

PLUMBING GENERAL NOTES

1. GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS.
2. DRAWINGS ARE DIAGRAMMATIC: DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD. COORDINATE ROUTING AND ELEVATION PRIOR TO PERFORM CONSTRUCTION.
3. DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL.
4. DETERMINE EXACT LOCATIONS OF EXISTING UTILITIES IN FIELD, WHETHER OR NOT SHOWN ON DRAWINGS. EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM WORK OF THIS SECTION.
5. ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE
1. INTERNATIONAL PLUMBING RESIDENTIAL 2017 AND AMENDMENTS PROVIDED BY DISTRICT OF COLUMBIA DESIGN REQUIREMENTS.
2. ALL OTHER APPLICABLE NATIONAL AND LOCAL CODES.
6. ANY INTERFERENCE DETERMINED BY THE COORDINATION AND NOT WORKED OUT SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND ARCHITECT/ENGINEER OF RECORD, AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK.
7. INSTALLATION OF EQUIPMENT AND MATERIALS SHALL ADHERE TO MANUFACTURERS' RECOMMENDATIONS, INSTRUCTIONS AND APPLICABLE CODE.
8. PROVIDE SHUTOFF VALVES ON ALL BRANCH PIPING AND ON ALL SUPPLIES TO INDIVIDUAL FIXTURES AND EQUIPMENT, INCLUDING HOSE BIBS AND WALL HYDRANTS. PROVIDE BALL VALVES ON ALL WATER MAIN BRANCHES IN CORRIDORS AND WHERE INDICATED ON DRAWINGS. PROVIDE 2" ROUND STAINLESS STEEL VALVE TAGS WITH STAINLESS STEEL BEAD CHAIN AND COORDINATED VALVE SCHEDULE.
9. PITCH GRAVITY PIPING IN DIRECTION OF FLOW.
10. DOMESTIC WATER: SHALL BE TYPE L HARD DRAWN COPPER PIPE WITH 125 PSI WROUGHT COPPER SWEAT FITTINGS AND ALL JOINT SOLDERED OR SILVER SOLDER. BELOW GRADE SHALL BE TYPE K. HOT WATER SHALL BE INSULATED WITH MIN R-3. NO SHARK BITE OR "PUSH" FITTINGS. ALL PIPING IN OR WITHIN 12" OF PERIMETER WALLS SHALL BE INSULATED WITH R-3.
11. VENT, SANITARY AND PUMP DISCHARGE: SHALL BE SCHEDULE 40 PVC PLASTIC PIPE AND PVC DMV FITTINGS.
12. SHOWER SHALL BE PROVIDE WITH BALANCE PRESSURE VALVES AMERICAN STANDARD 9046.502 OR EQUIVALENT EQUAL CONFORM TO ASSE1070 OR ASME A112.18.1/ CSA B125.1.

MECHANICAL GENERAL NOTES

1. ALL WORK SHOWN ON THESE DOCUMENTS IS NEW UNLESS SPECIFICALLY IDENTIFIED AS EXISTING OR PROVIDED BY OTHERS.
2. INSTALL ALL WORK ON THIS PROJECT IN ACCORDANCE WITH THE 2017 DISTRICT OF COLUMBIA MECHANICAL CODE AND DCMR 2017.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO DEPICT THE GENERAL LOCATION OF HVAC SYSTEM COMPONENTS.
4. CONNECT ALL MECHANICAL EQUIPMENT TO DUCTWORK USING RUBBERIZED-CANVAS FLEXIBLE CONNECTIONS. INSTALL ALL MECHANICAL EQUIPMENT ON VIBRATION ISOLATION DEVICES.
5. FABRICATE DUCTWORK FROM GALVANIZED SHEET STEEL WITH G90 COATING IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS AND THE PRESSURE CLASSES 2.0 AND SEAL CLASS A.
6. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. REFRIGERANT PIPES SHALL BE INSULATED WITH MIN R-3 CELLULAR GLASS.
7. INSTALL DUCTWORK TIGHT TO THE UNDERSIDE OF THE BUILDING STRUCTURE. ADJUST THE DUCT ELEVATION AS REQUIRED TO MAINTAIN DUCT TIGHT TO BOTTOM OF STRUCTURE WHERE STRUCTURE ELEVATIONS CHANGE. LOCATE DUCTWORK BETWEEN THE JOISTS WHERE POSSIBLE.
8. PROVIDE ALL NECESSARY TRANSITIONS IN DUCTWORK AND PIPING FOR CONNECTION TO EQUIPMENT AND ACCESSORIES. REDUCE PIPING AND DUCTWORK SIZES ONLY AT THE CONNECTION POINT TO EQUIPMENT.
9. SUSPEND DUCTWORK FROM THE BUILDING STRUCTURE IN ACCORDANCE WITH THE SMACNA DUCT CONSTRUCTION STANDARDS. SECURELY ATTACH DUCTWORK SUPPORTS TO THE BUILDING STRUCTURE.
10. ELBOWS CONSTRUCTED USING A SHARP 90-DEGREE ANGLE ON THE INSIDE OF THE ELBOW AND A RADIUS BEND ON THE OUTSIDE OF THE ELBOW (HARD RADIUS HEEL OR "SLED-BOOT" FITTING) WILL NOT BE ACCEPTED.
11. REFRIGERANT LINE SET INSTALLED EXPOSED TO WEATHER SHALL BE SEALED AND PROVIDED WITH ALUMINUM JACKET OR A PROTECTIVE WEATHER BARRIER.
12. ALL UNUSED AND USED OPENINGS SHALL BE SEALED AIRTIGHT.
13. ALL JOINTS AND SEAMS OF AIR DUCT SHALL BE AIR TIGHT SEALED.

