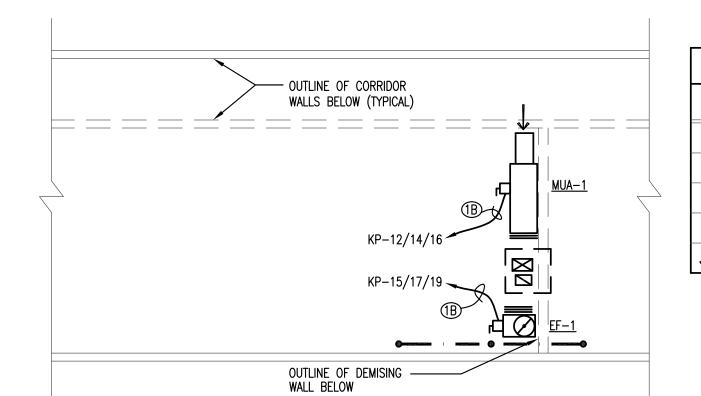
TUBE COLS......ASTM A1085, Fy = 46 ksi.
Anchor Rods: HILTI - KWIK II BOLTS. Embed = 2 ¾" min.

E. Design Criteria

EXISTING HOTEL ROOM LIVE LOAD = 40 psf

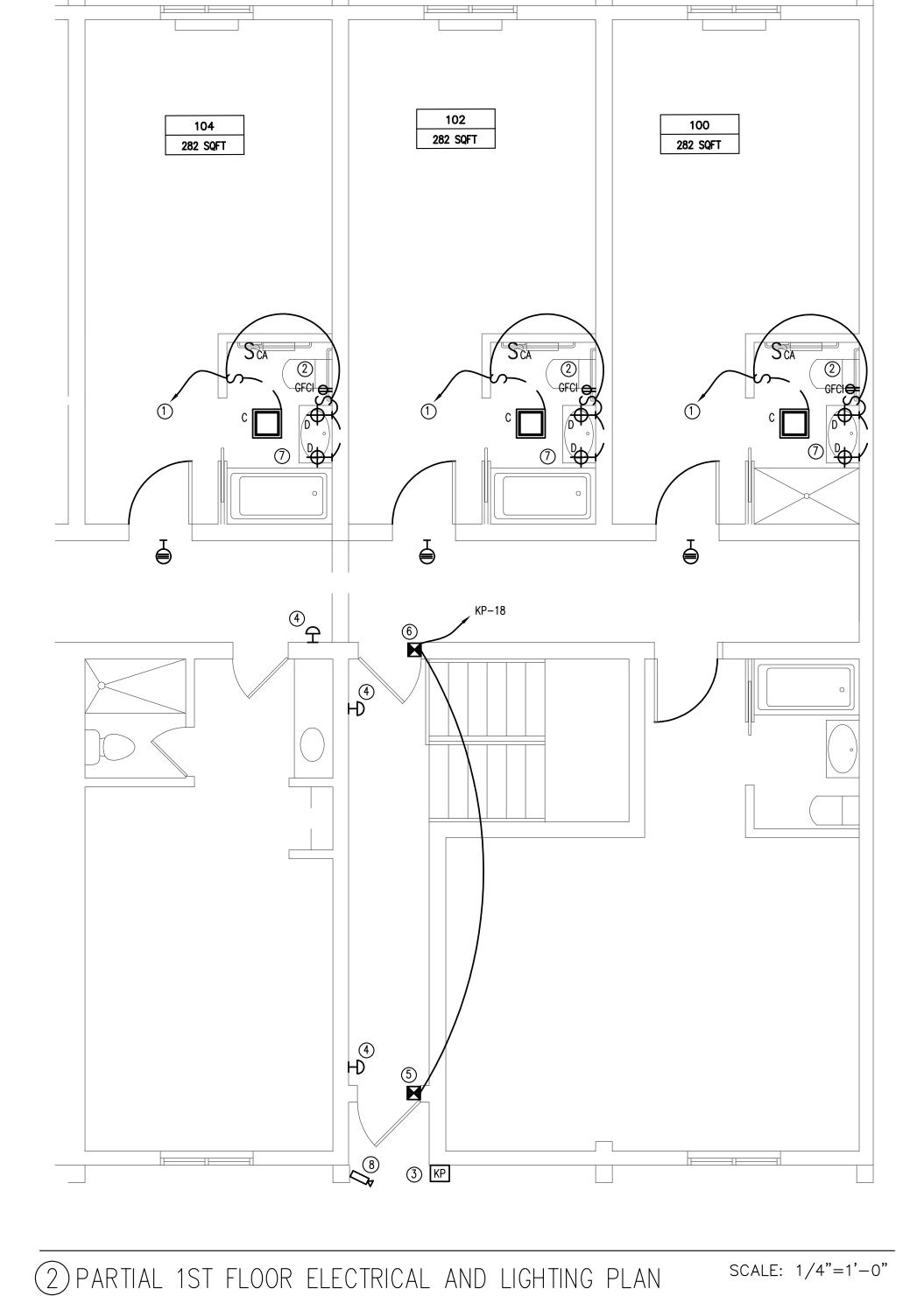
2) KITCHEN PARTIAL PLAN W/ NEW SUPPORT LINTELS

- COLUMN C-1: 4594x4x0.187 ALT: 40" dia soled 40



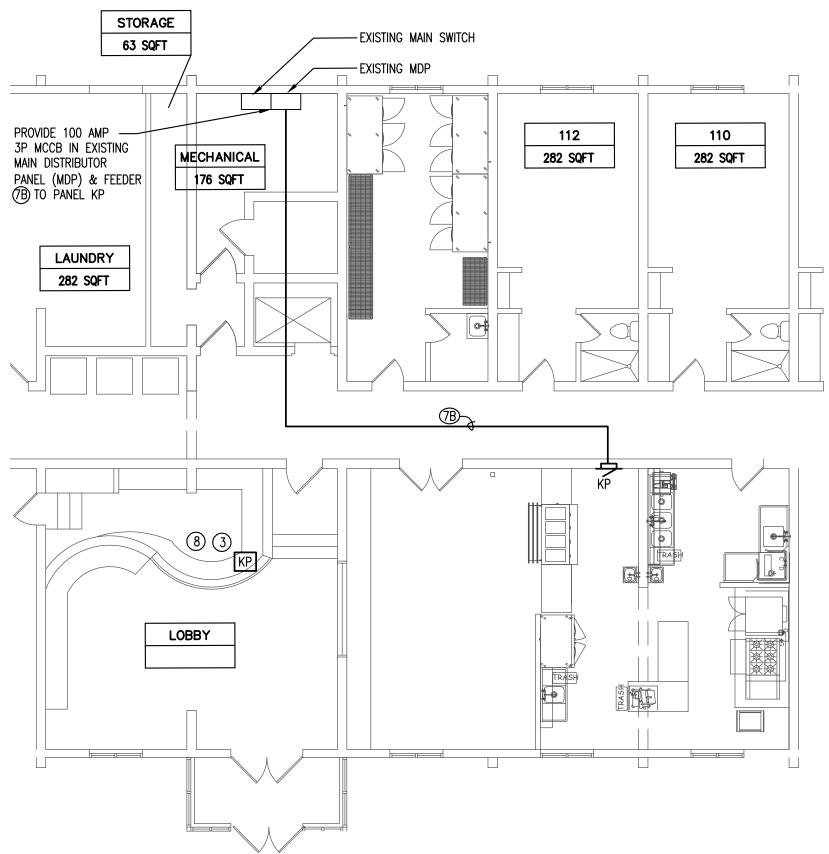
LIGHT FIXTURE SCHEDULE						
SYMBOL	MANUFACTURER	PART/MODEL	DESCRIPTION	VOLTAGE /WATTS	LAMPS	OPTIONS/REMARKS
A	DAY-BRITE	2FPZ 30L840-2-DS-UNV-DIM	LED FLAT PANEL	120/23	LED	-
В	LIGHTOLIER	C9L1D835MZ101	LED ROUND DOWN	120/9	LED	
С	LIGHTOLIER	SCS93010W	LED SURFACE FLAT	120/14.5	LED	
⊕ □	DALS LIGHTING	LEDVAN001-CC-12	VANITY WALL SCONE	120/8	LED	
√ XE	CHRCORIDE	VLCR3R	LED EXIST/EMERGENCY COMBO	35/2	LED	

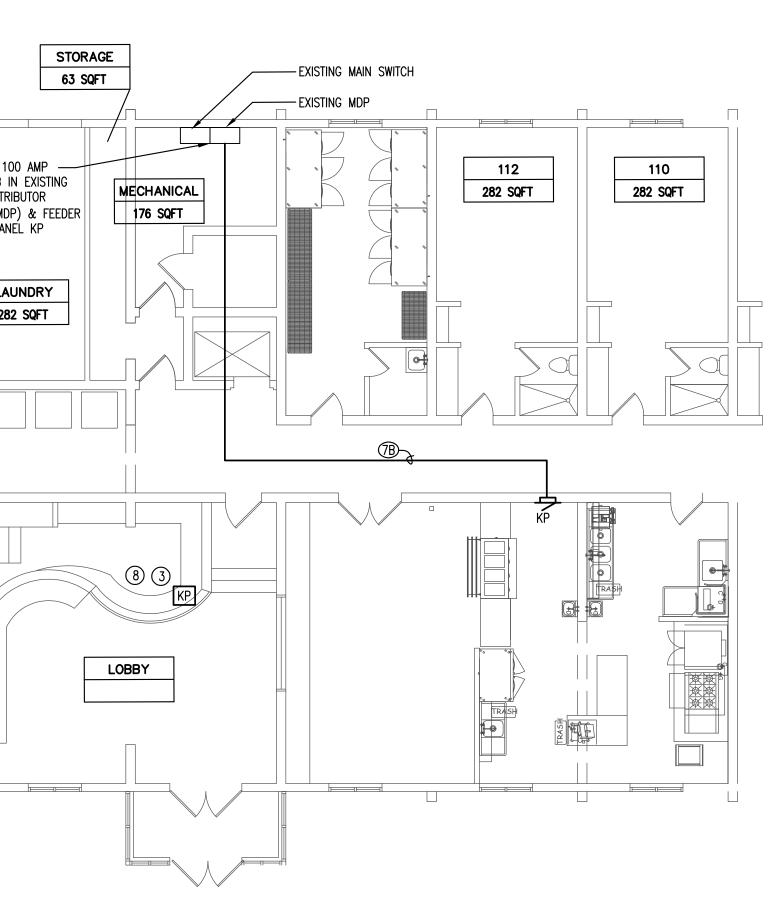
1) PARTIAL ELECTRICAL POWER ROOF PLAN scale: 1/8"=1'-0"



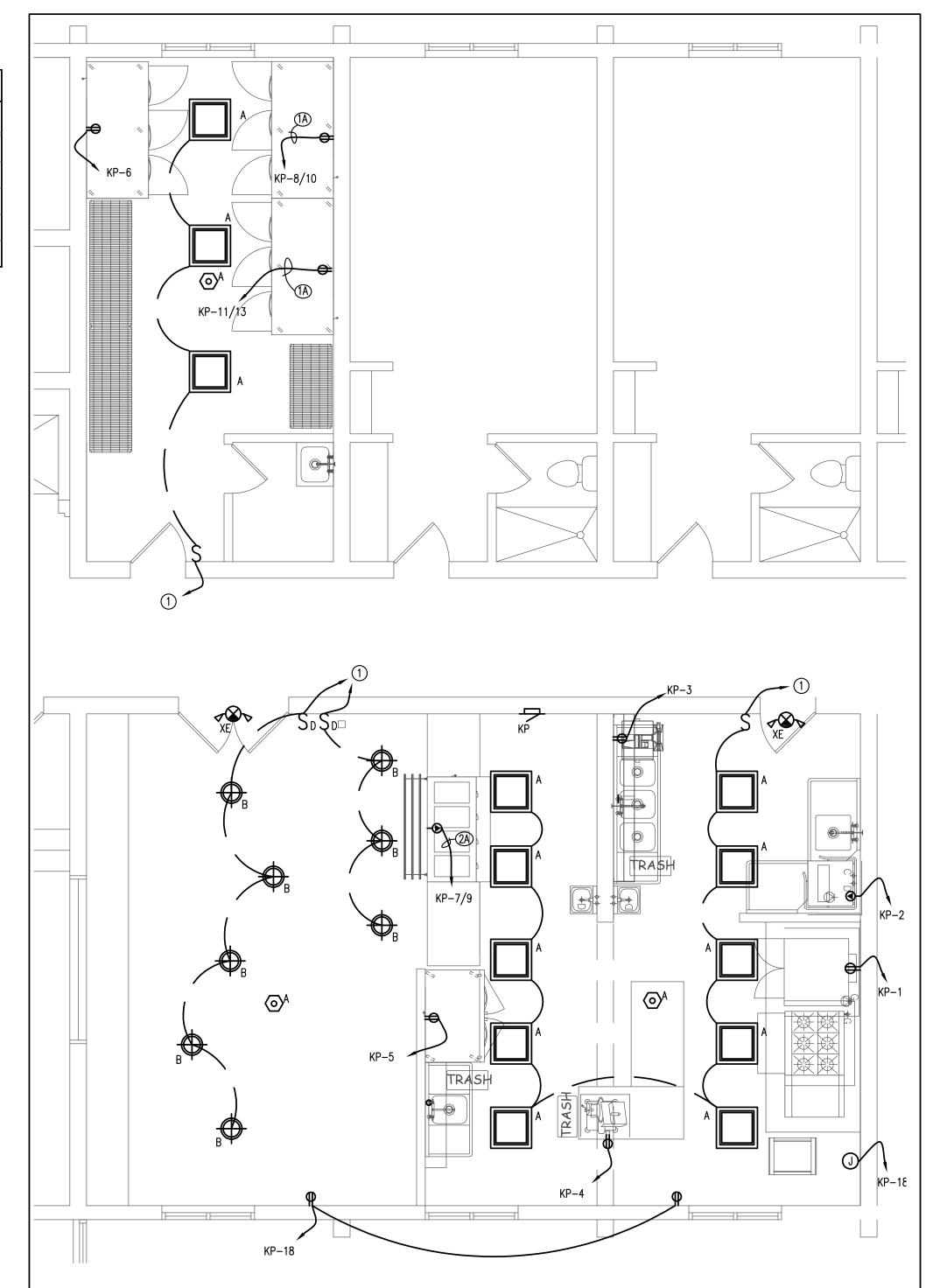
NOTES:

- (1) CONNECT TO EXIST LIGHTING CIRCUIT
- 2) CONNECT RECEPTACLE TO EXISTING CIRCUIT
- 3 PROVIDE INTERCOM/KEY PAD SYSTEM WITH STATION AT EXTERIOR DOOR AND AT LOBBY RECEPTACLE DESK AS INDICATED. SYSTEM SHALL BE ABLE TO UNLOCK AND OPEN EXTERIOR DOOR FROM RECEPTION DESK STATION.
- (4) PROVIDE ADA PUSH BUTTON DOOR OPERATION
- 5 PROVIDE DOOR STRIKE/OPENER CONNECTED TO PUSH BUTTONS AND INTERCOM
- (6) PROVIDE DOOR STRIKE/OPENER CONNECTED TO PUSH BUTTON
- 7 SCONCES (TYPE D) TO GO ON EACH SIDE OF THE MIRROR
- (8) PROVIDE CAMERA CONNECTED TO MONITOR AT RECEPTIONS DESK

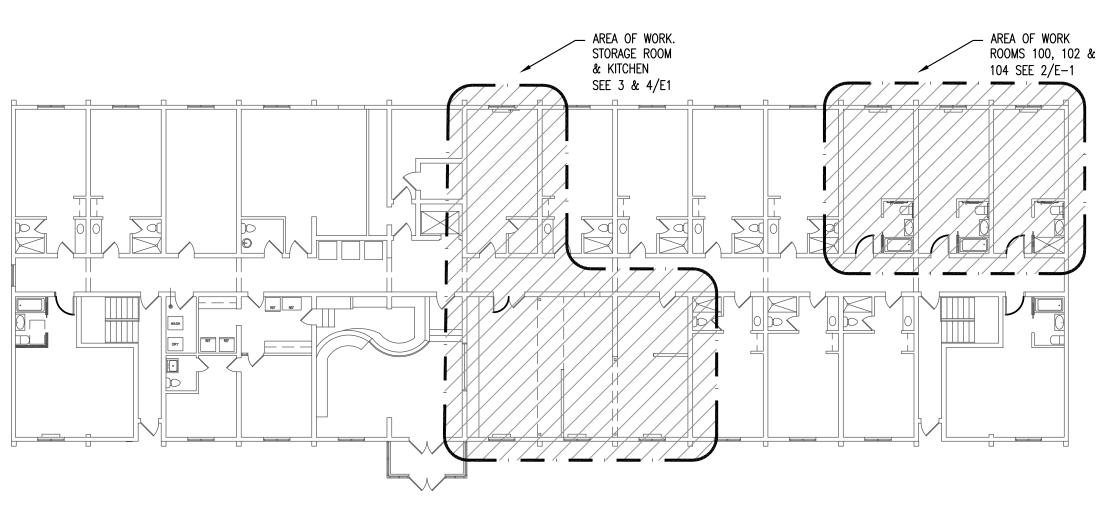








4 ENLARGED KITCHEN/DINING AREA ELECTRICAL POWER PLAN scale: 1/4"=1'-0"

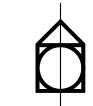


SCALE: N.T.S.



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207 Brainard Rd Hartford, CT 06114



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ZTECH ENGINEERS, INC.

Aztech Engineers, Inc. Phone (860)548-9987 901 Wethersfield Avenue Fax (860)549-2572 Hartford, Ct. 06114 www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



key plan	
issue or revision	date

ELECTRICAL POWER AND LIGHTING PLANS

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10 of 21

GENERAL ELECTRICAL NOTES

- . DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL FIELD CONDITIONS OR INTERFERENCES THAT MAY EXIST. CONTRACTOR SHALL VISIT THE JOB SITE, BECOME FAMILIAR WITH FIELD CONDITIONS AND ASSUME RESPONSIBILITY FOR THEM THEREOF, BEFORE BIDDING AND DURING EXECUTION OF WORK.
- 2. ALL WORK SHALL BE PERFORMED BY LICENSED WORKMEN IN ACCORDANCE WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO THE CURRENT NATIONAL ELECTRIC CODE (NEC).
- 3. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
- 4. ALL EQUIPMENT AND MATERIALS SHALL BE LABELED, LISTED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS INTERACTIONS, RECOMMENDATIONS AND INSTRUCTIONS.
- 5. THE TERM 'PROVIDE' SHALL MEAN FURNISH, INSTALL, CONNECT AND MAKE OPERABLE.
- 6. THE TERM 'INDICATE' SHALL MEAN AS SHOWN ON THE CONTRACT DOCUMENTS (DRAWINGS, SPECIFICATIONS AND RELATED ATTACHMENTS).
- 7. PROVIDE COMPLETE AND OPERATIONAL SYSTEMS INCLUDING ALL NECESSARY MATERIAL EQUIPMENT AND LABOR.
- 8. GIVE FULL COOPERATION TO OTHER TRADES, PROVIDING THEM WITH ALL NECESSARY INSTALLATION DETAILS.
- 9. PROVIDE OWNER WITH WARRANTY, GUARANTEEING THAT IMPERFECT SYSTEM OPERATION AND ALL DEFECTS IN MATERIAL AND LABOR OF WORK WILL BE REPAIRED WITHOUT
- COST TO THE OWNER FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. 10. EQUIPMENT AND MATERIAL INDICATED ON THE DRAWING SHALL BE CONSIDERED AS "BASIS OF DESIGN". EQUAL PRODUCTS CAN BE SUBMITTED AND WILL BE
- CONSIDERED FOR APPROVAL STRICTLY SUBJECT TO OWNERS AND DESIGN PROFESSIONAL'S APPROVAL. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING FIXTURES.
- 11. BECOME FAMILIAR WITH THE COMPLETE SET OF CONTRACT DOCUMENTS, AS ALL OTHER SPECIFICATION SECTIONS AND DRAWINGS ARE APPLICABLE TO THE WORK OF THIS DRAWING. FOLLOW THE JOB-SITE INSTRUCTIONS OUTLINED IN THE GENERAL CONDITIONS.
- 13. UNLESS OTHERWISE INDICATED, INTERIOR BRANCH CIRCUIT WIRING USING 6 AWG AND SMALLER CONDUCTORS MAY BE ARMORED CABLE (TYPE AC) WHERE ACCEPTABLE
- TO LOCAL CODES. 14. UNLESS OTHERWISE INDICATED PROVIDE COMMERCIAL GRADE, 20 AMPERE RECEPTACLES.

12. UNLESS OTHERWISE INDICATED ALL ENCLOSURES FOR EQUIPMENT SHALL BE NEMA TYPE 1.

- 15. ANY HAZARDOUS MATERIALS ENCOUNTERED (SUCH AS PCB BALLASTS) SHALL BE DISPOSED OF PROPERLY. ALL PAPERWORK RELATING TO DISPOSAL SHALL BE MAINTAINED ON FILE FOR ONE YEAR FROM COMPLETION OF JOB.
- 16. PROVIDE THE OWNER WITH ALL MANUFACTURERS WARRANTIES FOR EQUIPMENT AND MATERIAL FURNISHED.
- 17. IF ANY ASBESTOS OR MATERIALS CONTAINING ASBESTOS ARE ENCOUNTERED DURING EXECUTION OF THE PROJECT WORK IS TO BE HALTED. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNER AND PROPER AUTHORITIES IF THEY HAVE DISCOVERED ASBESTOS.
- 18. ALL WIRING TO BE CONCEALED WHEREVER POSSIBLE. IF BUILDING STRUCTURE PREVENTS WIRE OR CABLE FROM BEING RUN INSIDE WALLS AND CEILINGS, ALL EXPOSED WIRING TO BE RUN IN METALLIC RACEWAY.
- 19. EMT CONDUIT SHALL BE USED FOR CONCEALED WALL & CEILING PENETRATIONS, RISERS AND MAY BE USED IN EQUIPMENT CLOSETS.
- 20. FIRE RATING OF ALL WALLS AND CEILINGS SHALL BE MAINTAINED. ANY FIRE BARRIERS THAT MUST BE PENETRATED SHALL MAINTAIN FIRE RATINGS THAT COMPLY WITH BOTH THE NATIONAL FIRE PROTECTION ASSOCIATION AND UNDERWRITER LABORATORY'S STANDARDS AND SPECIFICATIONS.
- 21. ALL LOW VOLTAGE WIRING TO BE RUN WITH A MINIMUM OF 12" CLEARANCE FROM FLUORESCENT LIGHTING IN ALL DIRECTIONS.
- 22. ALL CONDUCTORS SHALL BE COPPER W/ THHN/THWN INSULATION. ALUMINUM CONDUCTOR WILL NOT BE ACCEPTED.
- 23. UNLESS OTHERWISE NOTED ALL CIRCUITS SHALL BE 2#12 AWG & 1#12 GND IN 1/2"C
- 24. EMERGENCY EXIT AND EMERGENCY LIGHTING WILL BE TIED TO THE LINE SIDE OF THE LOCAL LIGHTING CIRCUIT THEY SERVE (TYPICAL)
- 25. EXIT SIGNS SHALL MEET ALL REQUIREMENTS OF 2015 IBC 1013 & 1111, COORDINATE ACCESSIBLE EXIT PATHS WITH ARCHITECT PRIOR TO CONSTRUCTION (TYPICAL)

FDR NO.	CONDUIT	1 OR 3 PHASE, 3WIRE CABLE	GROUND	NOM. AMPS	CALC. AMPS	FDR NO.	CONDUIT	3 PHASE, 4 WIRE CABLE	GROUND	NOM. AMPS	CALC. AMPS
(1A)	3/4"	3-#12	1-#12	20	20	(1B)	3/4"	4-#12	1-#12	20	20
(2A)	3/4"	3-#10	1-#10	30	30	(2B) (3B)	3/4"	4-#10	1-#10	30	30
2A) 3A)	1"	3-#8	1-#10	40	50	(3B)	1"	4-#8	1-#10	40	50
(4A)	1"	3-#8	1-#10	50	50	(4B)	1"	4-#8	1-#10	50	50
(5A)	1"	3-#6	1-#10	60	65	(5B)	1"	4-#6	1-#10	60	65
(6A)	1-1/4"	3-#4	1-#8	70	85	(6B)	1-1/4"	4-#4	1-#8	70	85
(7A)	1-1/4"	3-#3	1-#8	100	100	(7B)	1-1/4"	4-#3	1-#8	100	100
(8A)	1-1/2"	3-#1	1-#6	125	130	(8B)	2"	4-#1	1-#6	125	130
(9A)	2"	3-#1/0	1-#6	150	150	9B)	2"	4-#1/0	1-#6	150	150
(10A)	2"	3-#2/0	1-#6	175	175	(10B)	2"	4-#2/0	1-#6	175	175
(11A)	2"	3-#3/0	1-#6	200	200	(1B)	2-1/2"	4-#3/0	1-#6	200	200
12A) (13A) (14A)	2-1/2"	3-#4/0	1-#4	225	230	(12B) (13B)	2-1/2"	4-#4/0	1-#4	225	230
(13A)	3"	3-250MCM	1-#4	250	255	(13B)	3"	4-250MCM	1-#4	250	255
(14A)	3"	3-350MCM	1-#4	300	310	(14B)	3"	4-350MCM	1-#4	300	310
(15A)	3-1/2"	3-500MCM	1-#3	350	380	(15B)	4"	4-500MCM	1-#3	350	380
(16A)	3-1/2"	3-500MCM	1-#3	400	380	(16B)	4"	4-500MCM	1-#3	400	380
(17A) (18A)	(2) 2-1/2"	3-#4/0	1-#2	450	460	(17B)	(2) 2-1/2"	4-#4/0	1-#3	450	460
(18A)	(2) 3"	3-250MCM	1-#2	500	510	(18B)	(2) 3"	4-250MCM	1-#2	500	510
(19A)	(2) 3"	3-350MCM	1-#1	600	620	(19B)	(2) 3"	4-350MCM	1-#1	600	620
(20A)	(2) 3"	3-500MCM	1-#1/0	700	760	20B	(2) 4"	4-500MCM	1-#1/0	700	760
(21A)	(2) 3"	3-500MCM	1-#1/0	800	760	(21B)	(2) 4"	4-500MCM	1-#1/0	800	760
(22A) (23A) (24A)	(2) 4"	3-400MCM	1-#2/0	1000	1005	(22B) (23B)	(3) 4"	4-400MCM	1-#2/0	1000	1005
(23A)	(4) 4"	3-350MCM	1-#3/0	1200	1240	23B)	(4) 4"	4-350MCM	1-#3/0	1200	1240
(24A)	(5) 4"	3-300MCM	1-#4/0	1400	1425	(24B)	(5) 4"	4-300MCM	1-#4/0	1400	1425
(25A)	(5) 4"	3-400MCM	1-#4/0	1600	1675	(25B)	(5) 4"	4-400MCM	1-#4/0	1600	1675
(26A)	(5) 4"	3-500MCM	1-250MCM	1800	1900	26B)	(5) 4"	4-500MCM	1-250MCM	1800	1900
27A) 28A) 29A)	(6) 4"	3-400MCM	1-250MCM	2000	2010	27B	(6) 4"	4-400MCM	1-250MCM	2000	2010
(28A)	(7) 4"	3-500MCM	1-350MCM	2500	2660	28B	(7) 4"	4-500MCM	1-350MCM	2500	2660
	(8) 4"	3-500MCM	1-400MCM	3000	3040	29B)	(8) 4"	4-500MCM	1-400MCM	3000	3040
(30A)	(11) 4"	3-500MCM	1-500MCM	4000	4180	(30B)	(11) 4"	4-500MCM	1-500MCM	4000	4180
(31A)	(14) 4"	3-500MCM	2-350MCM	5000	5320	(31B)	(14) 4"	4-500MCM	2-350MCM	5000	5320
(32A)	(16) 4"	3-500MCM	2-500MCM	6000	6080	(32B)	(16) 4"	4-500MCM	2-500MCM	6000	6080

NOTE:		
WHFN	Δ	F

WHEN A FEEDER SUPPLIES AN ISOLATED GROUND PANEL OR SUB PANEL, AN ADDITIONAL GROUND WIRE SHALL BE PROVIDED WITH AND IDENTIFIED BY GREEN INSULATION WITH A YELLOW STRIPE. THE ISOLATED GROUND WIRE SHALL BE ROUTED THROUGH PANELS IN ACCORDANCE WITH NEC SECTION 384-20 AND TERMINATE AT THE BUILDING INCOMING SEVICE.

HOMERUN	CIRCUIT SY	MBOLS
3	SINGLE PHASE CIRCUIT	120 OR 277 VOLT
3,5	CONSECUTIVE SINGLE PHASE CIRCUITS	120 OR 277 VOLT
3/5	SINGLE PHASE CIRCUIT (2 POLE)	208 OR 480 VOLT
1/3/5	THREE (3) PHASE CIRCUIT (3 POLE)	208 OR 480 VOLT

ITEM #	QUANTITY	SCHEDULE OF EQUIPMENT	K	ITC	HEI	V Е	CLEC	CTRI	CAL	EQUIPMENT C	ONNECTI	ON SCHEDULE
	0	DESCRIPTION	VOLT	Ø	AMP	KW	HP	CONN	POLES	FEEDER SIZE C	CIRCUIT #	COMMENT
1	1	SINGLE DOOR REFRIGERATOR	115	1	2.1		1/7	C&P	1	2#12,1#12GN 3/4"C K	(P-6	
3	1	DOUBLE STACK CONVECTION OVEN	(2) 115	1	8.0		3/4	C&P	1	2#12,1#12GN 3/4"C K	(P-1	
8	1	GREASE TRAP	115	1	5.0			C&P	1	2#12,1#12GN 3/4"C K	(P-3	
12	1	SERVING COUNTER/COLD ITEMS	115	1	6.3		1/3	C&P	1	2#12,1#12GN 3/4"C K	(P-5	
13	1	SEVING COUNTER/HOT ITEMS	208	1	19.0	4.0		C&P	2	2#12,2A 1#12GN 3/4"C K	(P-7/9	
15	1	FOOD TRAY AND UTENSIL COUNTER	115/208	1	5.5		1.0	C&P	2	2#12,1A 1#12GN 3/4"C KP-8	3/10, KP-11/13	
22	1	DISH MACHINE	115	1	16.0		1.0	JB	1	2#12,1#12GN 3/4"C K	(P−2	
23	1	SLICER	115	1	4.0		1/2	C&P	1	2#12,1#12GN 3/4"C K	(P-4	
MUA												

ELEC	TRICAL SYMBOL LIST
SYMBOL	DESCRIPTION
PANEL-	BRANCH WIRING HOME RUN (ARROW INDICATES CIRCUIT NUMBER
	BRANCH WIRING CONCEALED IN CEILING OR WALL
	SWITCH LEG WIRING
-0	DUPLEX RECEPTACLE OUTLET (+18" AFF - TYPICAL)
⇒ GFCI	GROUND FAULT CIRCUIT INTERRUPTER
₩	240 VOLT OUTLET
	SPECIAL PURPOSE SINGLE RECEPTACLE OUTLET
H	DATA OUTLET
N	TV CABLE OUTLET
	EXHAUST FAN/ LIGHT
S	SINGLE - POLE SWITCH
(\$)	SMOKE DETECTOR
	EXTERNALLY OPERATED DISCONNECT SWITCH
0	JUNCTION BOX
S _D	DIMMER SWITCH
S _T	TIMER SWITCH
⊬	COMBINATION TELEPHONE/DATA OUTLET
⊢	CALL FOR AID — LIGHT/BUZZER
0	JUNCTION BOX
	FLOOR MOUNTED JUNCTION BOX
<u></u> ⊢⊍	WALL MOUNTED JUNCTION BOX
KP	KEY PAD
<u></u>	MOTOR
2.5 M	MOTOR SAFETY SYSTEM CONTROLLER (SIZE AS INDICATED)
<u> </u>	PHOTO EYE
머	FUSE DISCONNECT SWITCH
마	EXTERNALLY OPERATED DISCONNECT SWITCH TRANSFORMER
	SINGLE RECEPTACLE OUTLET
-0	OCCUPANCY SENSOR - ROOMS
S	SINGLE - POLE SWITCH
S ₃	THREE - WAY SWITCH
S _{CA}	SWITCH CALL FOR AID
——————————————————————————————————————	FLUSH — MOUNTED PANELBOARD
<u> </u>	SURFACE — MOUNTED LOAD CENTER
	SURFACE - MOUNTED PANELBOARD
S₀	DUCT MOUNTED SMOKE DETECTOR
0	FLOOR RECEPTACLE
<u> </u>	FLOOR SPECIAL PURPOSE RECEPTACLE
KP	FIRE GATE
(H	PUSH BUTTON DOOR OPENER DOOR STRIKE
	CAMERA
С	

	ELECTRICA	L ABBRI	EVIATIONS
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPERES	IMC	INTERMEDIATE METALLIC CONDUIT
ABV	ABOVE	IN	INCHES
AC	ABOVE COUNTER	JB	JUNCTION BOX
AFF	ABOVE FINISHED FLOOR	KV	KILOVOLT
AWG	AMERICAN WIRE GAUGE	KVA	KILOVOLT-AMPERE
BAT	BATTERY	KW	KILOWATT
BD	BOARD	LT	LIQUID TIGHT
BK	BACK	MDP	MAIN DISTRIBUTION PANELBOARD
С	CONDUIT	N.T.S.	NOT TO SCALE
CAB	CABINET	N/A	NOT APPLICABLE
C/B	CIRCUIT BREAKER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
ССТ	CIRCUIT	NEUT	NEUTRAL
CLG	CEILING	NF	NONFUSED
DISC	DISCONNECT	NIC	NOT IN CONTRACT
DN	DOWN	Р	POLE
DWG	DRAWING	PH	PHASE
E	EMERGENCY	PNL	PANELBOARD
EMT	ELECTRICAL METALLIC TUBING	PWR	POWER
ENCL	ENCLOSURE	RSC	RIGID STEEL CONDUIT
EQUIP	EQUIPMENT	TV	TELEVISION
EWH	ELECTRIC WATER HEATER	TYP	TYPICAL
EXT	EXTERIOR	UL	UNDERWRITER'S LABORATORY
F	FUSED	UTIL	UTILITY
FA	FIRE ALARM	V	VOLTS
FDR	FEEDER	VA	VOLT-AMPERES
GFCI	GROUND-FAULT CIRCUIT-INTERRUPTER	W	WATTS
GND	GROUND	WP	WEATHERPROOF
HP	HORSEPOWER		



McKinney Shelter Renovation

Hartford, CT 06120

207 Brainard Rd Hartford, CT 06114



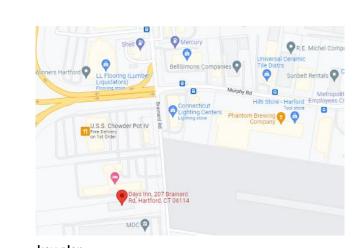
LIFECARE DESIGN INC. 1429 Park St. Ste 201 Hartford Ct. 06106

architecture - planning - interior design



Aztech Engineers, Inc. Phone (860)548-9987 901 Wethersfield Avenue Fax (860)549-2572 Hartford, Ct. 06114 www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108

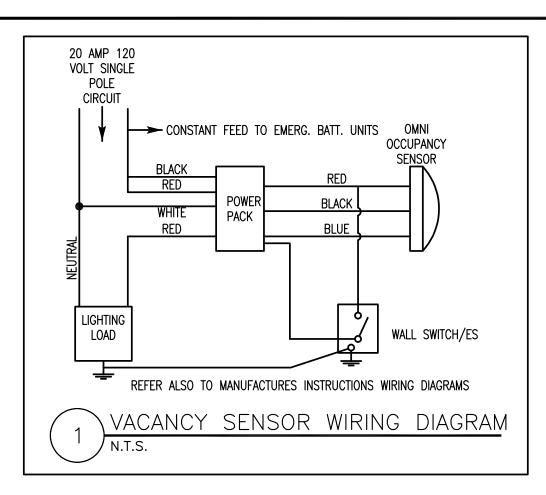


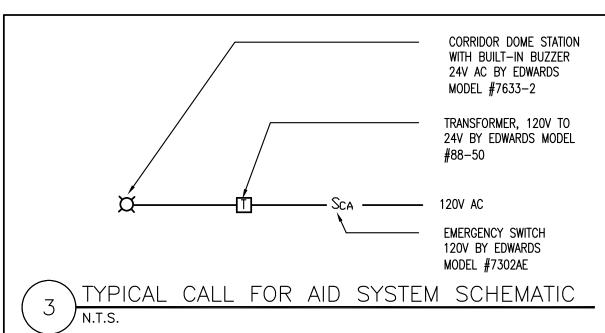
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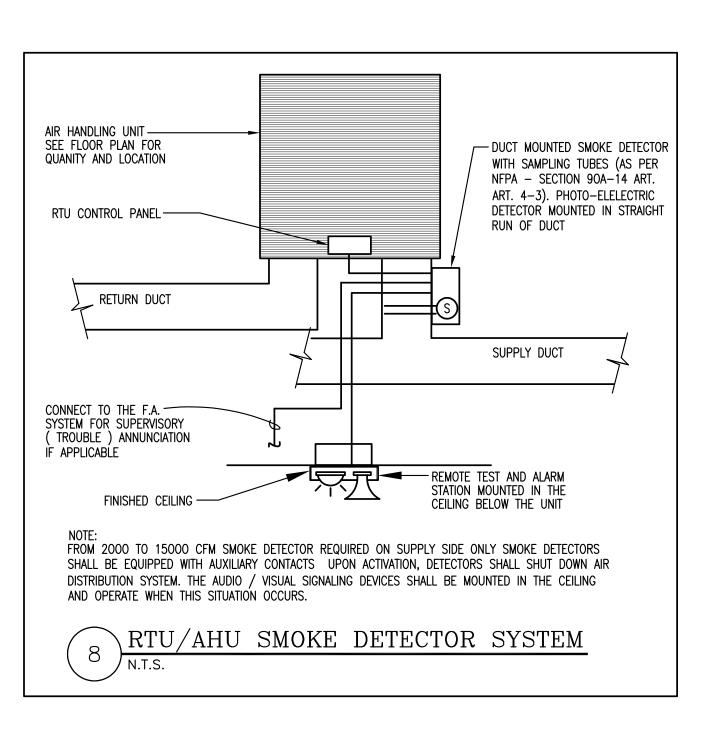
drawing title ELECTRICAL SYMBOLS, SCHEDULES, NOTES & ABBREVIATIONS

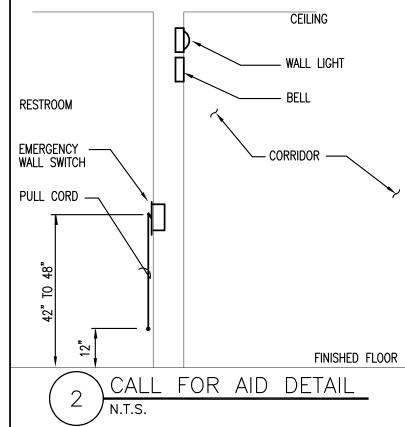
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5/20/2022	DHA/PMC
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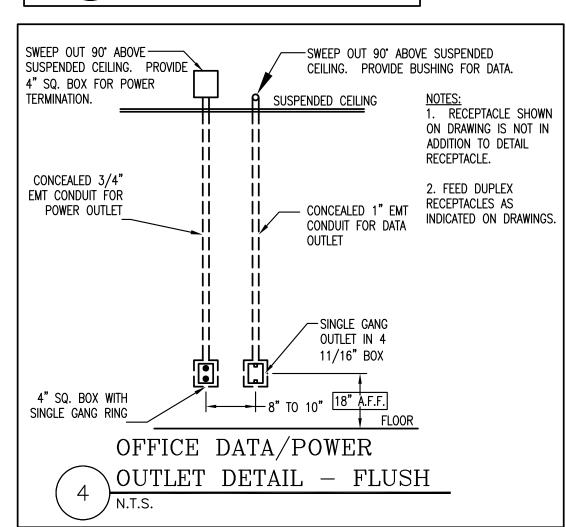
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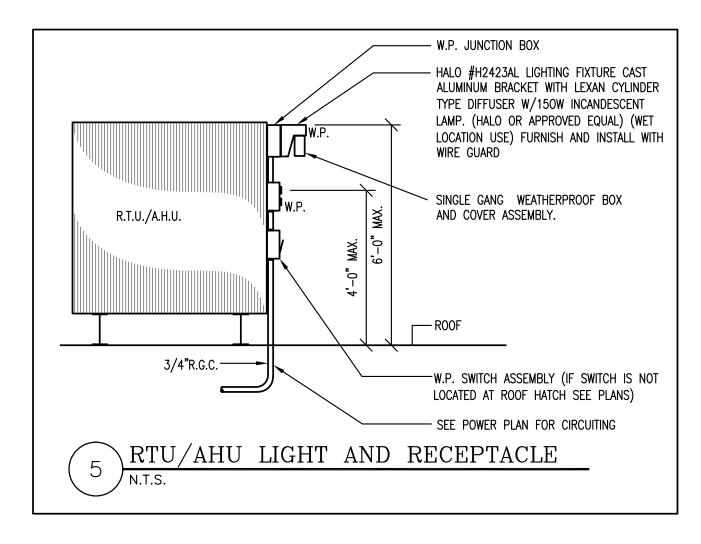


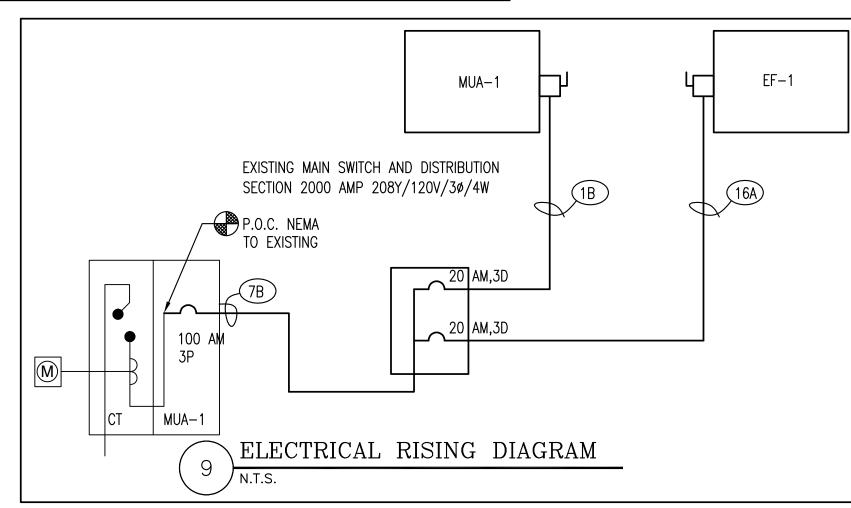


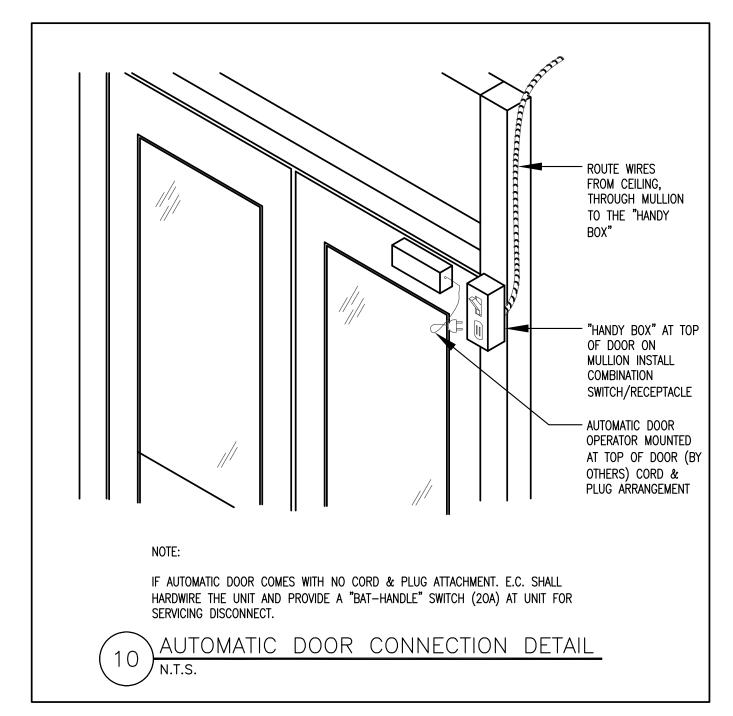


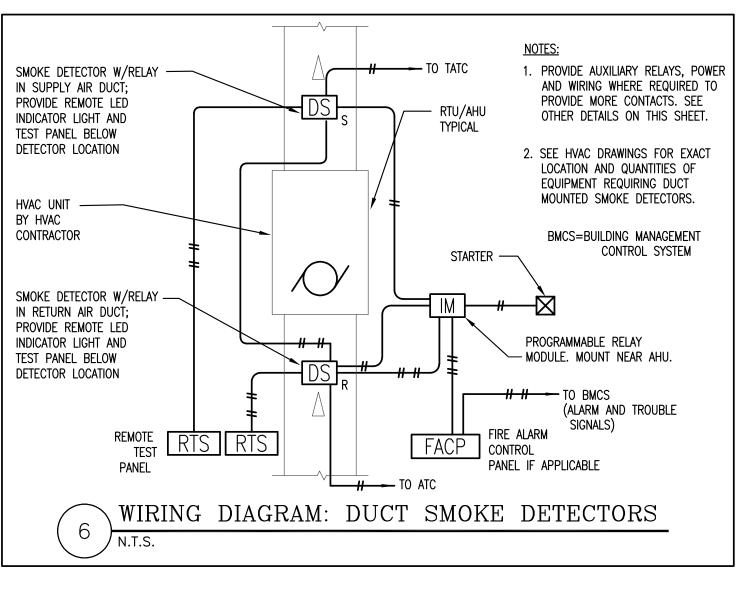


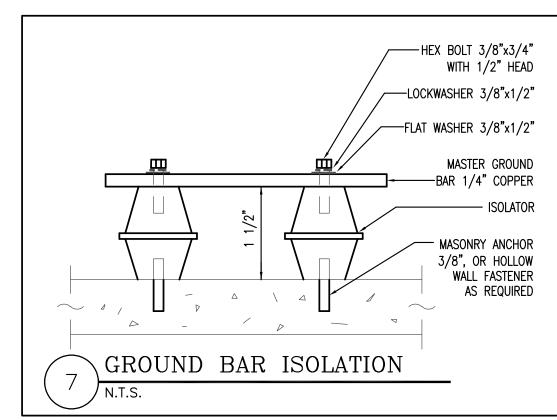












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LOCATION		CLASS		MAIN TYPE	VOLTAGE CH 208Y/120V/3ø/4				MOL	JNTING	;	мссв	MOUNTING	FEDEER ENTRANCE	INCOMING FEEDER	MINIMUM SCR.	SE RATING	
	KITCHEN	-	125 AMP	100 AMP MCB	NEUTRAL WITH EQL	JIPMENT	MENT GROUND BUS		FLUSH			PLUG ON		ВОТТОМ	7B	22 KAIC	-	
CIR. NO.		DESCRIPTION					TRIP SIZE	Α	В	С	TRIP SIZE	Р		DES	CRIPTION		0	
1		CONVENTIONAL OVEN #3					20	-			20	1		DISHWASHE	R MACHINE	#22		
3		DEGREASE TRAP				1	20		_		20	1			ZER #15			
5										_	20	1		REENGE	NARATOR #1			
7 9	SERVING COUNTER #13						30	-	-		20	2		FRE	EZER #15			
11 13		FREEZER #15					20	_		-	20	3		MUA-1				
15							1		-		20	1		HOOD LIGH	T/ANSIL SYS	TFM		
17		EF-1				3	20			_	20	1			OPERATOR	11 E.W		
19			_			† <u>-</u>	1-	_			_	<u> </u>		_				
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				PANE	TR(JAI	KD.	MI)P	(Ł	XI	STING)					
LOCATION	CLASS	BUS SIZ	E MAIN TYPE	VOLTAGE CH				МО	UNTING		MCCB MOUNTING		FEDEER ENTRANCE	INCOMING FEEDER	MINIMUM SCR. EXISTING	SE RATING	
ELECTRICAL	_ EXISTING	3 2000	MLO	208Y/120V/3ø/4 NEUTRAL WITH EQU	w with Jipment	100% GROUN	rated ID BUS	SU	SURFACE		F)	KISTING	EXISTING	EXISTING		_	
IR.	. DESCRIPTION				Р	TRIP		В		TRIP	В			SCRIPTION	LAIGHHO	C	
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ZTECH ENGINEERS, INC.