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	PIPE DIAMETER (INCH.)				REMARKS
		C.W.	H.W.	DRAIN	VENT	
P-1	WATER CLOSET	1/2	-	3	1-1/2	SELECT BY ARCHITECT
P-2	LAVATORY	1/2	1/2	1-1/2	1	SELECT BY ARCHITECT
P-3	SHOWER	1/2	1/2	1-1/2	1	SELECT BY ARCHITECT: SEE SPECIFICATION NOTE
S-1	KITCHEN SINK	1/2	1/2	2	1	SELECT BY ARCHITECT: PROVIDE 1/2 HP; 120V 1PH GARBAGE DISPOSAL
FD	FLOOR DRAIN	-	-	2	-	SELECT BY ARCHITECT
WB	WASHER BOX	1/2	-	2	1	SELECT BY ARCHITECT
DW	DISH WASHER	-	1/2	-	-	SELECT BY ARCHITECT: CONNECT FLEX DRAIN TO DISPOSAL
REF	REFRIGERATOR	1/4	-	-	-	SELECT BY ARCHITECT: PROVIDE WITH BACK FLOW PREVENTOR
OSD	OPEN SITE DRAIN	-	-	1-1/2"	-	

EQUIPMENT SCHEDULE

MARK	DESCRIPTION
WH-1	50 GAL. ELEC. WATER HEATER (REPLACEMENT)
CU-1	CONDENSOR/HEAT PUMP (REPLACEMENT)
FURN-1	ELECTRIC FURNACE (REPLACEMENT)
EF-1	FAN/LIGHT EXHAUST FAN

BASIS OF DESIGN: ELECTRIC FURNACE, WATER HEATER AND STOVE. GAS ALTERNATE AT OWNER DESCREATION, COORDINATION AND SELECTION OF EQUIPMENT BY MECHANICAL CONTRACTOR

A CUSTOM DESIGN

by A. Alphanso James



• Bowie Md. • 301.485.9329 •

3220 Brothers Pl. SE  
Washington DC. 20032

- 1.) Builder or contractor must verify all dimensions prior to proceeding with construction.  
2.) Contractor must verify compliance with all local building codes in the jurisdiction where construction is to take place.

Square Footage

FIRST FLOOR	1,935
SECOND FLOOR	1,890
TOTAL	

JOB NO.