Aztech Engineers, Inc.
901 Wethersfield Avenue
Hartford, Ct. 06114
Phone (860)548-9987
Fax (860)549-2572
www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



MDC					
key plan					
issue or revision	date				
					

drawing title
ELECTRICAL DETAILS
AND SCHEDULES

scale:	designer:
as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
seal	sheet number

12 of 21

SECTION 16000 - ELECTRICAL SPECIFICATIONS

PART 1: GENERAL

A. DESCRIPTION OF WORK

ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO FURNISH AND INSTALL ALL WORK OF THIS SECTION AS SHOWN ON THE DRAWINGS OR AS SPECIFIED. THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

- CONDUIT AND CONDUCTORS.
- WIRING DEVICES.
- 3. PANELBOARDS, FEEDERS, BRANCH CIRCUITS.
- 4. LIGHTING FIXTURES AND LAMPS, AS REQUIRED.
- 5. DATA AND VOICE COMMUNICATION SYSTEMS
- 6. FINAL CONNECTIONS TO EQUIPMENT FURNISHED AND INSTALLED BY OTHERS.
- 7. HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, POWER WIRING
- CONTROL WIRING AS SHOWN/REQUIRED.

B. REFERENCES

THE FOLLOWING CODES AND STANDARDS LISTED BELOW APPLY TO ALL ELECTRICAL WORK. WHEREVER CODES AND/OR STANDARDS ARE MENTIONED IN THESE SPECIFICATIONS. THE LATEST EDITION OR REVISION SHALL BE FOLLOWED. UNLESS NOTED OTHERWISE:

THE BOCA NATIONAL BUILDING CODE NFPA-70 (NATIONAL ELECTRICAL CODE - 2005 EDITION) CONNECTICUT STATE BUILDING CODE AND ALL AMENDMENTS CONNECTICUT STATE FIRE CODE AND ALL AMENDMENTS

C. PERMITS AND FEES

THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES; OBTAIN ALL PERMITS; PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE: PAY OTHER COSTS. INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH HIS WORK: FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION: OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTIONS FOR HIS WORK; AND DELIVER A COPY TO THE OWNER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

D. QUALITY ASSURANCE

MATERIALS AND INSTALLATION SHALL COMPLY WITH LATEST CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION INCLUDING INTERNATIONAL BUILDING CODE AND CONNECTICUT SUPPLEMENTS.

WHERE REGULATIONS OF GAS AND ELECTRIC UTILITY AND TELEPHONE COMPANIES APPLY, CONFORMANCE WITH THEIR REGULATIONS IS MANDATORY AND ANY COSTS INVOLVED SHALL BE INCLUDED IN THE CONTRACT. CONSULT WITH THE POWER, TELEPHONE AND GAS COMPANY PRIOR TO BIDS.

ARRANGE AND PAY FOR ALL APPLICABLE FEES FOR TEST AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PAY FOR ALL PERMITS AND INSPECTIONS.

E. POWER DISTRIBUITION

1. ELECTRICAL SERVICE AT 208/120V-3PH-4W.

F. PROGRESS SCHEDULE

KEEP INFORMED OF PROGRESS SCHEDULES OF ALL OTHER CONTRACTORS, AND WORK IN ACCORDANCE WITH SCHEDULES TO COMPLETION OF THIS JOB.

<u>G. GUARANTEE</u>

GUARANTEE ALL WORK UNDER THIS DIVISION, IN WRITING, TO BE FREE OF DEFECTIVE WORK, MATERIALS, OR PARTS FOR A PERIOD OF TWO YEARS AFTER ACCEPTANCE OF WORK BY OWNER. REPAIR, REVISE, OR REPLACE ALL WORK THAT DEVELOPS DEFECTS, FAILURES, OR INOPERATIVENESS AT NO COST TO OWNER.

H. DRAWINGS

- 1. FOR PURPOSES OF CLARITY AND LEGIBILITY. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC. AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR IS TO MAKE USE OF ALL DATA IN THE CONTRACT DOCUMENTS TO VERIFY THIS INFORMATION. THE DRAWINGS REFLECT THE DESIRED LOCATION OF SERVICES SUCH AS "HOME RUNS." CONDUIT. AND PIPING TO THE EXTENT POSSIBLE.
- DRAWINGS INDICATE REQUIRED SIZE. POINTS OF TERMINATION OF CABLES, WIRING, AND CONDUITS. THESE SHALL BE ROUTED PROPERLY TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, AND PRESERVE CLEARANCES.
- 3. FURNISH LAYOUT DRAWINGS TO OWNER, IF REQUIRED, INDICATING ALL CHANGES, TO MEET SPACE REQUIREMENTS, CODE REQUIREMENTS, AND AS NECESSARY TO RESOLVE ALL SPACE CONFLICTS.
- 4. ALL LOCATIONS OF AND CONNECTIONS MADE TO EQUIPMENT SHOWN ON THE DRAWINGS ARE BASED ON PRELIMINARY EQUIPMENT SELECTIONS BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST CONDUIT, FOUNDATIONS, ETC., TO SUIT EQUIPMENT ACTUALLY PURCHASED. THE CONTRACTOR SHALL SUBMIT "AS-BUILT" DRAWINGS IN ACCORDANCE WITH THE "GENERAL CONDITIONS" SECTION OF THIS CONTRACT TO DOCUMENT CHANGES.

I. SITE CONDITIONS

SUBMITTAL OF A BID SHALL INDICATE CONTRACTOR HAS EXAMINED SITE AND DRAWINGS AND HAS INCLUDED ALL REQUIRED ALLOWANCES IN HIS BID. NO ALLOWANCE SHALL BE MADE FOR ANY ERROR RESULTING FROM CONTRACTOR'S FAILURE TO VISIT JOB SITE AND REVIEW DRAWINGS. BID SHALL INCLUDE COSTS FOR ALL REQUIRED DRAWINGS AND CHANGES AS OUTLINED ABOVE.

J. ACCEPTANCE

COMPLETED WORK SHALL BE IN PROPER WORKING ORDER AND CLEAN. LEAVE PREMISES AND SITE IN PRESENTABLE CONDITION, FREE OF SURPLUS MATERIALS AND DEBRIS.

K. SUBMITTALS

- 1. PRIOR TO FABRICATION OF ANY WORK AND ORDERING EQUIPMENT, SUBMIT SHOP DRAWINGS TO ARCH/ENGINEER FOR REVIEW.
- CONTRACTOR IS WARNED NOT TO ORDER ANY EQUIPMENT AND/OR MATERIAL PRIOR TO REVIEW BY ENGINEER.
- 3. SHOP DRAWINGS AND SAMPLES: SUBMIT SIX (6) COPIES OF ALL SHOP DRAWINGS AND EQUIPMENT SUBMITTALS. EQUIPMENT CATALOG NUMBERS AND PARTS SHALL BE UNDERLINED OR IDENTIFIED ON THE SHOP DRAWINGS.
- 4. INSTALLATION DRAWINGS: PREPARE INSTALLATION DRAWINGS AND SUBMIT THREE (3) COPIES TO THE ENGINEER FOR REVIEW. FLOOR PLANS AND MECHANICAL EQUIPMENT ROOMS SHALL BE DRAWN TO 1/2" SCALE MINIMUM.
- 5. OPERATION AND MAINTENANCE MANUALS: SUBMIT SIX COPIES OF OPERATION AND MAINTENANCE MANUALS IN HARD BOUND
- 6. CERTIFICATIONS: ONE WEEK PRIOR TO THE FINAL INSPECTION, DELIVER TO THE ENGINEER FOUR TYPEWRITTEN COPIES OF EACH
 - A. CERTIFICATION FROM THE CONTRACTOR THAT ALL EQUIPMENT AND SYSTEMS HAVE BEEN PROPERLY INSTALLED,
 - ADJUSTED AND TESTED. B. CERTIFICATION FROM THE RESPECTIVE MANUFACTURER'S AUTHORIZED REPRESENTATIVE THAT THE EQUIPMENT AND SYSTEM(S) HAVE BEEN PROPERLY INSTALLED, ADJUSTED AND TESTED.
- 7. PROJECT RECORD DRAWINGS: PREPARE AND MAINTAIN IN CURRENT STATUS, A COMPLETE SET OF DETAILED DRAWINGS FOR ALL WORK INCLUDED UNDER THE CONTRACT. THESE DRAWINGS SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.
- 8. REQUIRED DATA SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO:
 - A. UNIT DESIGNATION.
 - B. UNIT DIMENSIONS AND WEIGHT
 - C. COMPLETE ELECTRICAL DATA, INCLUDING WIRING DIAGRAMS.
 - D. COMPLETE DESCRIPTION OF MATERIALS AND METHODS OF CONSTRUCTION, INCLUDING FINISHES.
 - E. INSTALLATION RECOMMENDATIONS.
 - F. COMPLETE LIST OF RECOMMENDED SPARE PARTS.
- 9. PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ITEMS:
 - A. PANEL BOARDS, METERS, ETC.
 - B. INTERIOR LIGHTING FIXTURES AND EXTERIOR LIGHT FIXTURES, LAMPS.
 - C. WALL SWITCHES, RECEPTACLES, COVER PLATES.

 - E. RACEWAY AND BOXES.

D. CONDUCTORS AND CABLES.

- F. FIRE ALARM SYSTEM.
- G. OCCUPANCY SENSORS
- H. ENCLOSED CONTROLLERS, SAFETY SWITCHES.

<u>L. WARRANTY</u>

ALL WORK SHALL BE WARRANTED FOR BOTH MATERIALS AND LABOR FOR ONE YEAR. THE CONTRACTOR SHALL REPLACE AND/OR REPLACE ANY DEFECT WITHIN A TWELVE MONTH PERIOD TO THE SATISFACTION OF THE ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.

M. COORDINATION OF TRADES

1. LAYOUT DRAWINGS OF EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE FULLY COORDINATED WITH APPROVED MECHANICAL, STRUCTURAL, AND OTHER APPROVED SHOP DRAWINGS AS REQUIRED TO DEFINE LAYOUT CONSTRAINTS.

N. MATERIALS

- 1. UNLESS OTHERWISE SPECIFIED, PROVIDE ONLY NEW, FIRST-GRADE EQUIPMENT AND MATERIALS WHICH COMPLY WITH REQUIREMENTS OF THIS SPECIFICATION AND APPLICABLE STANDARDS.
- 2. FURNISH, IF REQUIRED, SATISFACTORY EVIDENCE OF KIND AND QUALITY OF MATERIALS PROPOSED FOR USE.
- SIMILAR ITEMS OF MATERIAL AND EQUIPMENT SHALL BE PRODUCT OF SAME MANUFACTURER.

O. SUBSTITUTION

USE ONLY MATERIALS AND EQUIPMENT OF MANUFACTURERS LISTED IN THIS SPECIFICATION. WHERE THE TERM "OR EQUAL" IS USED, OBTAIN APPROVAL FROM THE OWNER BEFORE SUBSTITUTION IS MADE.

N. PROTECTIVE PAINTING

TOUCH UP FACTORY-PAINTED EQUIPMENT THAT HAS BEEN DAMAGED DURING HANDLING OR INSTALLATION. FEATHER DAMAGED AREA, AND APPLY PRIMER PLUS TWO FRESH COATS TO MATCH EXISTING FINISH.

PART 2: PRODUCTS

A. WIRE

- 1. WIRE (600 VOLTS) SHALL HAVE STRANDED (CLASS B) SOFT ANNEALED COPPER CONDUCTORS. WIRE SHALL HAVE THWN (75 C) INSULATION FOR #6 AND SMALLER, XHHW (75 C) FOR #4 AND LARGER.
- 2. GROUNDING WIRE SHALL BE BARE ANNEALED COPPER (CLASS B) STRANDED GROUND WIRE.

B. RACEWAY

- 1. RIGID CONDUIT SHALL BE ZINC-COATED (GALVANIZED STEEL) OR ALUMINUM.
- 2. INTERMEDIATE CONDUIT SHALL BE ZINC-COATED (GALVANIZED) STEEL.
- 3. ELECTRICAL METALLIC TUBING (EMT) SHALL BE ZINC—COATED STEEL.
- 4. FLEXIBLE METAL CONDUIT SHALL BE GALVANIZED STEEL STRIP, SPIRAL WOUND INTO INTERLOCKED FLEXIBLE METAL CONDUIT WITH POLYVINYL CHLORIDE (PVC) JACKET (SEALTITE).

C. PANELBOARDS

1. PROVIDE ONLY U. L. LISTED PANELBOARDS WHICH CONFORM TO STANDARDS OF NEMA PUBLICATION PB-1. REFER TO THE DRAWINGS FOR VOLTAGE, PHASE, AMPERAGE, AND POLE SPACE REQUIREMENTS. BRANCH CIRCUIT BREAKERS SHALL FEATURE BOLT-ON CONSTRUCTION AND HAVE A MINIMUM INTERRUPTING CAPACITY OF 10 KA FOR 208 VOLT SYSTEMS AND 14 KA FOR 480 VOLT SYSTEMS.

D. LIGHTING FIXTURES

1. FURNISH AND INSTALL ALL LIGHTING FIXTURES COMPLETE WITH LAMPS, LENSES, CANOPIES, AND ALL REQUIRED APPURTENANCES TO MAKE THEM COMPLETE AND OPERATIONAL. REFER TO THE LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE SPECIFICATIONS.

E. APPROVED MANUFACTURER'S LIST

ALL EQUIPMENT SHALL BE EQUAL IN GRADE, STYLE, AND QUALITY TO THAT INDICATED, SPECIFIED, OR SCHEDULED AND SHALL BE LIMITED TO MANUFACTURERS LISTED BELOW:

- 1. FUSES: BUSSMAN, GOULD-SHAWMUT, LITTLEFUSE
- 2. 600V WIRE AND CABLES: ANACONDA, GENERAL CABLE, ESSEXECOWNELL WIRE AND CABLE, SOUTHWIRE CONDUIT: CARLON, ALLIED, NATURAL PIPE
- FITTINGS: CROUSE-HINDS, APPLETON, THOMAS & BETTS, STEEL CITY, NATIONAL, OZ/GEDNEY
- 4. CONNECTORS (WIRE AND CABLE): BUCHANON, BURNDY, T & B, TREGO, OZ/GEDNEY, SKOTCHLOK, IDEAL.
- 5. OUTLET BOXES: BELL, RACO, MIDLAND ROSS.
- 6. PULL AND JUNCTION BOXES: BELL, CROUSE-HINDS, QUEEN, RACO, SEDCO
- 7. PANELBOARDS: G. E., SQUARE SIEMONS.
- 8. TRANSFORMERS: G. E., SQUARE D, SIEMONS
- 9. ELECTRICAL DEVICES: LEVITON, HUBBELL.

PART 3: EXECUTION

A. GENERAL WIRING REQUIREMENTS, 600 VOLT AND BELOW:

- 1. MINIMUM SIZED WIRE FOR POWER CIRCUITS SHALL BE #12. SIGNAL AND CONTROL WIRING SHALL BE SIZED AS SHOWN ON PLANS. ALL WIRING SHALL BE COPPER.
- 2. JOINTS OR TERMINATIONS SHALL BE MADE WITH SOLDERLESS, POSITIVE—PRESSURE CONNECTIONS. JOINTS AND FREE ENDS, UNLESS PROPERLY INSULATED BY CONNECTOR, SHALL BE WRAPPED WITH TAPE IN A MANNER THAT MAKES THEIR INSULATION EQUAL TO THE ORIGINAL INSULATION OF THE CONDUCTOR.
- 3. MINIMUM SIZED CONDUIT, UNLESS NOTED, SHALL BE 3/4". TYPE OF CONDUIT SHALL BE AS IN FOLLOWING TABLE:

TYPE	USE
FEEDERS, UP TO 4' ABOVE FLOOR	RIGID STEEL
FEEDERS, OVER 4' ABOVE FLOOR	INTERMEDIATE STEEL OR EMT
BRANCH CIRCUITS , EXPOSED	ЕМТ
BRANCH CIRCUITS, CONCEALED	EMT, METAL-CLAD, OR ARMORED CABLE
CONNECTIONS TO VIBRATING EQUIPMENT, MOTORS, TRANSFORMERS, ETC	CONDUIT (SEALTITE) WITH APPROVED GROUND CONTINUITY FITTINGS. ALL CIRCUITS SHALL HAVE BONDED GROUND WIRE.

4. CONDUIT LOCATION:

- A. CONDUIT IS INDICATED DIAGRAMMATICALLY ON DRAWINGS. AND EXACT LOCATION IS TO BE DETERMINED IN FIELD. CONDUIT SHALL BE ARRANGED IN A NEAT, COMPACT, AND WORKMANLIKE MANNER, WITH A MINIMUM OF CROSSING AND INTERLACING, MAXIMUM HEAD ROOM, AND WITHOUT DIAGONAL RUNS. CONTRACTOR SHALL FURNISH ALL INFORMATION NECESSARY TO PERMIT WORK ON ALL TRADES TO BE INSTALLED IN A SATISFACTORY MANNER.
- 5. ALL RIGID CONDUIT SHALL BE WRENCH-TIGHT.
- 6. PULL AND JUNCTION BOXES SHALL BE INSTALLED AS REQUIRED BY CODE AND AT SUBCONTRACTOR'S CONVENIENCE AS NECESSARY TO PULL IN WIRES, WHETHER SHOWN ON DRAWINGS OR NOT.
- 7. RELOCATION: CONDUIT, SWITCHES, AND CONTROLLERS SHALL BE RELOCATED UP TO 6' FROM LOCATIONS SHOWN, WHEN SO DIRECTED. AT NO COST TO OWNER.

B. GROUNDING:

1. THE GROUNDING SYSTEM SHALL CONFORM TO APPLICABLE PROVISIONS OF ARTICLE 250 OF THE NEC.

4. PROVIDE ONE CONDUCTOR THWN OR XHHW GROUND CONDUCTOR FOR EACH CIRCUIT AS FOLLOWS:

- 2. GROUND ALL METAL CONDUITS, RACEWAYS, CABINET,S AND NON-CURRENT CARRYING METAL COMPONENTS OF THE ELECTRICAL
- 3. FRAMES OF ALL MOTORS SHALL HAVE BONDING WIRE FROM CONDUIT THROUGH FLEXIBLE CONDUIT TO MOTOR FRAME.
 - CIRCUIT CONDUCTOR GROUND CONDUCTOR

#12	#12
#10	#10
#8 TO 4/0	1 SIZE SMALLER

C. FUSING:

SIZES OF FUSES ARE SHOWN ON PLAN FOR DISCONNECT SWITCHES. FUSES 100 AMPS OR LARGER SHALL BE BUSSMAN LPN-RK FOR 250V CIRCUITS AND LPS-RK FOR 480V CIRCUITS. FUSES LESS THAN 100 AMPS SHALL BE FRN-R FOR 250V CIRCUITS AND FRS-R FOR 480V CIRCUITS. FUSE SIZE INDICATED FOR MOTOR CIRCUITS ARE BASED ON DESIGN MOTOR HORSEPOWER. ACTUAL INSTALLED NAMEPLATE AMPERAGE SHALL BE CHECKED IN FIELD AND FUSE CHANGES MADE AS REQUIRED.

D. IDENTIFICATION:

- 1. PROVIDE AND INSTALL MARKERS FOR ALL CONDUIT. MARKERS SHALL BE "BRADY" TYPE, ADHESIVE-BACKED, PLASTIC-FACED OF SUITABLE COLOR. MARKER SHALL IDENTIFY SYSTEM AND ELECTRICAL CHARACTERISTICS. INSTALL MARKERS AT POINT OF ORIGIN, TERMINATION, ADJACENT TO EACH INTERMEDIATE SPLICE, ALL BOXES IN RUN, AND AT 50' INTERVALS ON RACEWAY RUN.
- 2. IDENTIFY ALL CONDUCTORS AT ORIGIN, TERMINATION, AND AT INTERMEDIATE BOXES BY MEANS OF "BRADY" TYPE, PRESSURE-SENSITIVE, PLASTIC-COATED FACE STICK-ON LABELS, EXCEPT FEEDERS SHALL HAVE PHENOLIC TAGS ENGRAVED

WITH CIRCUIT DESIGNATION AND BE ATTACHED WITH WAXED TWINE.

E. TESTING:

UPON COMPLETION OF THIS WORK, THIS CONTRACTOR SHALL CONDUCT (WITH MECHANICAL AND OTHER ELECTRICALLY POWERED EQUIPMENT SUBCONTRACTORS) OPERATING TEST OF ALL ELECTRICALLY OPERATED OR CONTROLLED EQUIPMENT FOR APPROVAL AT SUCH TIME AS THE OWNER MAY DIRECT. EQUIPMENT SHALL OPERATE IN ACCORDANCE WITH REQUIREMENTS OF DRAWINGS. TEST SHALL BE PERFORMED IN PRESENCE OF OWNER. DURING TEST PERIOD, IN ADDITION TO OTHER REQUIRED EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE LABOR, MATERIAL, AND INSTRUMENTS REQUIRED FOR THESE TESTS. ALL DEFECTIVE MATERIALS AND WORKMANSHIP DISCLOSED BY TESTS SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE.

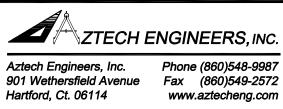


Hartford, CT 06120 McKinney Shelter Renovation

207 Brainard Rd Hartford, CT 06114



LIFECARE DESIGN INC. 1429 Park St. Ste 20° Hartford Ct. 06106 architecture - planning - interior design



Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



key plan	
issue or revision	date
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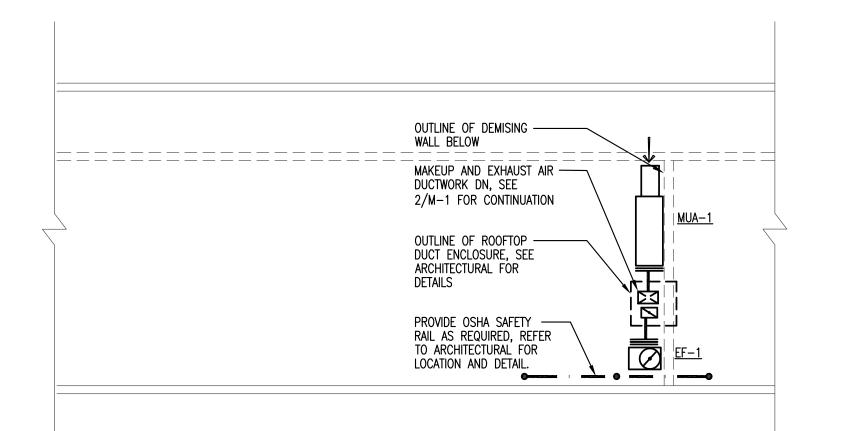
drawing title

scale:	designer:
as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
seal	sheet numb

1.3 of 21

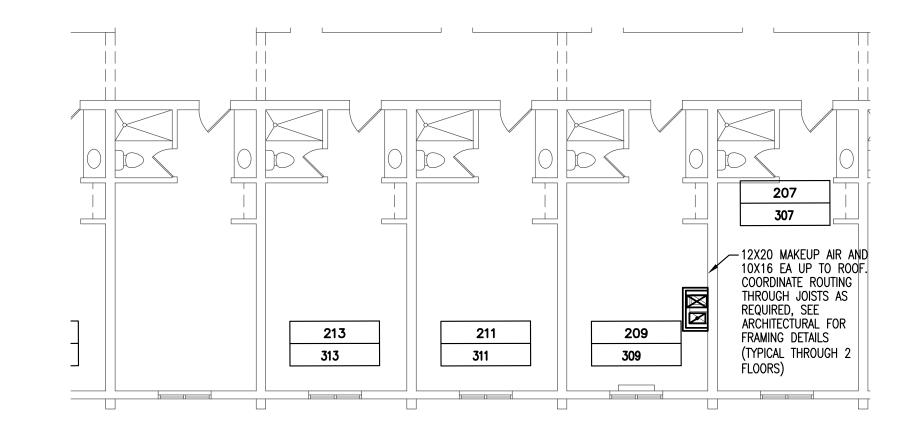
THIS DOCUMENT SHALL NOT BE MODIFIED IN ANYWAY BY ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A REGISTERED

ARCHITECT. EVERY DRAWING SEALED AND SIGNED BY A REGISTERED ARCHITECT COULD BE MODIFIED ONLY BY A REGISTERED ARCHITECT AND THE NATURE OF SUCH MODIFICATION DESCRIBED SHALL BE FOLLOWED BY THE DATE OF MODIFICATION PLUS THE SEAL AND SIGNATURE OF THE ARCHITECT MAKING SUCH MODIFICATION.

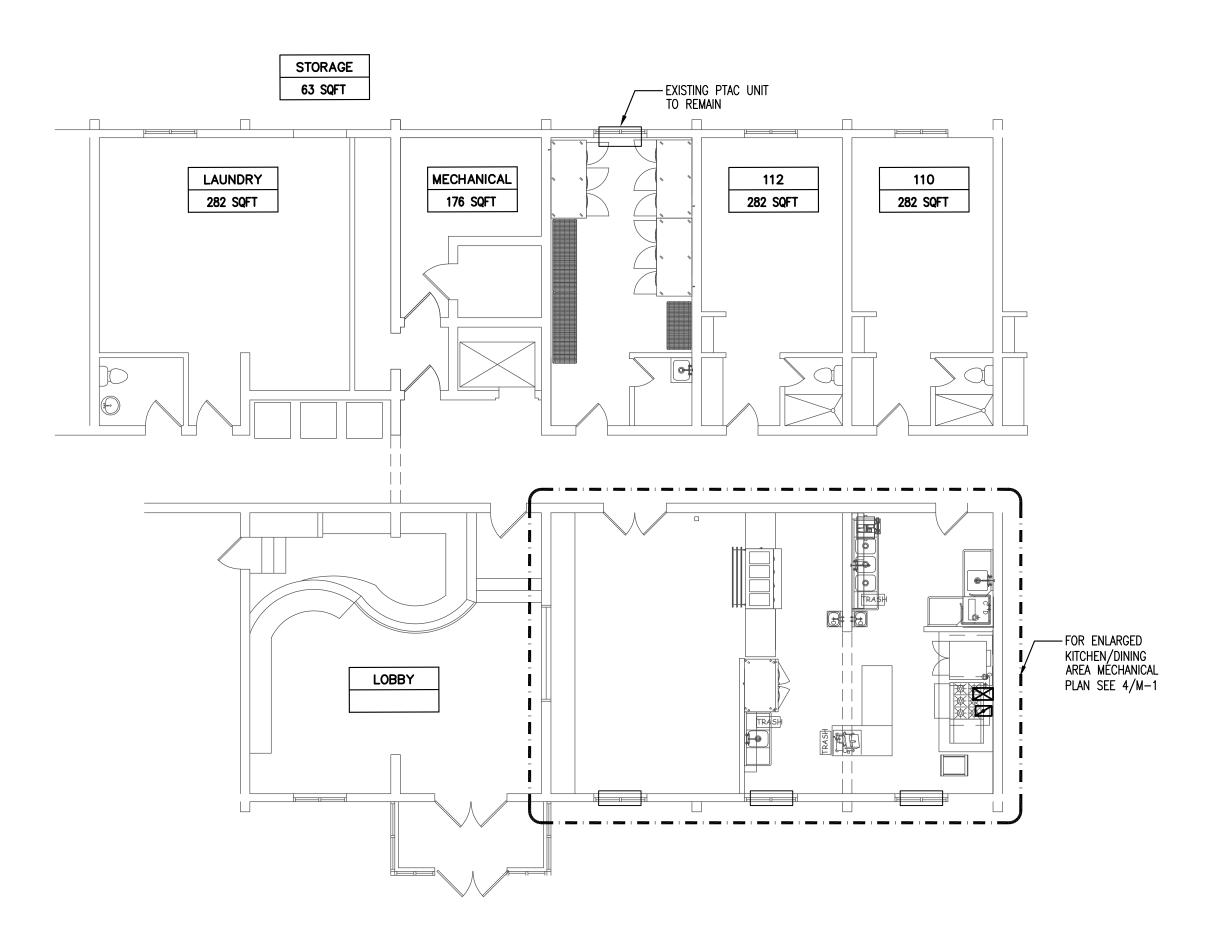


1) PARTIAL ROOF MECHANICAL PLAN

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



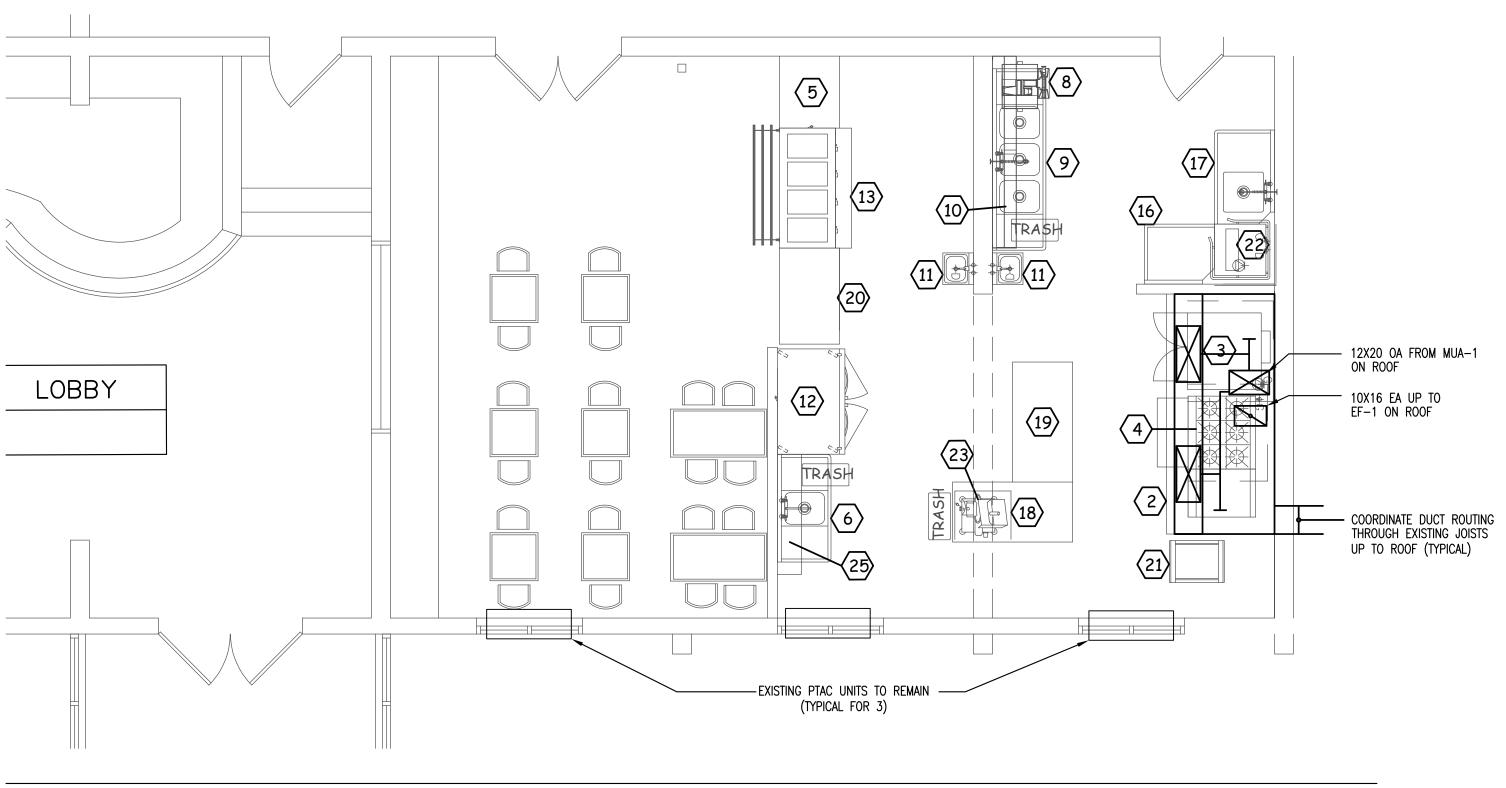
2) PARTIAL 2ND & 3RD FLOOR MECHANICAL PLAN scale: 1/8"=1'-0"



SCHEDULE OF GAS-FIRED MAKEUP AIR UNITS CAPACITY AIR DATA FAN MOTOR DATA TEMP. (F°) MANUFACTURER/MODEL OUTPUT WEIGHT ESP REMARKS NUMBER SYMBOL LOCATION (LBS) (MBH) (IN. WG.) TYPE DESIGN ENT. MIN. ECON-AIR/ EA1-D.500-15D PROVIDE WITH STARTER, DISCONNECT SWITCH, ROOF CURB, INTAKE HOOD, 0.5 MUA-1 R00F DIRECT FIRED 118.6 1000 1600 1527 208 600 KITCHEN HOOD INTERLOCK AND MOTORIZED BACKDRAFT DAMPER

SCHEDULE OF EXHAUST FANS															
NUMBER	LOCATION	AREA SERVED	MANUFACTURER / MODEL NUMBER	SERVICE	FAN TYPE	CONTROL	WIGHT (LBS)	CFM	EXT. S.P. (IN. WG.)	FAN RPM	DRIVE	ELE	CTRICAL DATA	A PH	REMARKS
EF-1	ROOF	KITCHEN HOOD	ECON-AIR / EA-USBI15DD-RM	EXHAUST	USU	HOOD INTERCLOCK	300	2000	1.35	1527	BELT	1.5	208	3	PROVIDE WITH DISCONNECT SWITCH, STARTER, ROOF CURB, GREASE DRAIN, VARIABLE SPEED CONTROL AND DISCHARGE ADAPTER

FAN TYPES: CRCE = CENTRIFUGAL ROOF CURB MOUNTED EXHAUSTER CRCU = CENTRIFUGAL ROOF CURB UPBLAST IL = INLINE CENTRIFUGAL USU = UTILITY SET UPBLAST



4) ENLARGED KITCHEN/DINING AREA MECHANICAL PLAN

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

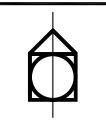


COMMUNITY
RENEWAL TEAM
555 Windsor St.

McKinney Shelter Renovation

Hartford, CT 06120

207 Brainard Rd Hartford, CT 06114

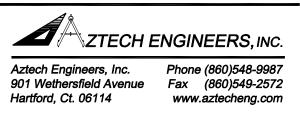


LIFECARE DESIGN INC.

1429 Park St. Ste 201

Hartford Ct. 06106

architecture - planning - interior design



Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



key plan

issue or revision date

drawing title

MECHANICAL PLANS AND SCHEDULES

scale:	designer:
as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
seal	sheet number

M — 1 sheet

14 of 21

	MECHANICAL	ABBREVI	ATIONS
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AMB	AMBIENT	KWH	KILOWATT HOUR
AMP	AMPERE (AMP, AMPS)	LAT	LEAVING AIR TEMPERATURE
APPROX	APPROXIMATE	LBS	POUNDS
ATM	ATMOSPHERE	LF	LINEAR FEET
AVG	AVERAGE	LG	LENGTH
BTU	BRITISH THERMAL UNIT	LVG	LEAVING
CAP	CAPACITY	LWT	LEAVING WATER TEMPERATURE
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM
CU. FT.	CUBIC FEET	мвн	BTU PER HOUR (THOUSAND)
dB	DECIBELS	MIN	MINIMUM
DB	DRY BULB	MUA-	MAKE-UP AIR UNIT
DIFF	DIFFUSER	N.T.S.	NOT TO SCALE
EAT	ENTERING AIR TEMPERATURE	N/A	NOT APPLICABLE
EF-1	EXHAUST FAN	NC	NOISE CRITERIA
ENT	ENTERING	NIC	NOT IN CONTRACT
ER	EXHAUST REGISTER	NO.	NUMBER
ESP	EXTERNAL STATIC PRESSURE	NOM	NOMINAL
EWH-1	ELECTRIC WALL HEATER	OA	OUTSIDE AIR
EXG	EXISTING	PD	PRESSURE DROP (FEET OF WATER OR INCHES OF WATER)
EXH	EXHAUST	PH	PHASE
EXP	EXPANSION	PRESS	PRESSURE
EXT	EXTERNAL	PSIG	POUNDS PER SQUARE INCH GAUGE
oF	DEGREES FAHRENHEIT	RA	RETURN AIR
FD	FIRE DAMPER	RECIRC	RECIRCULATE
FLEX	FLEXIBLE	RPM	REVOLUTIONS PER MINUTE
FPM	FEET PER MINUTE	RTU-	ROOF TOP UNIT
FT	FEET	SA	SUPPLY AIR
GA	GAUGE	SENS.	SENSIBLE
HD	HEAD	SP	STATIC PRESSURE
HORIZ	HORIZONTAL	SQ.FT.	SQUARE FEET
HP	HORSE POWER	STD	STANDARD
HR	HOUR	ТЕМР.	TEMPERATURE
HTG	HEATING	T-STAT	THERMOSTAT
HZ	FREQUENCY	(TYP.)	TYPICAL
IN.	INCH	VD	VOLUME DAMPER
IN. WG.	INCHES WATER GAUGE		

DUCTWORK & ACCESSORIES SYMBOLS						
SYM	IBOL	DESCRIPTION				
VD	VD	MANUAL VOLUME DAMPER				
VD	VD-	BRANCH TAKE-OFF WITH VOLUME CONTROL DAMPER				
VD VD	VD -	DUCT MOUNTED DIFFUSER				
	C RETURN	DUCT 90° UP				
	O SUPPLY	DUCT 90° UP				
	C RETURN	DUCT 90° DOWN				
	O SUPPLY	DUCT 90° DOWN				
	T	THERMOSTAT				

PROVIDE COMPLETE AND OPERATIONAL SYSTEM INCLUDING ALL NECESSARY MATERIAL EQUIPMENT AND LABOR.

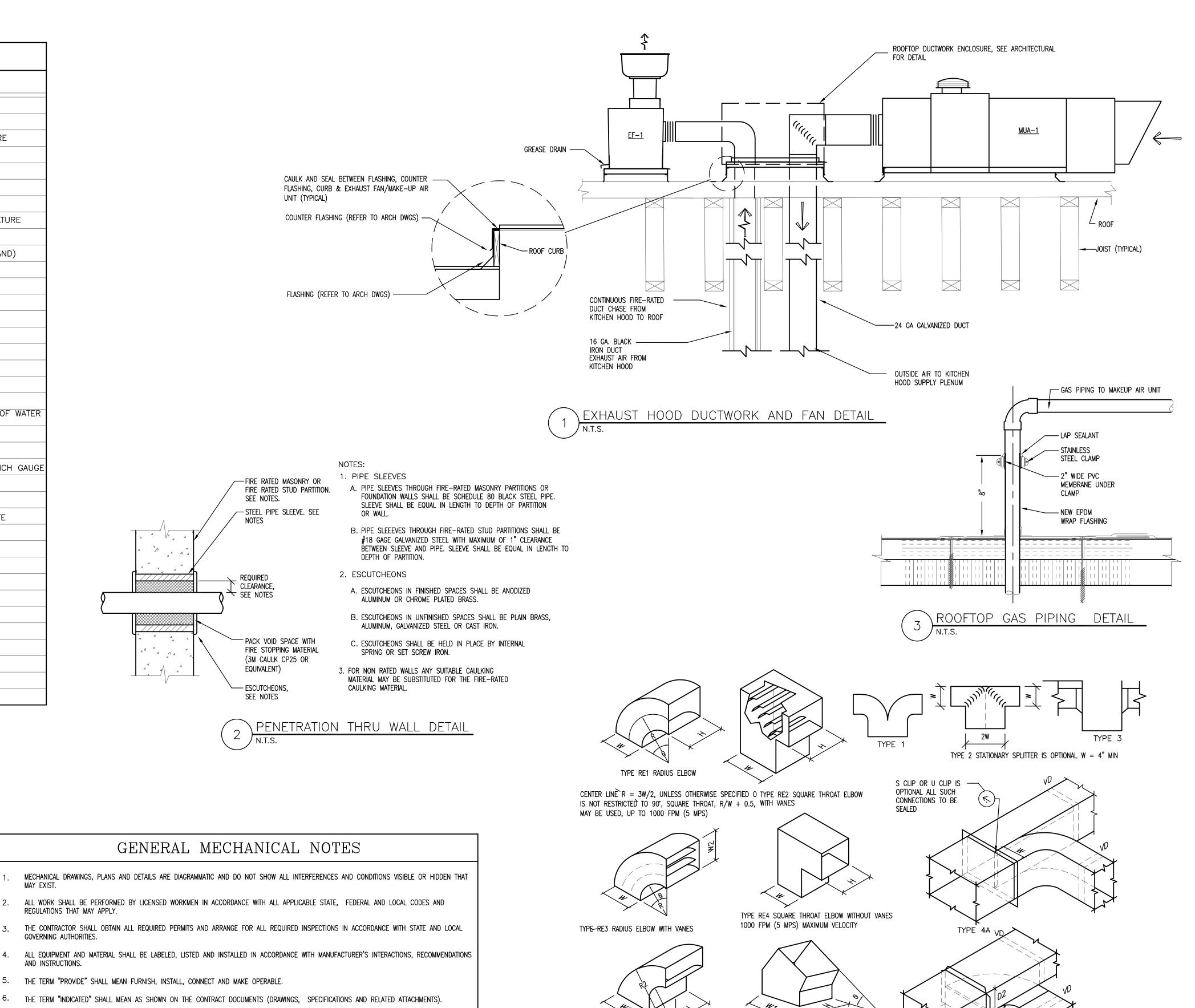
PROVIDE THE OWNER WITH ALL MANUFACTURERS WARRANTIES FOR EQUIPMENT AND MATERIALS PROVIDED.

GIVE FULL COOPERATION TO OTHER TRADES, PROVIDING THEM WITH ALL NECESSARY INSTALLATION DETAILS.

PROVIDE OWNER WITH WARRANTY, GUARANTYING THAT IMPERFECT SYSTEM OPERATION AND ALL DEFECTS IN MATERIAL AND LABOR OR WORK WILL BE

 11 . Repaired without cost to the owner for a period of one year from the date of substantial completion of the project.

PROVIDE OWNER WITH BOUND "OPERATIONS & MAINTENANCE" MANUALS FOR SYSTEMS INSTALLED.



3/4+W1 R2= R1+W2

TYPE RE6 SQUARE MITERED ELBOW

DUCT WORK CONSTRUCTION DETAIL

NOTE: BEAD, CROSSBREAK AND REINFORCE FLAT

SURFACES AS IN STRAIGHT DUCT.

, 4) N.T.S.

NOTE: VOLUME CONTROL SHOULD BE BY

W OR 1.5 D3

BRANCH DAMPERS. IF A SPLITTER IS SHOWN

IN THE DESIGN ITS LENGTH SHOULD BE 1.5



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ZTECH ENGINEERS, INC.

Aztech Engineers, Inc.
901 Wethersfield Avenue
Hartford, Ct. 06114

Phone (860)548-9987
Fax (860)549-2572
www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



issue or revision	date

drawing title
MECHANICAL DETAILS,
NOTES, SYMBOLS &
ABBREVIATIONS

as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
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15of 21

MECHANICAL SPECIFICATIONS

GENERAL REQUIREMENTS

THE CONTRACTOR COVENANTS AND AGREES THAT HE AND HIS SUBCONTRACTORS AND HIS AND THEIR AGENTS, AND EMPLOYEES WILL PROVIDE AND MAINTAIN A SAFE PLACE TO WORK AND THAT HE AND THEY WILL COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITY HAVING JURISDICTION HEREOF, AND THE CONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE ENGINEER AND THE OWNER FROM AND ANY LIABILITY, LOSS, INJURY, DEATH, DAMAGE OR EXPENSE, INCLUDING ATTORNEY'S FEES.

PROVIDE EQUIPMENT, MATERIALS, OPERATIONS, AND METHODS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS INCLUDING LABOR, TOOLS, SUPPLIES AND NECESSARY ACCESSORIES.

WORK INCLUDED

FURNISH ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THE MECHANICAL AND ELECTRICAL WORK WHICH IS CALLED FOR DIAGRAMMATICALLY IN THE DRAWINGS AND SPECIFIED HEREIN. THE WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- 1. HEATING, VENTILATING, AIR CONDITIONING, FIRE PROTECTION AND PLUMBING EQUIPMENT MATERIALS, LABOR,
- 2. CONDUIT, CONDUCTORS AND WIRING DEVICES.
- 3. BRANCH CIRCUITS.
- 4. FINAL CONNECTIONS TO EQUIPMENT FURNISHED AND INSTALLED BY OTHERS.
- 5. POWER WIRING AND CONTROL WIRING AS SHOWN/REQUIRED.

INTENT

FURNISH, ERECT, INSTALL, CONNECT, CLEAN, ADJUST, TEST AND PLACE IN SERVICE ALL MATERIALS, EQUIPMENT AND SYSTEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS.

APPARATUS, MATERIAL OR WORK NOT SHOWN ON DRAWINGS, OR ANY INCIDENTAL ACCESSORIES SUCH AS DAMPERS, GRILLES, SMOKE AND FIRE DETECTORS, FIRE DAMPERS, ETC. NECESSARY TO MAKE THE WORK COMPLETE SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL EXPENSE TO THE OWNER

THE INSTALLATION SHALL BE COMPLETE IN EVERY DETAIL ESSENTIAL TO PROPER AND SATISFACTORY OPERATION, READY FOR USE AND IN CONDITION FOR SERVICE WHEN DELIVERED TO THE OWNER. THIS INCLUDES THE FURNISHING AND INSTALLING OF ALL EQUIPMENT AND MATERIAL HEREIN DESCRIBED OR SHOWN OR CALLED FOR ON THESE DRAWINGS, OR REASONABLY IMPLIED BY THE DRAWINGS.

STANDARDS

THE FOLLOWING STANDARDS FORM A PART OF THIS SPECIFICATIONS. THE FOLLOWING STANDARDS FORM A PART OF THIS SPECIFICATIONS.

- 1. ASHRAE STANDARDS
- 2. UNDERWRITERS LABORATORIES (U.L.)
- 3. SMACNA STANDARDS
- ANSI STANDARD
 ASME STANDARDS
- 6. NFPA STANDARDS
- 7. THE INTERNATIONAL BUILDING CODE
- NFPA-70 (NATIONAL ELECTRICAL CODE)
 INTERNATIONAL MECHANICAL CODE
- 10 INTERNATIONAL MECHANICAL CODE
- 10. INTERNATIONAL PLUMBING CODE11. FEDERAL, STATE AND LOCAL CODES

QUALITY ASSURANCE

MATERIALS AND INSTALLATION SHALL COMPLY WITH LATEST CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION INCLUDING INTERNATIONAL BUILDING CODE AND CONNECTICUT SUPPLEMENTS.

WHERE REGULATIONS OF GAS AND ELECTRIC UTILITY AND TELEPHONE COMPANIES APPLY, CONFORMANCE WITH THEIR REGULATIONS IS MANDATORY AND ANY COSTS INVOLVED SHALL BE INCLUDED IN THE CONTRACT. CONSULT WITH THE POWER, TELEPHONE AND GAS COMPANY PRIOR TO BIDS.

PERMITS AND FEES

THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES; OBTAIN ALL PERMITS; PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE; PAY OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION: OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTIONS FOR HIS WORK; AND DELIVER A COPY TO THE OWNER BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

SUBMITTALS

PRIOR TO FABRICATION OF ANY WORK AND ORDERING EQUIPMENT, SUBMIT SHOP DRAWINGS TO ARCH/ENGINEER FOR REVIEW.

CONTRACTOR IS WARNED NOT TO ORDER ANY EQUIPMENT AND/OR MATERIAL PRIOR TO REVIEW BY ENGINEER.

SHOP DRAWINGS AND SAMPLES: SUBMIT ELECTRONIC COPIES OF ALL SHOP DRAWINGS AND EQUIPMENT SUBMITTALS. EQUIPMENT CATALOG NUMBERS AND PARTS SHALL BE UNDERLINED OR IDENTIFIED ON THE SHOP DRAWINGS.

INSTALLATION DRAWINGS: PREPARE INSTALLATION DRAWINGS AND SUBMIT TO THE ENGINEER FOR REVIEW. FLOOR PLANS AND MECHANICAL EQUIPMENT AREAS SHALL BE DRAWN TO 1/4" SCALE MINIMUM.

OPERATION AND MAINTENANCE MANUALS: SUBMIT (2) TWO COPIES OF OPERATION AND MAINTENANCE MANUALS IN HARD BOUND COVERS.

CERTIFICATIONS: ONE WEEK PRIOR TO THE FINAL INSPECTION, DELIVER TO THE ENGINEER FOUR TYPEWRITTEN COPIES OF EACH OF THE FOLLOWING:

1. CERTIFICATION FROM THE CONTRACTOR THAT ALL EQUIPMENT AND SYSTEMS HAVE BEEN PROPERLY INSTALLED.

ADJUSTED AND TESTED.

2. CERTIFICATION FROM THE RESPECTIVE MANUFACTURER'S AUTHORIZED REPRESENTATIVE THAT THE EQUIPMENT AND SYSTEM(S) HAVE BEEN PROPERLY INSTALLED, ADJUSTED AND TESTED.

PROJECT RECORD DRAWINGS: PREPARE AND MAINTAIN IN CURRENT STATUS, A COMPLETE SET OF DETAILED DRAWINGS FOR ALL WORK INCLUDED UNDER THE CONTRACT. THESE DRAWINGS SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.

REQUIRED DATA SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO:

- 1. UNIT DESIGNATION
- UNIT DIMENSIONS AND WEIGHT
 COMPLETE ELECTRICAL DATA, INCLUDING WIRING DIAGRAMS
- 4. COMPLETE DESCRIPTION OF MATERIALS AND METHODS OF CONSTRUCTION, INCLUDING FINISHES
- 5. INSTALLATION RECOMMENDATIONS6. COMPLETE LIST OF RECOMMENDED SPARE PARTS
- _____

PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

- KITCHEN HOOD
 GAS-FIRED MAKE-UP AIR UNIT
- 3. EXHAUST FAN4. DUCTWORK, DAMPERS, ACCESSORIES AND CONTROLS

WARRANTY SHALL INCLUDE AT LEAST ONE COMPLETE HEATING AND COOLING SEASON.

<u>WARRANTY</u>

ALL WORK SHALL BE WARRANTED FOR BOTH MATERIALS AND LABOR FOR ONE YEAR. THE CONTRACTOR SHALL REPLACE AND/OR REPLACE ANY DEFECT WITHIN A TWELVE MONTH PERIOD TO THE SATISFACTION OF THE ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.

<u>GUARANTEE</u>

GUARANTEE ALL WORK UNDER THIS DIVISION, IN WRITING, TO BE FREE OF DEFECTIVE WORK, MATERIALS, OR PARTS FOR A PERIOD OF TWO YEARS AFTER ACCEPTANCE OF WORK BY OWNER. REPAIR, REVISE, OR REPLACE ALL WORK THAT DEVELOPS DEFECTS, FAILURES, OR INOPERATIVENESS AT NO COST TO OWNER.

JOB CONDITIONS

THE CONTRACTOR SHALL INSPECT THE SITE AND GET HIMSELF THOROUGHLY FAMILIAR WITH JOB CONDITIONS BEFORE SUBMITTING HIS PROPOSAL.

- 1. NO EXTRA CHARGES SHALL BE ACCEPTED BY THE OWNER FOR WORK THAT HAS TO BE PERFORMED DUE TO THE CONTRACTOR'S NEGLIGENCE IN VERIFYING THE EXISTING JOB CONDITIONS.
- 2. CONTRACTOR TO SCHEDULE ALL HIS WORK WITH THE GENERAL CONTRACTOR AND OWNER.

PROGRESS SCHEDULE

KEEP INFORMED OF PROGRESS SCHEDULES OF ALL OTHER CONTRACTORS, AND WORK IN ACCORDANCE WITH SCHEDULES TO COMPLETION OF

DRAWINGS

- 1. FOR PURPOSES OF CLARITY AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC, AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR IS TO MAKE USE OF ALL DATA IN THE CONTRACT DOCUMENTS TO VERIFY THIS INFORMATION. THE DRAWINGS REFLECT THE DESIRED LOCATION OF SERVICES SUCH AS "HOME RUNS," CONDUIT, AND PIPING TO THE EXTENT POSSIBLE.
- 2. DRAWINGS INDICATE REQUIRED SIZE, POINTS OF TERMINATION OF CABLES, WIRING, AND CONDUITS. THESE SHALL BE ROUTED PROPERLY TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, AND PRESERVE CLEARANCES.
- 3. FURNISH LAYOUT DRAWINGS TO OWNER, IF REQUIRED, INDICATING ALL CHANGES, TO MEET SPACE REQUIREMENTS, CODE REQUIREMENTS, AND AS NECESSARY TO RESOLVE ALL SPACE CONFLICTS.
- 4. ALL LOCATIONS OF AND CONNECTIONS MADE TO EQUIPMENT SHOWN ON THE DRAWINGS ARE BASED ON PRELIMINARY EQUIPMENT SELECTIONS BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST CONDUIT, FOUNDATIONS, ETC., TO SUIT EQUIPMENT ACTUALLY PURCHASED. THE CONTRACTOR SHALL SUBMIT "AS-BUILT" DRAWINGS IN ACCORDANCE WITH THE "GENERAL CONDITIONS" SECTION OF THIS CONTRACT TO DOCUMENT CHANGES.

ACCEPTANCE

COMPLETED WORK SHALL BE IN PROPER WORKING ORDER AND CLEAN. LEAVE PREMISES AND SITE IN PRESENTABLE CONDITION, FREE OF SURPLUS MATERIALS AND DEBRIS.

COORDINATION OF TRADES

1. LAYOUT DRAWINGS OF EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE FULLY COORDINATED WITH APPROVED MECHANICAL, STRUCTURAL AND OTHER APPROVED SHOP DRAWINGS AS REQUIRED TO DEFINE LAYOUT CONSTRAINTS.

MATERIALS

- 1. UNLESS OTHERWISE SPECIFIED, PROVIDE ONLY NEW, FIRST-GRADE EQUIPMENT AND MATERIALS WHICH COMPLY WITH REQUIREMENTS OF THIS SPECIFICATION AND APPLICABLE STANDARDS.
- 2. FURNISH, IF REQUIRED, SATISFACTORY EVIDENCE OF KIND AND QUALITY OF MATERIALS PROPOSED FOR USE.
- 3. SIMILAR ITEMS OF MATERIAL AND EQUIPMENT SHALL BE PRODUCT OF SAME MANUFACTURER.

<u>SUBSTITUTION</u>

USE MATERIALS AND EQUIPMENT OF MANUFACTURERS LISTED IN THE SCHEDULES AND SPECIFICATION, OR APPROVED EQUALS. OBTAIN APPROVAL FROM THE OWNER BEFORE SUBSTITUTION IS MADE.

PROTECTIVE PAINTING

TOUCH UP FACTORY—PAINTED EQUIPMENT THAT HAS BEEN DAMAGED DURING HANDLING OR INSTALLATION. FEATHER DAMAGED AREA, AND APPLY PRIMER PLUS TWO FRESH COATS TO MATCH EXISTING FINISH.

DELIVERY, STORAGE, HANDLING

DELIVER MATERIALS IN ADEQUATE TIME TO MAINTAIN APPROVED CONSTRUCTION SCHEDULE AND STORE IN A SAFE DRY LOCATION OUT OF THE WAY OF CONSTRUCTION OPERATIONS AS APPROVED BY THE GENERAL CONTRACTOR.

INSTALLATION OF WORK

THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF EQUIPMENT, PIPING ELECTRICAL AND OTHER WORK. EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS SHALL BE DETERMINED AT THE SITE AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER.

CHECK DRAWINGS OF THE OTHER TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED AND FURNISH OTHER TRADES WITH ADVANCE INFORMATION ON LOCATIONS AND SIZES OF FRAMES, CONCRETE PADS, SLEEVES AND OPENINGS NEEDED FOR WORK.

AFTER REVIEWED BY THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MINOR MODIFICATIONS MAY BE MADE IN THE WORK AS REQUIRED BY THE STRUCTURAL INTERFERENCES AND WORK OF OTHER TRADES.

REFER TO ALL CONTRACT DOCUMENTS FOR DETAILS, INCLUDING REFLECTED CEILING PLANS AND LARGE SCALE DRAWINGS FOR ARCHITECTURAL, STRUCTURAL AND MECHANICAL WORK.

SCAFFOLDING, RIGGING, HOISTING

FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR THE ERECTION AND DELIVERY ONTO THE PREMISES OF ALL EQUIPMENT APPARATUS. FURNISHED AND REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.

CUTTING AND PATCHING

PROVIDE DRILLING, CUTTING, FITTING AND PATCHING NECESSARY FOR THE INSTALLATION OF EQUIPMENT, DUCTWORK, BREECHING, PIPING, CONTROL WIRING AND OTHER WORK AND PROVIDE SUPPORTS FOR BRACING AND ANCHORAGE OF WORK. NO CUTTING OF STRUCTURAL WORK OR OF FIREPROOFING SHALL BE DONE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.

HOLES THROUGH CONCRETE AND MASONRY IN EXISTING STRUCTURES SHALL BE CUT WITH A DIAMOND CORE DRILL OR CONCRETE SAW. HOLES SHALL BE LOCATED SO AS NOT TO AFFECT STRUCTURAL RIBS OR BEAMS.

<u>FLASHING</u>

PROVIDE WEATHERPROOF FLASHING FOR VENTS AND PIPES THAT RUN THROUGH THE ROOF OR OTHER EXPOSED AREAS. COORDINATE ROOF AND WALL PENETRATIONS WITH MECHANICAL WORK AND PROVIDE WEATHERPROOF SLEEVES FOR EACH.

PROTECTION

PROTECT ALL PIPING AGAINST ENTRANCE OF LIQUIDS AND FOREIGN MATTER BY MEANS OF PLUGS OR CAPS. COVER AND PROTECT ALL OTHER MATERIALS AND EQUIPMENT FURNISHED AND/OR INSTALLED UNDER THIS SECTION DURING THE CONSTRUCTION PERIOD. DAMAGED DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED.

CLEANING AND PAINTING

ALL FINISHED METAL SURFACES SHALL BE CLEANED. ALL UNFINISHED METAL SURFACES SHALL BE CLEANED AND READIED FOR PAINTING.

ALL PANELBOARDS, SWITCHBOARDS, STARTERS, DISCONNECT SWITCHES AND OTHER ELECTRICAL EQUIPMENT SHALL BE FACTORY FINISHED WITH BAKED ENAMEL OR LACQUER PAINT.

FLOOR AND WALL PENETRATIONS

NO CORING, DRILLING OR OTHER PENETRATIONS IN SLAB IS ALLOWED UNLESS AUTHORIZED BY THE STRUCTURAL ENGINEER. COORDINATE WORK WITH THE GENERAL CONTRACTOR.

WHERE PIPING PASSES THROUGH FIRE—RATED FLOORS OR WALLS, THE OPENINGS AROUND THE PIPES SHALL BE SEALED WITH 3M FIRE SAFING. PIPING FLOOR PENETRATIONS WITHIN FIRE—RATED CHASES SHALL BE SEALED WITH SMOKE BARRIER SEALANTS.

3" HIGH CURBS SHALL BE PROVIDED AROUND ALL OPENINGS THROUGH FLOORS. ALL SLEEVES SHALL BE STUBBED 3" ABOVE THE FLOOR AND FLUSH WITH WELLS

INICERTO

CONCRETE INSERTS FOR SUSPENDED ITEMS SHALL BE MALLEABLE IRON.

MATERIAL AND EQUIPMENT

MATERIALS AND EQUIPMENT SHALL BE NEW AND UL LABELED. MATERIALS AND EQUIPMENT OF THE SAME GENERAL TYPE SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT TO PROVIDE UNIFORM APPEARANCE, OPERATION AND MAINTENANCE.

<u>TRAINING</u>

CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY TRAINING OWNER AND MAINTENANCE STAFF REGARDING 0&M MANUALS FOR ALL EQUIPMENT ON THIS PROJECT, AND FOR TRAINING OCCUPANTS REGARDING USE OF EQUIPMENT.

ROOFTOP MAKEUP AIR UNIT

PACKAGED, FACTORY ASSEMBLED, PRE-WIRED UNIT CONSISTING OF CABINET, SUPPLY FAN, FURNACE SECTION AND CONTROLS; WIRED FOR SINGLE POWER CONNECTION WITH CONTROL TRANSFORMER. PROVIDE WITH FACTORY ROOF CURB WITH VIBRATION ISOLATION AND BYPASS DAMPER WITH ACTUATOR. INCLUDE POWERED CONVENIENCE OUTLET.

HANGERS, SUPPORTS AND ANCHORS

PROVIDE CORROSION RESISTANT HANGERS, ANGLES, CHANNELS, ANCHORS AND OTHER SUPPORTS REQUIRED BY FIELD CONDITIONS TO INSTALL PIPING, DUCTWORK AND EQUIPMENT. SUPPORTS AND METHODS OF FASTENING TO BUILDING STRUCTURE SHALL BE ACCEPTABLE TO THE OWNER.

HANGERS AND SUPPORTS EXPOSED TO MOISTURE OR OUTDOORS SHALL BE HOT DIPPED GALVANIZED STEEL.

NO MECHANICAL ITEMS SHALL REST ON, OR DEPEND FOR SUPPORT ON SUSPENDED CEILING MEDIA, SUCH AS TILES, LATH PLASTER, SPLINES, ETC., IN SUSPENDED CEILING, SUPPORT PIPING AND DUCTWORK DIRECTLY FROM STRUCTURAL SLABS, DECKS OR FRAMING MEMBER. ALL FLOOR MOUNTED EQUIPMENT SHALL BE PROVIDED WITH CONCRETE HOUSEKEEPING PADS. ALL HANGERS AND SUPPORTS TO COMPLY WITH LOCAL SEISMIC ZONE REQUIREMENTS.

QUIET OPERATION AND VIBRATION

ALL EQUIPMENT AND/OR SYSTEMS SHALL OPERATE UNDER ALL CONDITIONS OF LOAD WITHOUT ANY SOUND OR VIBRATION WHICH IS OBTRUSIVE IN QUALITY. VIBRATION CONTROL SHALL BE BY MEANS OF APPROVED VIBRATION ELIMINATORS IN A MANNER AS RECOMMENDED BY THE MANUFACTURER.

<u>DUCTWORK</u>

MAKEUP AIR DUCTWORK SHALL BE HOT DIPPED GALVANIZED STEEL DUCTWORK ASTM A527-80, FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARD DUCT SEALER BE USED TO SEAL ALL JOINTS. VOLUME DAMPERS SHALL BE 16 GAUGE GALVANIZED STEEL.

KITCHEN EXHAUST GREASE DUCTWORK SHALL BE 16 GAGE MINIMUM 1" W.G. PRESSURE CLASS STAINLESS STEEL, LIQUID TIGHT CONSTRUCTION WITH CONTINUOUS EXTERNAL WELD FOR ALL SEAMS AND JOINTS. PROVIDE ACCESS DOORS FOR DUCT CLEANING EVERY 20 FEET AND AT EACH CHANGE OF DIRECTION, GASKETS AND SEALANTS RATED AT 1500 DEG.F FOR GREASE TIGHT CONSTRUCTION

DUCTWORK INSULATION

MAKEUP AIR DUCTWORK INSULATION SHALL BE FIBERGLASS, SHALL COMPLY WITH ASHRAE 90.1 STANDARDS AND HAVE SURFACE BURNING CHARACTERISTICS RATINGS AS TESTED BY NFPA 255, OF NOT MORE THAN 25 FLAMES SPREAD AND 50 SMOKE DEVELOPED. INSULATION SHALL BE JACKETED AND SHALL PROVIDE A CONTINUOUS VAPOR BARRIER. ALL DUCTWORK SHALL BE INSULATED. GREASE DUCTWORK INSULATION SHOULD BE RATED FIREWRAP BY 3M, OR EQUAL.

EXHAUST FANS

FANS SHALL BE DESIGNED, FABRICATED AND ASSEMBLED IN ACCORDANCE WITH ASHRAE AND AMCA STANDARDS.

PROVIDE FLEXIBLE CONNECTIONS ON INLET OF FAN CONNECTED TO DUCTWORK. CONNECTIONS TO BE A MINIMUM OF 12" WIDE FABRIC WITH 1" OF

PIPING MATERIALS AND FITTINGS

WELDING, BRAZING AND SOLDERING MATERIALS SHALL BE IN COMPLIANCE WITH "ASME" BOILER AND PRESSURE CODE.

ESCUTCHEONS SHALL BE CHROME-PLATED, STAMPED STEEL, HINGED, SPLIT-RING ESCUTCHEONS WITH SET-SCREW AND SHALL COMPLETELY COVER THE OPENINGS IN FLOORS, WALLS AND CEILINGS.

ACTIONS AND STOP CORROSION.

DIELECTRIC FITTINGS SHALL BE PROVIDED WITH APPROPRIATE END CONNECTIONS TO EFFECTIVELY ISOLATE DISSIMILAR METALS, PREVENT GALVANIC

SHEET METAL SLEEVES SHALL BE 10 GAUGE, GALVANIZED SHEET METAL, ROUND TUBE CLOSED WITH WELDED LONGITUDINAL JOINT.

STEEL SLEEVES SHALL BE SCHEDULE 40, GALVANIZED, WELDED STEEL PIPE, ASTM A120/A53.

BALANCING

THE BALANCING OF ALL SYSTEMS SHALL BE ACCOMPLISHED BY AN INDEPENDENT TESTING AND BALANCING CONTRACTOR TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE TIME OF THE COMPLETION OF THE INSTALLATION.

THE TESTING AND BALANCING AGENCY SHALL BE CERTIFIED BY NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR ASSOCIATED AIR BALANCING COUNCIL (AABC). THE TESTING AND BALANCING ENGINEER SHALL HAVE AT LEAST (3) THREE YEARS OF TESTING, ADJUSTING AND BALANCING EXPERIENCE.

TEST ADJUST AND BALANCE THE HVAC SYSTEMS INDICATED ON PLANS. BALANCE ALL AIRFLOWS +10%. PROVIDE BALANCE REPORT INDICATING ALL AIRFLOWS, AMPERAGE DRAW, VOLTAGE, SUPPLY AND RETURN EXTERNAL STATIC PRESSURE.



555 Windsor St. Hartford, CT 06120

McKinney Shelter Renovation

207 Brainard Rd Hartford, CT 06114



LIFECARE DESIGN INC.

1429 Park St. Ste 201

Hartford Ct. 06106

architecture - planning - interior design



Aztech Engineers, Inc.
901 Wethersfield Avenue
Hartford, Ct. 06114

Phone (860)548-9987
Fax (860)549-2572
www.aztecheng.com

Bill LaPoint, Structural Engineer

1379 Main St.
East Hartford, CT 06108

Shell Martford, CT 06108

Winners Hartford Lucidators
Flooring (Lumber)
Flooring

key plan
issue or revision date

drawing title

MECHANICAL

SPECIFICATIONS

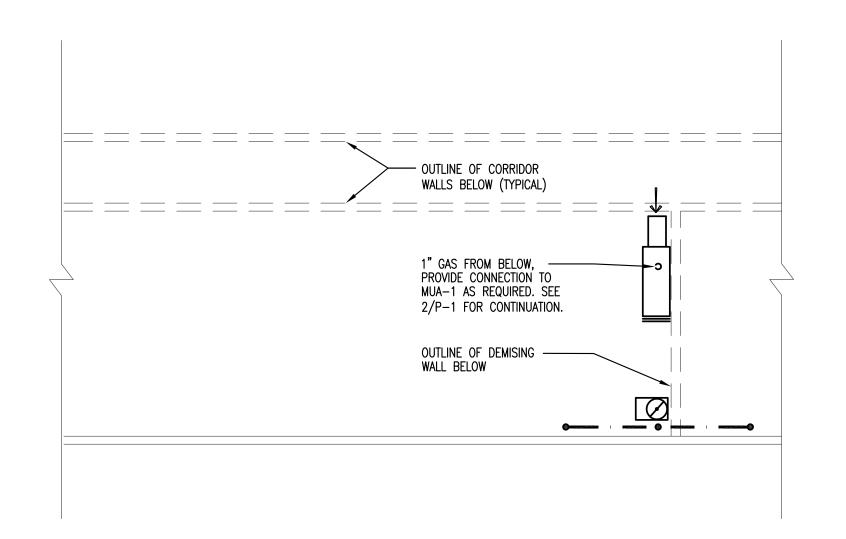
scale: designer:
as indicated DHA/PMC

project no.: drawn by:
21570 RMS
date: checked by:
5/20/2022 DHA/PMC

16of 21

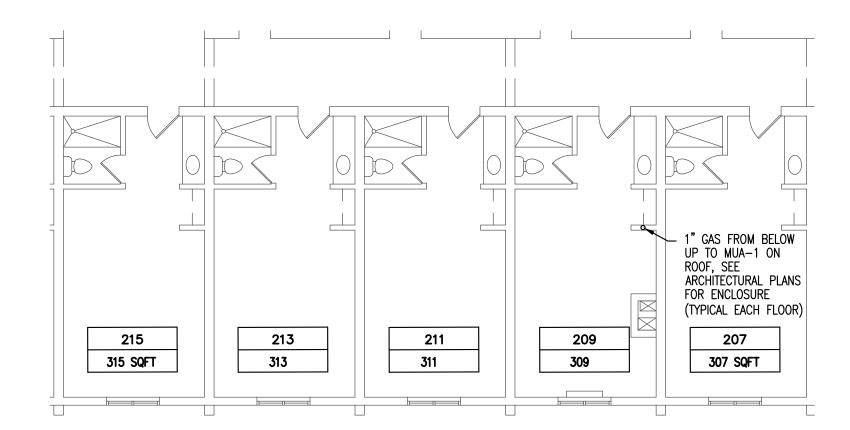
THIS DOCUMENT SHALL NOT BE MODIFIED IN ANYWAY BY ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A REGISTERED ARCHITECT. EVERY DRAWING SEALED AND SIGNED BY A REGISTERED ARCHITECT COULD BE MODIFIED ONLY BY A REGISTERED ARCHITECT AND THE NATURE OF SUCH MODIFICATION DESCRIBED SHALL BE FOLLOWED BY THE DATE OF MODIFICATION PLUS THE SEAL AND SIGNATURE OF THE ARCHITECT MAKING SUCH

MODIFICATION.



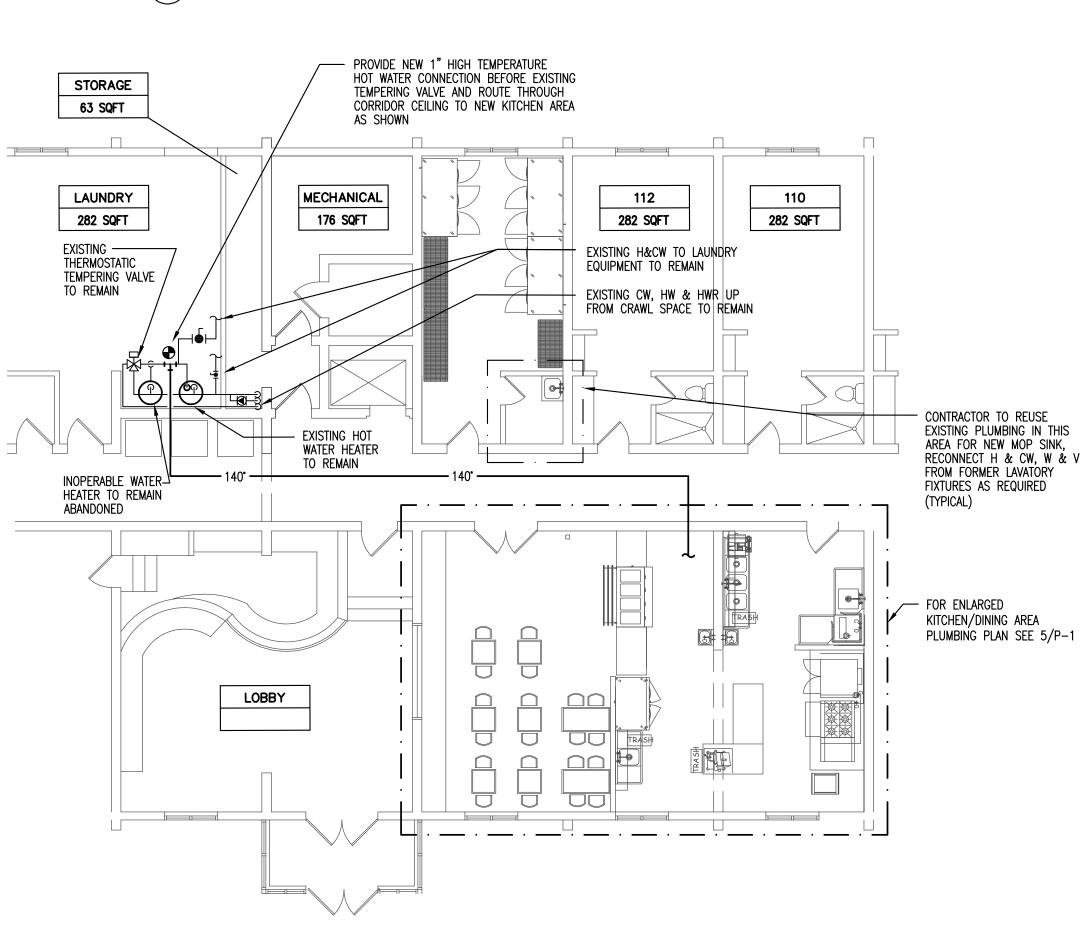
1) PARTIAL ROOF PLUMBING PLAN

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



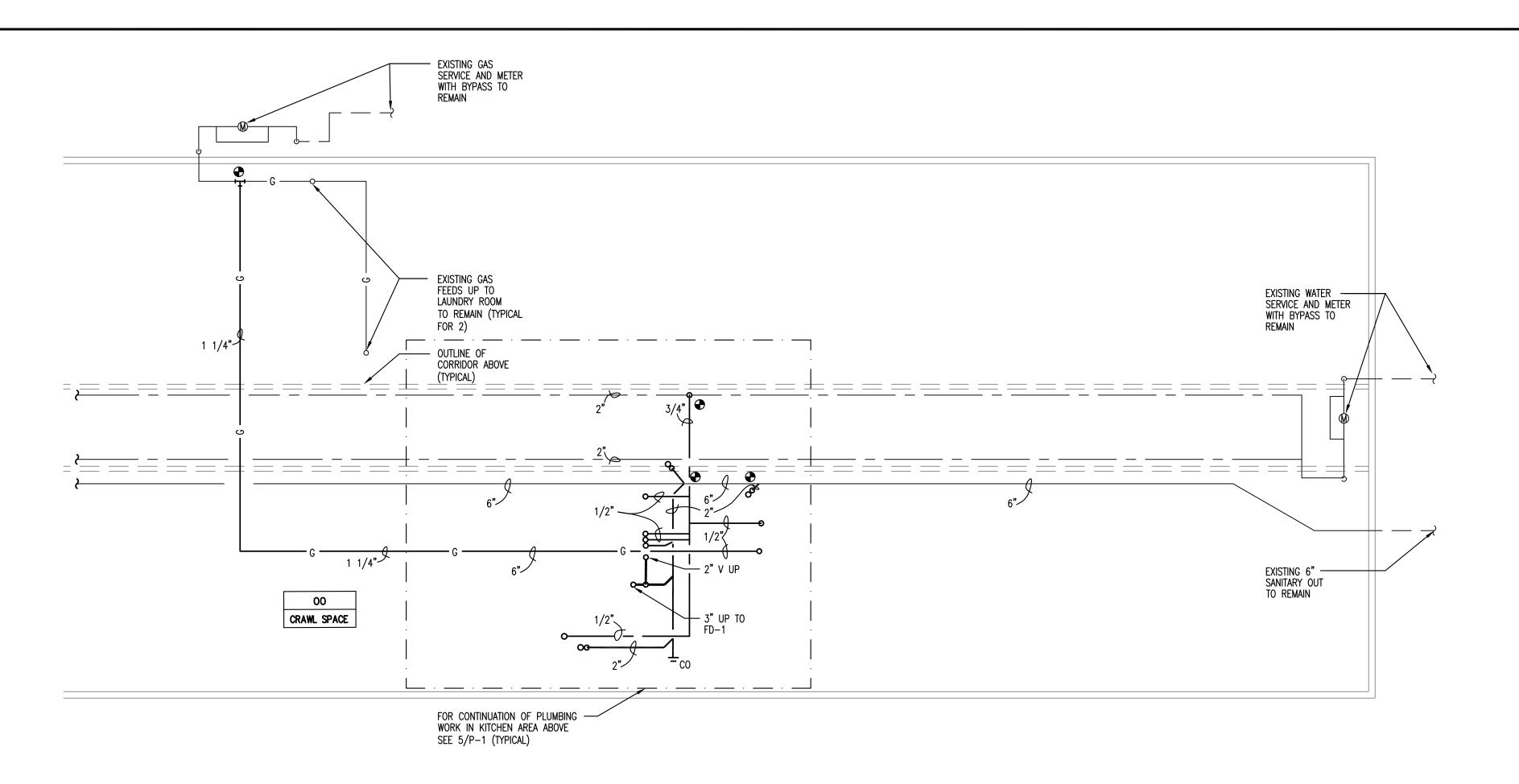
2) PARTIAL 2ND & 3RD FLOOR PLUMBING PLAN

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



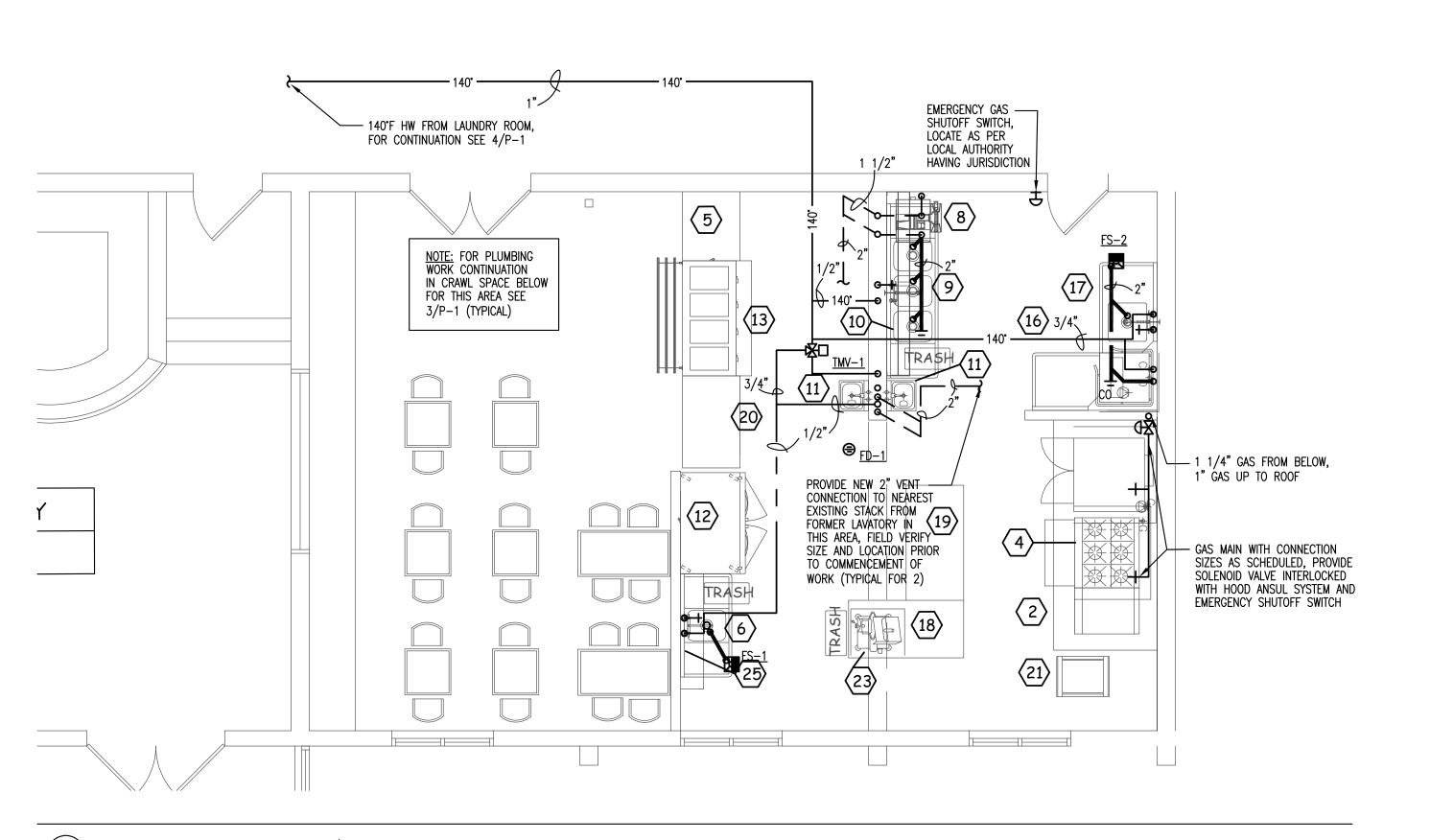
(4) PARTIAL 1ST FLOOR PLUMBING PLAN

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



(3) PARTIAL CRAWL SPACE PLUMBING PLAN

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



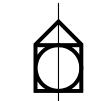
(5) ENLARGED KITCHEN/DINING AREA PLUMBING PLAN

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



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Hartford, Ct. 06114

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



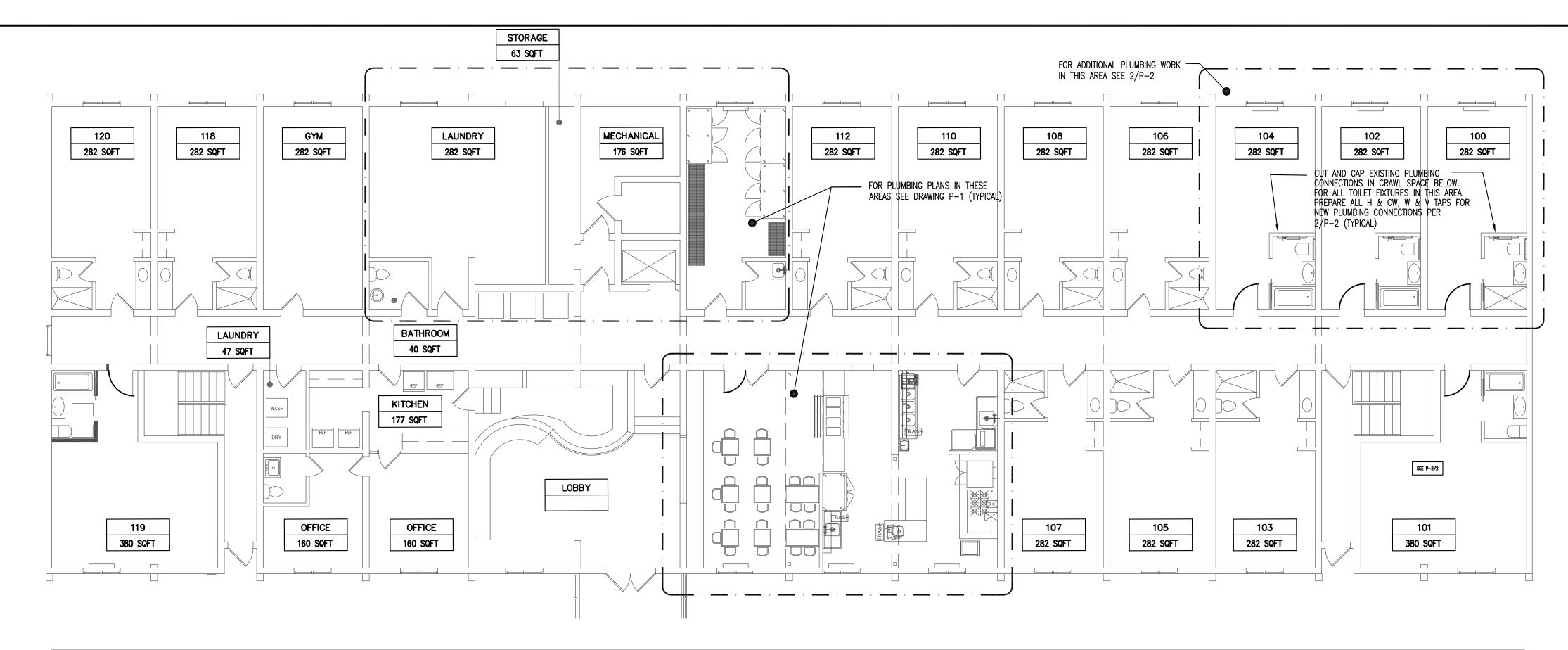
issue or revision	date

drawing title KITCHEN/DINING AREA AND CRAWL SPACE PLUMBING PLANS

scale:	designer:
as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS

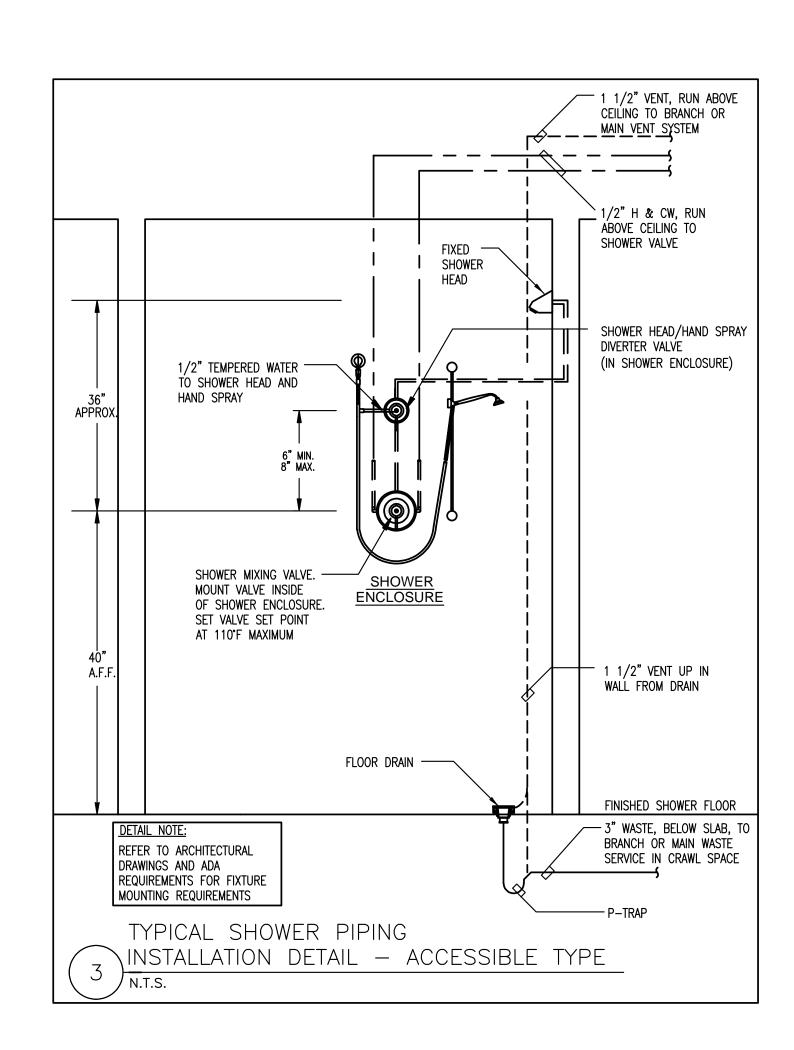
5/20/2022

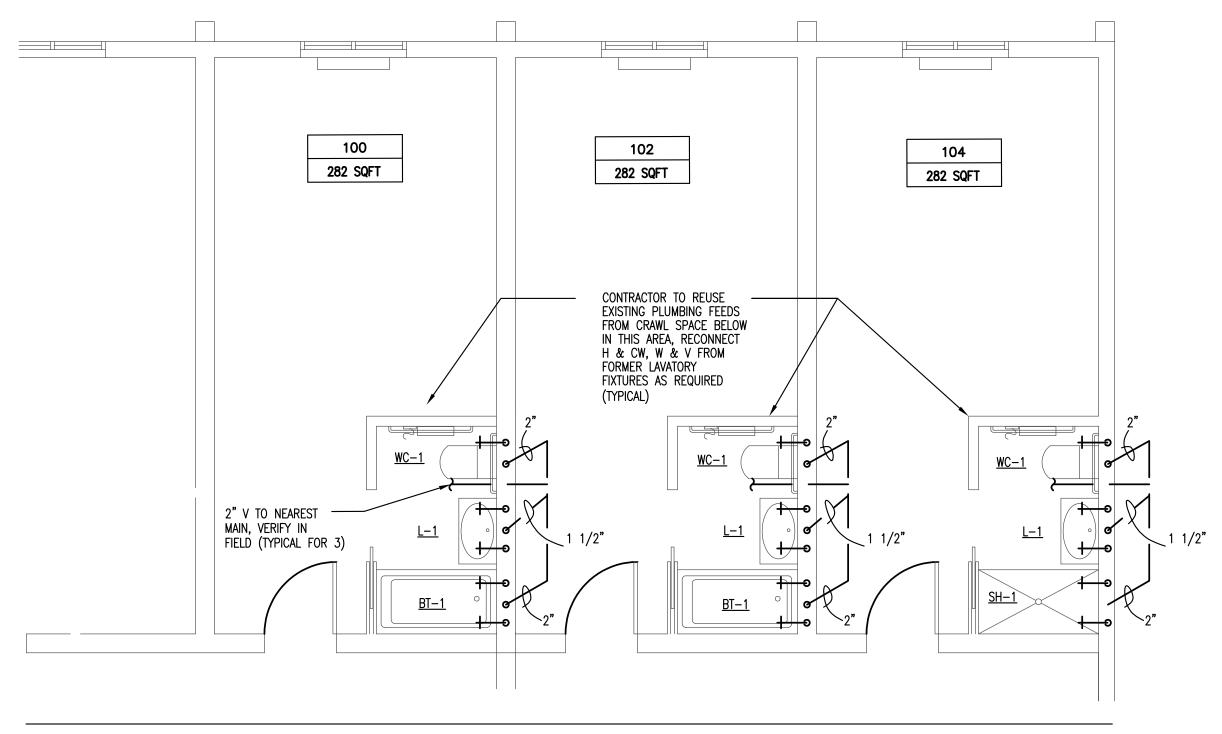
17of 21



1) PLUMBING PLAN

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





2 ADA APARTMENT PLUMBING PLANS

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

						PLUN	MBING FIXTURE SCHEDULE	
1. 2.							ONTRACTOR SHALL INSTALL ALL NECESSARY FITTINGS, ADAPTERS, ETC. TO MAKE FINAL CONNECTION AND COMPLETE THE INSTALLAT SEMI-CAST PRAPS, PLUMBING FIXTURE SUPPORTS, AND ANY OTHER REQUIRED TRIM FOR INSTALLATION AND PROPER OPERATION	
TYPE	FIXTURE	SOIL	VENT	COLD	нот	MOUNT	DESCRIPTION	REMARKS
WC-1 (H/C)	WATER CLOSET (H/C)	4"	2"	1/2"	_	FLOOR	KOHLER PERSUADE K-6355, VITREOUS CHINA, ELONGATED BOWL, TOP MOUNTED TWO-BUTTON FLUSH, 1.0/1.6 GAL/FLUSH, QUIET-CLOSE SEAT, ANGLE SUPPLY WITH STOP. PROVIDE ROUGH-IN COORDINATED WITH ARCHITECTURAL INSTALLATION DETAILS. MOUNT AT ADA REQUESTED HEIGHT	ADA COMPLIANT
SH-1 (H/C)	SHOWER	3"	2"	1/2"	1/2"	FLOOR	REFER TO ARCHITECTURAL SPECIFICATIONS FOR SHOWER UNIT ENCLOSURE. SYMMONS TEMPTROL C-96-300-B30-V HAND SHOWER SYSTEM WITH MIXING VALVE AND SLIDE BAR, POLISHED CHROME, LEVER HANDLE, INCLUDE ALL ADA REQUIREMENTS (TYPICAL)	ADA COMPLIANT
L-1 (H/C)	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL	KOHLER PINOIR K-2035-1 WALL MOUNT LAVATORY WITH K-2028-1 BASIN AND K-2057 CHROUD. VITREOUS CHINA WITH OVERFLOW DRAIN AND SINGLE FAUCET HOLE. DELTA 15938T-DST SINGLE HANDLE DECK MOUNT FAUCET WITH LOW FLOW AERATOR. MOUNT AT ADA REQUIRED HEIGHT	ADA COMPLIANT
BT-1	BATHTUB	3"	2"	1/2"	1/2"	COUNTER	KOHLER UNDERSCORE K-20201-LA ACRYLIC BATHTUB WITH INTEGRAL APRON AND FLANGE. INCLUDE K-7271 SLOTTED OVERFLOW DRAIN. SYMMONS TEMPTROL C-96-300-B30-V HAND SHOWER SYSTEM WITH MIXING VALVE AND SLIDE BAR, POLISHED CHROME, LEVER HANDLE, INCLUDE ALL ADA REQUIREMENTS (TYPICAL)	ADA COMPLIANT

CONTRACTOR SHALL COORDINATE ALL FIXTURE SELECTIONS WITH ARCHITECTURAL PLANS, BRING ANY DISCREPANCIES TO THE ATTENTION OF ARCHITECT AND ENGINEER PRIOR TO ORDER (TYPICAL)



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Aztech Engineers, Inc. Phone (860)548-9987 901 Wethersfield Avenue Fax (860)549-2572 Hartford, Ct. 06114 www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



issue or revision	date

ADA APARTMENT PLUMBING PLANS, SCHEDULE AND DETAIL

as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
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18 of 21

					THER	MOSTATIO	C TEMPERING VALVE SCHEDULE
SYMBOL	MANUFACTURER/ MODEL NUMBER	LOCATION	SERVING	FLOW RATE (GPM)	INLET/OUTLET SIZE	PRESSURE DIFFERENTIAL (PSI)	REMARKS
TMV-1	LEONARD/SERIES TM	KITCHEN	DOMESTIC HOT WATER (110°F)	8	1/2" x 1/2" x 3/4"	7.0	THERMOSTATIC TEMPERING VALVE SHALL INCLUDE THERMOSTATIC CONTROLLER WITH SWIVEL ACTION CHECK STOPS, REMOVABLE CARTRIDGE WITH STRAINER, STAINLESS STEEL PISTON AND LIQUID FILLED THERMAL MOTOR WITH BELLOWS MOUNTED OUT OF WATER. VOLUME CONTROL SHUTOFF VALVE, BIMETAL DIAL THERMOMETER (3" FACE, RANGE 20 DEGREES F. – 240 DEGREES F.) BRASS PIPE, FITTINGS AND UNIONS. STANDARD VALVE AND PIPING IS ROUGH BRASS AND COPPER.

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
CO	CLEAN OUT	SS-	SERVICE SINK
FD-	FLOOR DRAIN	TMV-	THERMOSTATIC MIXING VALVE
FS-	FLOOR SINK	TP	TRAP PRIMER
CW	COLD WATER	TYP.	TYPICAL
EWC-	ELECTRONIC WATER COOLER	U–	URINAL
G	NATURAL GAS	V	VENT
GPH	GALLONS PER HOUR	VTR	VENT THRU ROOF
GPM	GALLONS PER MINUTE	w	WASTE
GW	GREASE WASTE	WC-	WATER CLOSET
GT	GREASE TRAP	wco	WALL CLEANOUT
HW	HOT WATER	WH-	WATER HEATER
IW	INDIRECT WASTE	WHA	WATER HAMMER ARRESTE

			F	PLU	MB	ING SPECIALTIES SCHEDULE
SYMBOL	DESCRIPTION	MAKE / MODEL		MINIMUM NECTION S	SIZE	REMARKS
		,	WASTE	VENT	CW	
FD-1	FLOOR DRAIN	WADE / #1103STD6	4"	2"	_	4" OUTLET, CAST IRON BODY, NICKEL BRONZE STRAINER, 4" DEEP SEAL TRAP, WITH TRAP GUARD
FS-1	FLOOR SINK	WADE / #9143-27	2"	1 1/2"	_	12"X12"X8" SUMP, 2" OUTLET, ALUMINUM DOME STRAINER, NICKEL BRONZE HINGED TOP
FS-2	FLOOR SINK	WADE / #9143-27	3"	2"	_	12"X12"X8" SUMP, 3" OUTLET, ALUMINUM DOME STRAINER, NICKEL BRONZE HINGED TOP
FCO	FLOOR CLEANOUT	WADE / #6004.1-NH	4"	-	_	CAST IRON, 4" NO HUB OUTLET, BRONZE GASKETED PLUG, REVERSIBLE CLAMPING COLLAR, ROUND FRAME, NON SLIP COVER WITH VANDAL PROOF SCREWS
wco	WALL CLEANOUT	ZURN / #Z1446-BP-VP	_	_	_	POLISHED STAINLESS STEEL ROUND COVER, VANDAL PROOF SCREWS

#	<u> </u>	SCHEDULE OF EQUIPMENT			Ŋ	ИЕС	СНА:	NICAL	, (COl	NNE	CTI	ONS		COMMENT	NOTE: CONTRACTOR SHALL REFER TO "PARADISE RESTAURANT SUPPLY" FOR ALL KITCHEN EQUIPMENT SELECTIONS LISTED HERE,
I	QUANTITY	DECODIDATION		EL	.ECTRIC	AL				PLU	IMBING			CONNECT		COORDINATE WITH OWNER (TYPICAL)
ITEM	9	DESCRIPTION	VOLT	Ø	AMP	IZ/W	HP	CONN CW	HW	W	IW	G	MBTU	AFF		
1	1	3- DOOR REFRIGERATOR	115	, , , , , , , , , , , , , , , , , , ,	4.2	I VVV	1/4	C&P	1144		177		IVIDIO	Λιι		
2	1	EXHAUST HOOD W/ANSEL	113	I	4.2		1/4	σαι							SEE HOOD DRAWING FOR SPECS	
3	1	CONVECTION OVEN	115	1	8.0		3/4	C&P				3/4"	45		SEL HOOD DIVAWING FOR SPECS	
1	1	6-BURNER RANGE W/GRIDDLE-DOUBLE OVEN BASE	113	<u> </u>	0.0		3/4	υαι				3/4"			CASTERS	
	1											- 3/4	200		CASIERS	
5	1	S/S WORK TABLE						1/.	2" 1/2)"	1-1/	/2"				
6	1	PREP SINK W/DRAINBOARDS MOP SINK						1/.				<u>' </u>				
8	1	GREASE TRAP	115	1	5.0			C&P	Z 1/2	Z Z						
	1		113	l	3.0				0" 1/0							
9	1	3-BAY POT SINK POT RACK						1/.	2" 1/2	2 1 - 1	/					
10	2							1 /	0" 1/0)" 1 1	/0"					
11	1	HAND SINK	115	1	7.0		1 / E		2" 1/2	2 1 – 1	/					
12	1	2- DOOR REFRIGERATOR	115		3.2	4.0	1/5	C&P								
13	1 10	SERVING COUNTER/COLD ITEMS	208	1	19.2	4.0		C&P								
	I LO	T COATED WIRE SHELVING	445 /00	. .			4.0	0.0.0								
15	2	3-DOOR FREEZER	115/20	8 1	5.5		1.0	C&P								
16	1	CLEAN DISH TABLE							0.77	>" 4 · 4	/0"					
17		SOILED DISH TABLE						1/.	2" 1/2	<u>/ 1-1</u>	/2					
18	1	S/S WORK TABLE													A.D.A.	
19	1	S/S WORK TABLE—CROSS BRACING													ADA	
20	1	S/S WORK TABLE W/CASTERS														
21	1	SHEET PAN RACK								- ••						
22	1	DISH MACHINE	115		16.0		1.0	JB	1/2	2" 2						
23	1	SLICER	115	1	4.0		1/2	C&P								
24	_	SPARE NO.														
25	2	S/S WALL SHELF														

PLUMBING PIPING	AND SYMBOLS
SYMBOLS	DESCRIPTION
	THERMOSTATIC MIXING VALVE
	PRESSURE REGULATING VALVE
	DRAIN VALVE
—————————————————————————————————————	GAS COCK
G	90° ELBOW DOWN
0	90° ELBOW UP
	UNION
	SOLENOID VALVE
	P-TRAP
٦¦L	VENT THRU ROOF
——————————————————————————————————————	GATE VALVE
	CHECK VALVE
─ ─ 	PRESSURE REGULATING VALVE
	PRESS. & TEMP. RELIEF VALVE
——————————————————————————————————————	BALL VALVE
	THERMOMETER
——————————————————————————————————————	CLEANOUT
	POINT OF CONNECTION—NEW TO EXISTING
——— GW ————— GW ———	GREASE WASTE BELOW FLOOR OR GRADE
	SOIL OR WASTE BELOW FLOOR OR GRADE
	VENT PIPING
	COLD WATER PIPING
	HOT WATER PIPING
140°	140°F HOT WATER PIPING
	HOT WATER RETURN PIPING
G	NATURAL GAS
	VENT BELOW SLAB

GENERAL PLUMBING NOTES

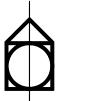
- 1. PROVIDE COMPLETE AND OPERATIONAL PLUMBING SYSTEMS INCLUDING ALL NECESSARY MATERIAL, LABOR, AND EQUIPMENT.
- 2. THE TERM "PROVIDE" SHALL MEAN FURNISH, INSTALL, CONNECT, AND MAKE OPERABLE.
- THE TERM "INDICATED" SHALL MEAN AS SHOWN IN CONTRACT DOCUMENTS (DRAWINGS, SPECIFICATIONS AND RELATED ATTACHMENTS).
- 4. THE TERM "REMOVE" SHALL MEAN TO DISCONNECT, REMOVE, AND LEGALLY DISPOSE OF, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- 5. ALL EQUIPMENT AND MATERIAL SHALL BE LABELED, LISTED, AND INSTALLED IN ACCORDANCE WITH
- MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

 6. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN
- ACCORDANCE WITH ALL STATE AND LOCAL GOVERNING AUTHORITIES.
- 7. ALL WORK SHALL BE PERFORMED BY LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL
- 8. ALL WORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WITH MAY APPLY.
- 9. THE CONTRACTOR MAY SUBSTITUTE EQUIPMENT OF ANOTHER MANUFACTURER IF IT IS EQUAL QUALITY AND RATING, SUBJECT TO THE OWNER'S AND ENGINEER'S REVIEW AND ACCEPTANCE.
- 10. THE CONTRACTOR SHALL VERIFY ALL MANUFACTURER'S CATALOG NUMBERS WITH MANUFACTURERS FOR CURRENT CONFIGURATIONS AND FUNCTIONS.
- 11. BEFORE SELECTING MATERIALS AND/OR EQUIPMENT AND PROCEEDING WITH THE WORK, INSPECT ALL AREAS TO INSURE SUITABILITY, FIT, CLEARANCES, AND INTERCONNECTIONS.
- 12. PLUMBING DRAWINGS, PLANS, AND DETAILS ARE DIAGRAMMATIC AND DO NOT SHOW ALL INTERFERENCES AND CONDITIONS VISIBLE AND/OR HIDDEN THAT MAY EXIST. THE CONTRACTOR MUST VISIT THE JOB SITE TO BECOME FAMILIAR WITH CONDITIONS AND ASSUME RESPONSIBILITY FOR CONDITIONS THEREOF, BEFORE BIDDING AND DURING THE CONDUCT OF WORK.
- 13. PROVIDE THE OWNER WITH ALL MANUFACTURER'S WARRANTIES FOR EQUIPMENT AND MATERIALS PROVIDED.
- 14. WATER, VENT AND OTHER SERVICE PIPING SHALL BE RUN AT THE CEILING OF THE PLAN ON WHICH IT IS SHOWN, EXCEPT AS OTHERWISE SHOWN.
- 15. REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATION AND MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT.

COMMUNITY COMMUNITY RENEWAL TEAM 555 Windsor St. Hartford, CT 06120

McKinney Shelter Renovation

> 207 Brainard Rd Hartford, CT 06114



LIFECARE DESIGN INC.

1429 Park St. Ste 201

Hartford Ct. 06106

architecture - planning - interior design

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Aztech Engineers, In

ECH ENGINEERS, INC.

Aztech Engineers, Inc. Phone (860)548-9987
901 Wethersfield Avenue Fax (860)549-2572
Hartford, Ct. 06114 www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



date
date

PLUMBING SCHEDULES,
NOTES, ABBREVIATIONS
AND SYMBOLS

as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
seal	sheet n

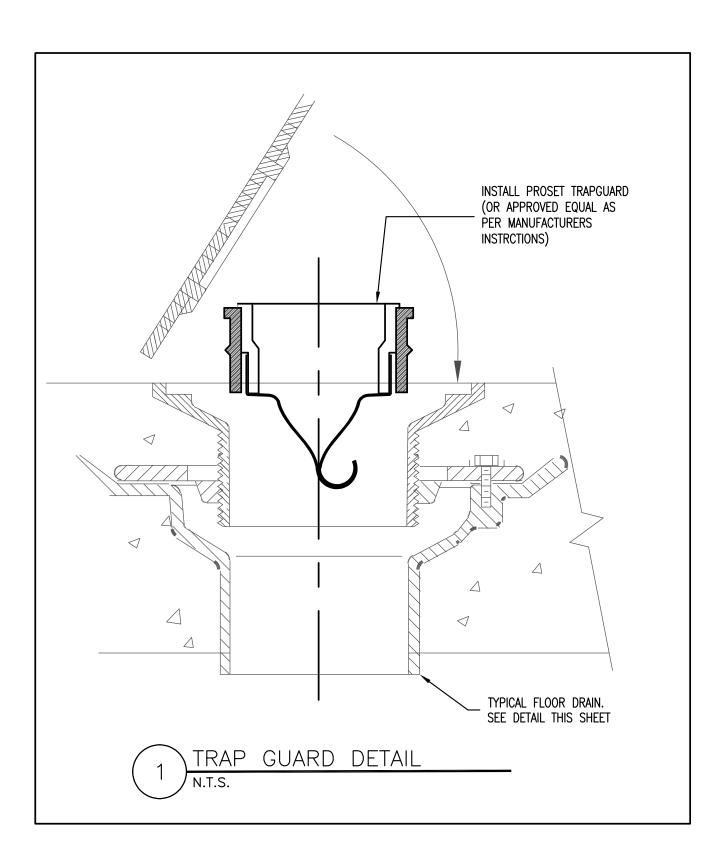
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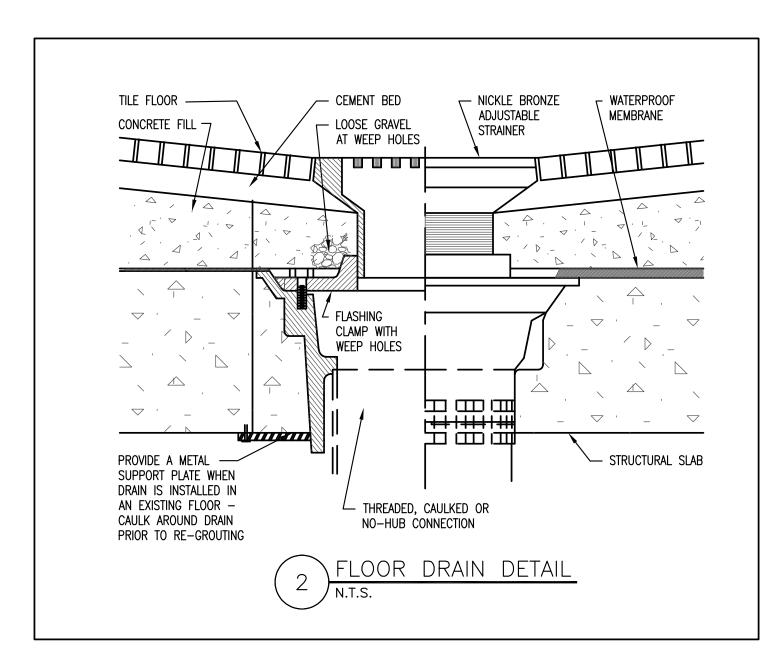
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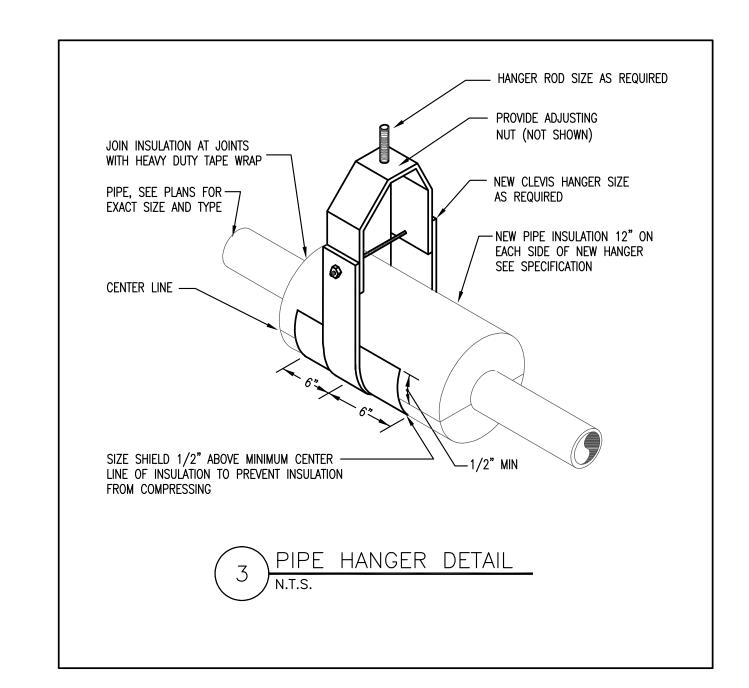
THIS DOCUMENT SHALL NOT BE MODIFIED IN ANYWAY BY ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A REGISTERED ARCHITECT. EVERY DRAWING SEALED AND SIGNED BY A REGISTERED ARCHITECT COULD BE MODIFIED ONLY BY A REGISTERED ARCHITECT AND THE NATURE OF SUCH MODIFICATION DESCRIBED SHALL BE FOLLOWED BY THE DATE OF MODIFICATION PLUS

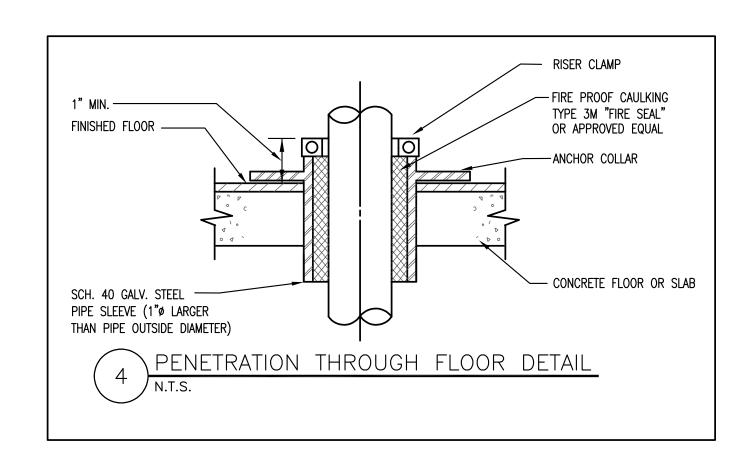
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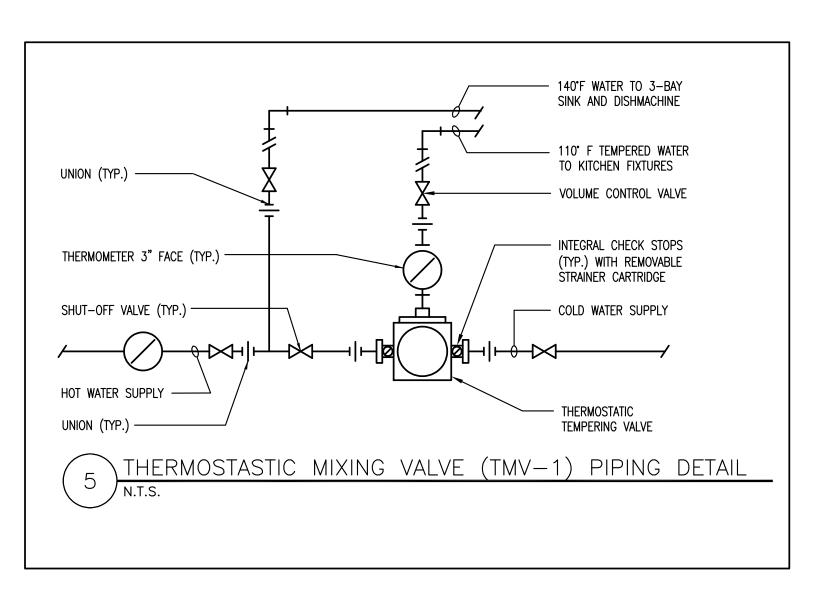
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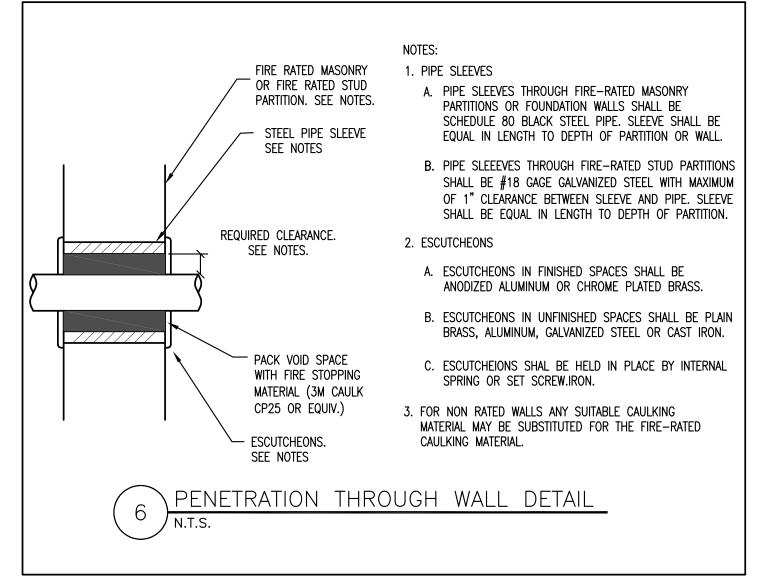


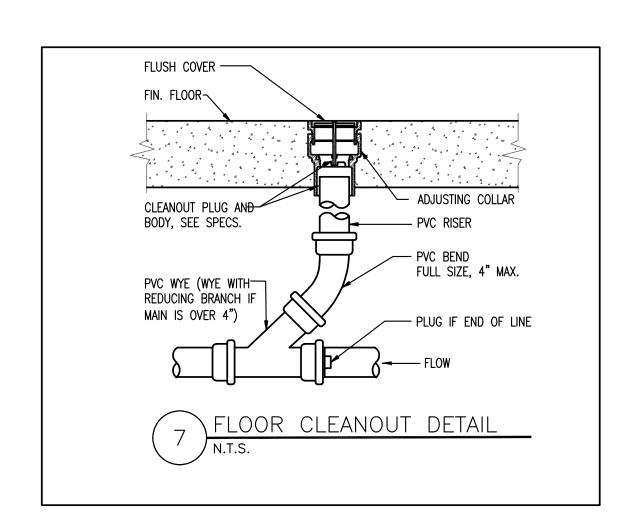


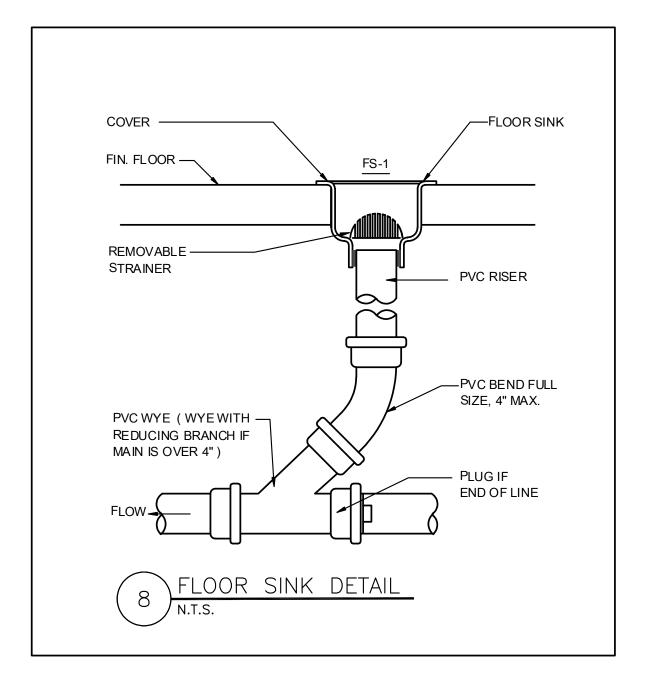


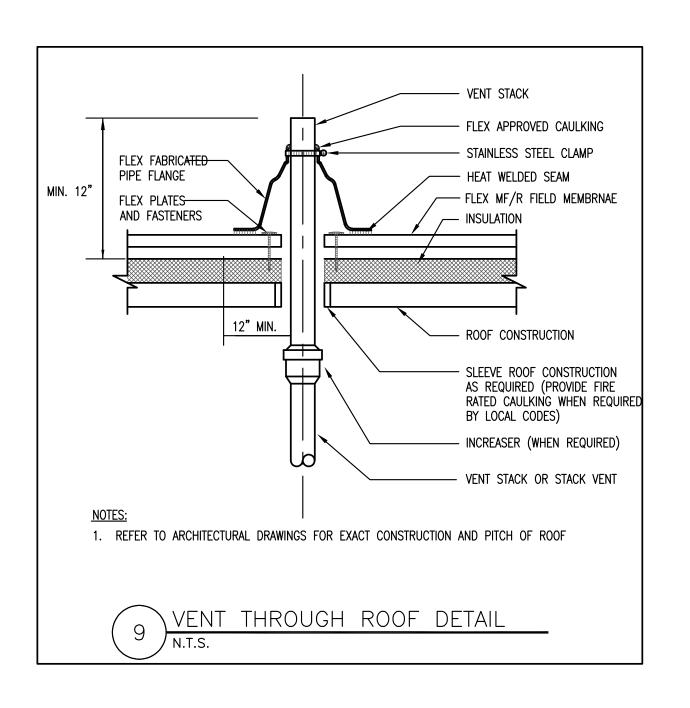














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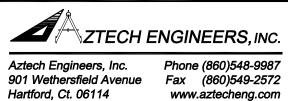


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1429 Park St. Ste 201

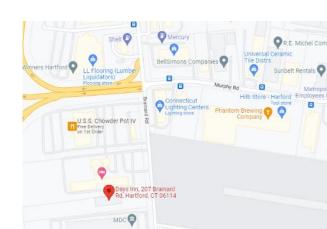
Hartford Ct. 06106

architecture - planning - interior design



Bill LaPoint, Structural Engineer

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



issue or revision	date

drawing title
PLUMBING
DETAILS

scale:	designer:
as indicated	DHA/PMC
project no.:	drawn by:
21570	RMS
date:	checked by:
5/20/2022	DHA/PMC
seal	sheet number
	D 4

sheet

20 of 21

PART 1 — GENERAL

1.1 SCOPE:

- A. ALL WORK SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT DOCUMENTS.
- B. ALL WORK SHALL COMPLY WITH (BUT NOT LIMITED TO) THE LATEST ACCEPTED EDITIONS OF THE FOLLOWING CODES:
 - INTERNATIONAL MECHANICAL CODE
 - INTERNATIONAL PLUMBING CODE NATIONAL ELECTRICAL CODE - SEE ELECTRICAL PLANS
 - 4. ALL LOCAL CODES.
- C. WORK SHALL COMPLY WITH (BUT NOT LIMITED TO) THE FOLLOWING STANDARDS
- AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).
- AMERICAN NATIONAL STANDARD INSTITUTE (ANSI).
- AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). UNDERWRITERS' LABORATORIES, INC. (UL).
- 6. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA).

-KITCHEN FIXTURES

- SUBCONTRACTOR SHALL OBTAIN AND BE FAMILIAR WITH ALL LOCAL CODES. ORDINANCES OR LOCAL REQUIREMENTS PERTAINING TO TYPE OF MATERIAL OR INSTALLATION OF ALL EQUIPMENT AND SYSTEMS INDICATED ON PLANS AND OR SPECIFIED HEREIN.
- CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND SYSTEMS INDICATED ON PLANS IN STRICT ACCORDANCE WITH ALL PERTAINING LOCAL, STATE, AND NATIONAL CODES AND STANDARDS AND AUTHORITIES HAVING JURISDICTION.

1.2 SUBMITTALS:

A. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ENGINEER, FOR REVIEW PRIOR TO PURCHASING, CATALOG CUT SHEETS, LITERATURE AND DESCRIPTIVE MATERIAL OF PRODUCTS AND MATERIALS TO BE UTILIZED ON THIS PROJECT INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

-PLUMBING FIXTURES -FAUCETS, TRIM, VALVES -CARRIERS, SUPPORTS, SUPPLIES AND TRAPS -PIPING AND PIPING IDENTIFICATION -VENT FLASHINGS -FLOOR SINKS -CLEANOUTS -FLOOR DRAINS

WHERE APPLICABLE, EQUIPMENT PERFORMANCE INFORMATION SUCH AS PUMP CURVES, ETC. SHALL BE SUBMITTED TO THE ENGINEER. SUBMITTALS SHALL BE MARKED TO REFLECT FIXTURE OR EQUIPMENT IDENTIFICATION NUMBER, ALL ACCESSORIES PROVIDED, ETC. FAILURE TO PROPERLY AND CLEARLY IDENTIFY SUBMISSION RELATIVE TO SPECIFICATIONS AND PLANS WILL RESULT IN RETURN FOR RESUBMISSION.

1.3 DESCRIPTION OF WORK:

-MIXING VALVES

- A. WORK OF THIS SECTION CONSISTS OF FURNISHING ALL PARTS, LABOR, MATERIALS, EQUIPMENT, APPLIANCES, SCAFFOLDING. ETC.. IN CONNECTION WITH THE COMPLETE INSTALLATION, READY FOR USE, OF ITEMS SPECIFIED HEREIN IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS AND GENERAL CONDITIONS.
- B. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OTHER TRADES TO AVOID INTERFERENCES.
- C. THIS CONTRACTOR SHALL STUDY THE EXISTING AND PROPOSED DRAWINGS OF SEWERS AND WATER, AND SHALL VISIT THE SITE AND MAKE A THOROUGH INSPECTION OF SITE BEFORE PREPARING HIS BID, AND SHALL BE RESPONSIBLE FOR ALL MEASUREMENTS AND ELEVATIONS AND ALL WORK PERTAINING TO THE
- D. THE PLUMBING WORK TO BE PERFORMED IS SHOWN ON THE DRAWINGS AND HEREINAFTER SPECIFIED. ALL WORK REQUIRED FOR A COMPLETE PLUMBING INSTALLATION, WHETHER OR NOT INDICATED ON THE DRAWINGS OR MENTIONED IN THESE SPECIFICATIONS, SHALL BE PART OF THIS CONTRACT. THIS CONTRACTOR SHALL MAKE ALL FINAL PLUMBING SERVICE CONNECTIONS TO SITE WORK UTILITIES AT 5'-0" OUTSIDE THE BUILDING.
- E. THIS CONTRACTOR SHALL SEE THAT ALL HIS EQUIPMENT. SUCH AS VALVES OR ANY OTHER APPLIANCE NECESSARY TO BE REACHED FROM TIME TO TIME FOR OPERATION AND MAINTENANCE ARE MADE EASILY ACCESSIBLE.
- F. THIS CONTRACTOR SHALL MAKE PROVISION WITH THE ELECTRICAL CONTRACTOR FOR ANY TEMPORARY LIGHT WHICH HE MAY REQUIRE FOR HIS WORK.

1.4 WORK INCLUDED:

- THE WORK SPECIFIED UNDER THIS SECTION OF THE SPECIFICATIONS INCLUDES, BUT IS NOT LIMITED, TO:
- A. FURNISH AND/OR INSTALL PLUMBING FIXTURES WHERE SHOWN ON THE DRAWINGS.
- B. INSTALLATION OF THE NEW SOIL, WASTE, VENT, AND DRAIN PIPING AS SHOWN ON DRAWINGS TO POINT
- C. COMPLETE INSTALLATION OF ALL COLD WATER, HOT WATER, AND SANITARY PIPING IN THE BUILDING.
- D. INSULATE ALL HOT WATER PIPING AS INDICATED IN THIS SPECIFICATION.
- E. FURNISH AND INSTALL FAUCETS, SUPPLY PIPES AND TRAPS FOR ALL PLUMBING FIXTURES. EXPOSED PIPES AND TRAPS TO BE METAL-CHROME PLATED.
- F. FURNISH AND INSTALL ALL HOSE BIBBS WITH VACUUM BREAKERS.
- G. FURNISH AND INSTALL ALL FLOOR DRAINS AND FLOOR SINKS AS SHOWN ON PLANS.
- H. FURNISH AND INSTALL ALL PLUMBING CONNECTIONS IN CONJUNCTION WITH OTHER EQUIPMENT SUPPLIERS.
- I. FURNISH AND INSTALL ALL PLUMBING IDENTIFICATION AS PER ANSI A13.1-2007 (TYPICAL)

1.5 REGULATIONS AND PERMITS:

A. PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS FOR CONSTRUCTION.

1.6 ACCEPTANCE:

A. ALL WORK FURNISHED UNDER THIS SECTION OF THE SPECIFICATIONS SHALL BE THOROUGHLY CLEANED, READY FOR USE OF THE OWNER.

1.7 GUARANTEE:

- THE SUBCONTRACTOR SHALL GUARANTEE AND SERVICE ALL WORKMANSHIP AND MATERIAL TO BE AS REPRESENTED BY HIM AND SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO OWNER ANY PART THEREOF WHICH MAY BECOME DEFECTIVE WITHIN THE PERIOD OF ONE (1) YEAR AFTER DATE OF FINAL ACCEPTANCE BY ARCHITECT, ORDINARY WEAR AND TEAR EXCEPTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR AND PAY FOR ANY DAMAGES CAUSED BY OR RESULTING FROM DEFECTS IN HIS WORK.

THIS SUBCONTRACTOR SHALL KEEP THE PREMISES FREE OF DEBRIS AND UNUSABLE MATERIALS RESULTING FROM HIS WORK, AND IMMEDIATELY UPON COMPLETION OF HIS WORK HE SHALL REMOVE SUCH DEBRIS AND MATERIAL FROM THE OWNER'S PROPERTY AND SHALL LEAVE ALL FLOORS BROOM CLEAN IN AREAS AFFECTED

PART 2 - PRODUCTS

2.1 MATERIAL SPECIFIED:

THE MATERIAL SPECIFIED SHALL BE REGARDED AS STANDARD. OTHER BRAND OR MAKE OF MATERIAL WILL BE ACCEPTABLE WITH WRITTEN PERMISSION OF ARCHITECT AND RECOGNIZED AS EQUAL TO THAT SPECIFIED.

2.2 SEWER, WASTE AND VENT PIPING:

- A. PIPE AND FITTINGS SHALL BE MARKED TO SHOW COMPLIANCE WITH THE REQUIRED STANDARDS. IN ADDITION, P.V.C. PIPE AND FITTINGS SHALL BEAR MARKINGS INDICATING THE TYPE OF COMPOUND USED IN THEIR PRODUCTION.
- B. ALL JUNCTIONS SHALL BE MADE WITH COMBINATION 'Y' AND 1/8" BEND FITTINGS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 1. ALL DRAIN. WASTE AND VENT LINES BELOW GRADE AND IN WALLS SHALL BE OF CAST IRON SOIL PIPE AND FITTINGS, AND SHALL CONFORM TO THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A-888 OR ASTM-74 FOR ALL PIPE AND FITTINGS. JOINTS FOR HUBLESS PIPE AND FITTINGS SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND STATE AND LOCAL CODE REQUIREMENTS. HUBLESS COUPLING GASKETS SHALL CONFORM TO ASTM STANDARD C-564.
- 2. ALL DRAIN, WASTE AND VENT LINES ABOVE GRADE AND BUILDING SEWER FROM THE BUILDING DRAIN(S) TO POINT OF CONNECTION AT CITY SEWER SHALL BE PVC ABS TYPE WITH SOLVENT WELD JOINTS.

2.3 WATER SYSTEMS:

- A. HOT AND COLD WATER PIPE INSIDE BUILDING ABOVE SLAB/GRADE SHALL BE TYPE 'L' COPPER PIPE. WITH WROUGHT COPPER FITTINGS. DOMESTIC WATER PIPING FOR APARTMENTS SHALL BE CROSS POLYETHYLENE (PEX) TYPE TUBING WHERE ALLOWABLE BY CODE.
- B. HOT AND COLD WATER PIPE BURIED IN GRADE AND BELOW SLAB SHALL BE TYPE 'K' COPPER, WROUGHT
- C. INSULATION: ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED WITH NOMINAL 1" TYPE PIPE INSULATION WITH ALL SERVICE PVC JACKET.
 - 1. APPLICATION: ALL JOINTS AND SEAMS SHALL HAVE AT LEAST 1-1/2 INCH LAP USING EITHER A JOINT TAPE OF THE SAME MATERIAL AS THE JACKET OR AN EXTENSION OF THE JACKET ITSELF. EITHER OF WHICH IS SECURED BY A PRESSURE SENSITIVE CEMENT OR BONDING ADHESIVE.
 - FITTING COVER INSULATION SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. SWEAT FITTINGS SHALL BE INSULATED WITH MITER-CUT PIECES OF PIPE INSULATION THE SAME SIZE AS ON ADJACENT PIPING. SCREWED FITTINGS SHALL BE INSULATED WITH SLEEVED FITTING COVERS FABRICATED FROM MITER-CUT PIECES OF PIPE INSULATION ACCORDING TO THE MANUFACTURER'S SLEEVING SIZE RECOMMENDATIONS AND SHALL BE OVERLAPPED AND SEALED TO THE ADJACENT PIPE INSULATION. ALL JOINTS AND MITER-CUT PIECES ARE TO BE SEALED WITH ADHESIVE.
- E. GATE VALVES: ALL VALVES SHALL BE OF ALL BRONZE CONSTRUCTION WITH SOLDER END CONNECTIONS, 125 LB. W.P. TO MEET AWWA SPECIFICATIONS.
- F. PROVIDE PRE-ENGINEERED FACTORY FABRICATED WATER HAMMER ARRESTORS CERTIFIED APPROVED BY P.D.I. STANDARD WH-201 AND CONFORMING TO ANSI A112-26-1. INSTALL ARRESTORS IN STRICT ACCORDANCE WITH P.D.I. WH-201, MANUFACTURER'S RECOMMENDATIONS, AND LOCAL CODES. AIR CHAMBERS ARE NOT ACCEPTABLE.

2.4 BACKFLOW AND BACK-SIPHONAGE PREVENTION:

A. THIS SUBCONTRACTOR SHALL FURNISH AND INSTALL BACKFLOW AND BACK-SIPHONAGE PREVENTION DEVICES AS REQUIRED BY LOCAL WATER PURVEYORS, PUBLIC HEALTH OFFICERS, AND PLUMBING OFFICIALS HAVING JURISDICTION.

2.5 FLOOR DRAINS:

- A. AS SHOWN ON PLUMBING SCHEDULE.
- B. DRAINS SHALL BE OF SIZE AS INDICATED ON DRAWINGS."P" TRAPS SHALL BE INSTALLED WITH DRAINS NOT HAVING INTEGRAL TRAPS.

2.6 PLUMBING FIXTURES:

- A. CONNECTIONS SHALL BE MADE IN A NEAT. FINISHED AND UNIFORM MANNER MAKING THE CONNECTIONS TO ALL FIXTURES OF EACH CLASS OF EQUAL HEIGHT, PLUMB AND RIGHT ANGLES TO THE WALLS. ALL ROUGHING SHALL BE ACCURATELY LAID OUT. EXPOSED METAL IN CONJUNCTION WITH PLUMBING FIXTURES SHALL BE CHROME-PLATED BRASS.
- B. LOCATION AND SETTING OF ALL PLUMBING FIXTURES SHALL BE TAKEN FROM ARCHITECT'S DIMENSIONAL

PART 3 - EXECUTION

3.1 GENERAL:

A. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

3.2 PROTECTION:

- A. ALL INTERIOR EXCAVATION REQUIRED IN CONNECTION WITH PLUMBING WORK SHALL BE DONE BY THIS CONTRACTOR. EXCAVATION SHALL BE MADE IN A MANNER TO PROVIDE A UNIFORM BEARING FOR ALL PIPES AND EQUIPMENT.
- B. ALL WORK MUST BE INSPECTED AND APPROVED BEFORE EXCAVATIONS SHALL BE BACK FILLED AND COMPACTLY TAMPED BY THIS CONTRACTOR.

3.3 SEWERS, WASTES, AND VENTS:

- A. SEWERS, VERTICAL PLUMBING STACKS AND VENT SYSTEMS ARE SHOWN DIAGRAMMATICALLY ON THE CONTRACT DOCUMENTS FOR NEW WORK TO BE INSTALLED.
- B. THE MINIMUM SLOPES FOR DRAINAGE PIPING SHALL NOT BE LESS THAN 1/8" FALL PER FOOT FOR ALL PIPING 3" DIAMETER AND LARGER AND NOT LESS THAN 1/4" FALL PER FOOT FOR 2" DIAMETER AND LESS, UNLESS OTHERWISE NOTED ON DRAWINGS.
- C. PLUMBING CONTRACTOR TO EXTEND ALL SANITARY DRAIN LINES 5'-0" FROM BUILDINGS UNLESS OTHERWISE INDICATED, AND SHALL MAKE ALL FINAL PLUMBING SERVICE CONNECTIONS TO SITE WORK UTILITIES.

3.4 SLEEVES, HANGERS, ETC.:

A. HANGERS AND SUPPORTS:

PVC PIPING

1. PROVIDE ALL NECESSARY HANGERS FOR SUPPORT OF THE WORK. PIPING SHALL BE SUPPORTED ON SOLID, ADJUSTABLE SWIVEL, MALLEABLE IRON HANGER RINGS. IN PLACES WHERE IT CAN BE SHOWN THAT SUCH IS NOT THE BEST PRACTICE, SPLIT RINGS WILL BE ALLOWED. ALL COPPER PIPING SHALL BE SUPPORTED ON COPPER HANGER RINGS. HANGER RINGS SHALL BE THREADED TO TAKE STANDARD HANGER RODS NOT SMALLER THAN THE FOLLOWING:

COPPER WATER TUBE ROD SIZE (DIA. INCHES) 2 INCH AND SMALLER 2-1/2 INCH THROUGH 3 INCH CAST IRON SOIL PIPE ROD SIZE (DIA. INCHES) 2 INCH 3 INCH

SPACING HANGERS ON ALL PIPE LINES SHALL BE PLACED SO THAT NO EXTREME PIPE DEFLECTION WILL RESULT AND NO UNDUE STRAIN WILL BE IMPOSED ON ANY JOINTS OR FITTINGS. HANGERS SHALL BE SPACED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND IN ACCORDANCE WITH 2015 IPC TABLE 308.5:

4 FEET (AND AT EACH HUB)

MAX. DISTANCE BETWEEN HANGERS COPPER WATER TUBE 1/2 THROUGH 1-1/4 INCH 6 FEET 1[°] 1/2" AND LARGER 10 FEET

PROVIDE ALL PIPE SUPPORTS AT LOCATIONS RECOMMENDED BY RESPECTIVE PIPE

MANUFACTURER.

STEEL OR CAST IRON PIPE TWO PIPE SIZES LARGER THAN THE PENETRATING PIPE.

B. PIPING PENETRATING FOUNDATION WALLS SHALL BE SLEEVED WITH SCHEDULE 40 GALVANIZED

3.5 TESTS OF PLUMBING:

- A. EQUIPMENT, MATERIAL, POWER, AND LABOR NECESSARY FOR INSPECTION AND TESTS SHALL BE FURNISHED BY THIS CONTRACTOR. TESTS SHALL BE IN ACCORDANCE WITH 2015 IPC SECTION 312 AND AS PER THE FOLLOWING. NO AIR TESTING OF PLASTIC PIPE WILL BE ALLOWED.
- B. DRAINAGE SYSTEM: TESTS OF ALL DRAINAGE AND VENT LINES SHALL BE IN ACCORDANCE WITH LOCAL PLUMBING DEPT. REQUIREMENTS.
- C. WATER SUPPLY SYSTEM: ALL WATER PIPING INSTALLED BY THIS CONTRACTOR AND INCLUDING FIXTURES AND EQUIPMENT SHALL BE TESTED UNDER A HYDROSTATIC PRESSURE OF NOT LESS THAN THE WORKING PRESSURE OF THE SYSTEM FOR AT LEAST FOUR (4) HOURS WITHOUT LEAKS. ANY DEFECTIVE PIPING SHALL BE REPLACED BY NEW MATERIAL AND THE TEST REPÈATED. NO CAULKING SHALL BE PERMITTED.
- D. SANITIZING: WATER PIPING SHALL BE STERILIZED WITH CHLORINE SOLUTION IN ACCORDANCE WITH THE LOCAL PLUMBING CODE.

COMMUNITY RENEWAL TEAM 555 Windsor St.

Hartford, CT 06120

McKinney Shelter Renovation

207 Brainard Rd Hartford, CT 06114



LIFECARE DESIGN INC. 1429 Park St. Ste 201 Hartford Ct. 06106 architecture - planning - interior design

A ZTECH E	ENGINEERS, INC.
Aztech Engineers, Inc.	Phone (860)548-9987
901 Wethersfield Avenue	Fax (860)549-2572
Hartford, Ct. 06114	www.aztecheng.com

Bill LaPoint, Structural Engineer 1379 Main St. East Hartford, CT 06108



key plan	
issue or revision	date

scale:	designer:
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21570	RMS
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21 of 21