DATE

10/16/2022

Board of Zoning Adjustment  
West of Columbia  
CASE NO. 21239  
EXHIBIT NO. 5

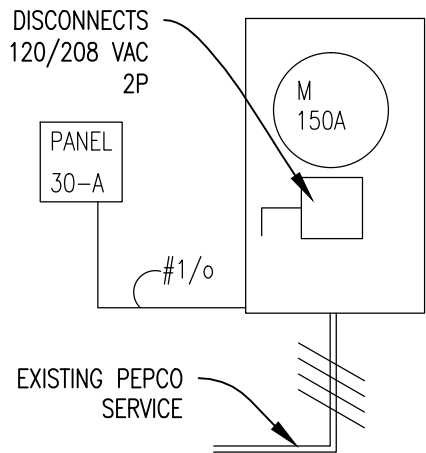
AAJ

MP



ELECTRICAL PANEL #A SCHEDULE				
PANEL 150 AMP A 208/120v SINGLE PHASE 3 WIRE				
CIRC NO.	CIRC. POLE	BREAKER TRIP	WIRE SIZE	ITEM SERVE
1	1	15	#14	LIGHTS, OUTLETS – LIVING
2	1	15	#14	LIGHTS, CORRIDOR, DINING, KITCHEN (Hood)
3	1	15	#14	KITCHEN COUNTER – APPLIANCES
4	1	20	#12	GARBAGE DISPOSAL
5	1	20	#12	DISHWASHER
6	2	30	#10	OUTLETS – KITCHEN ISLAND & REFRIG.
7,8	2	50	#6	RANGE/STOVE
9,10	1	20	#12	OVEN
11	1	15	#14	POWDER RM, OFFICE/DEN
12	1	15	#14	BEDROOM
13	2	30	#10	CORRIDOR, LAUNDRY, BATH
14	1	15	#14	BEDROOM
15	2	30	#10	MASTER BEDROOM
16,17	2	50	#6	DRYER
18	2	20	#12	MECHANICAL UTILITY
19,20	2	50	#6	FURNACE
21,22	2	30	#10	WATER HEATER
23,24	2	30	#10	CONDENSING UNIT
25	1	15	#14	SMOKE DETECTORS
26				SPARE
27				SPARE
28				SPARE

CONTRACTOR TO VERIFY EQUIPMENT SPECIFICATIONS PRIOR RUNNING ELECTRICAL FEEDS



POWER RISER DIAGRAM

ELECTRICAL FIXTURE SCHEDULE

USE LIGHTOLIER FIXTURES OR EQUAL.  
X- EXISTING FIXTURE AND WIRING  
– OWNER PROVIDED FIXTURE INSTALLED BYCONTRACTOR

1- 150 W 6 3/4” DIA. WHITE STEP BAFFLE LIGHTOLIER 1105WH WITH 1102 PI FRAME IN KIT AND 150 W PAR 38 LAMP.  
\* USE 1900 PI FRAME-IN EXISTINGCEILINGS.

1A USE IC FRAME-IN WHERE IN CONTACT WITHINSULATION

– USE FRAME-IN KIT FOR SLOPEDCEILING

2- 75W 3 3/4” DIA. WHITE STEP BAFFLE LIGHTOLIER 2005 WH WITH 1102 PI FRAME-IN KIT AND 75 W PAR 38 LAMP.  
\* USE 1900 PI FRAME-IN WHERE IN CONTACT WITHINSULATION  
3- 150W 6 3/4” DIA. WHITE WALL WASHER LIGHTOLIER 1135 WH WITH 1102 PI FRAME-IN KIT AND 150 W PAR 38 LAMP.  
\* USE 1900 PI FRAME-IN  
EXISTINGCEILINGS. USE IC FRAME-IN WHERE IN CONTACT WITHINSULATION.

3A- USE FRAME-IN KIT FOR SLOPEDCEILING

4- 60W 6 3/4” DIA. WHITE RECESSED LIGHTOLIER 1178 SH WITH 1002 PI FRAME-IN KIT AND 75W PAR 38 LAMP.  
\* USE 1900 PI FRAME IN EXISTINGCEILING.

\* USE IC FRAME-IN WHERE IN CONTACT WITHINSULATION.

5-SURFACE MOUNTED UTILITY LIGHT. SEAGULL 5328 WHITE WITH 2-60W BULBS

6- 75 W 6 3/4” DIA. WHITE OPALEX LIGHTOLIER 1177SH WITH 1102 PI FRAME-IN KIT AND 60W A19 LAMP

7- SEAGULL 8327 WHITE SURFACE MOUNT WITH 100WBULB.

UNDERCABINET LIGHTS SEAGULL 4977-15 24” SLIMLINE FLOURESCENT  
\*ALTERNATE 12 VOLT UNDERCABINET LIGHTS SEAGULL 9485-12 WHITE OR 9485-12 BLACK WITH 18W XENON LAMPS AND TRANSFORMER.

BATH FANS- NUTONE 696N. USE BROAN SOLITAIR ULTRA

A CUSTOM DESIGN

by A. Alphonso James



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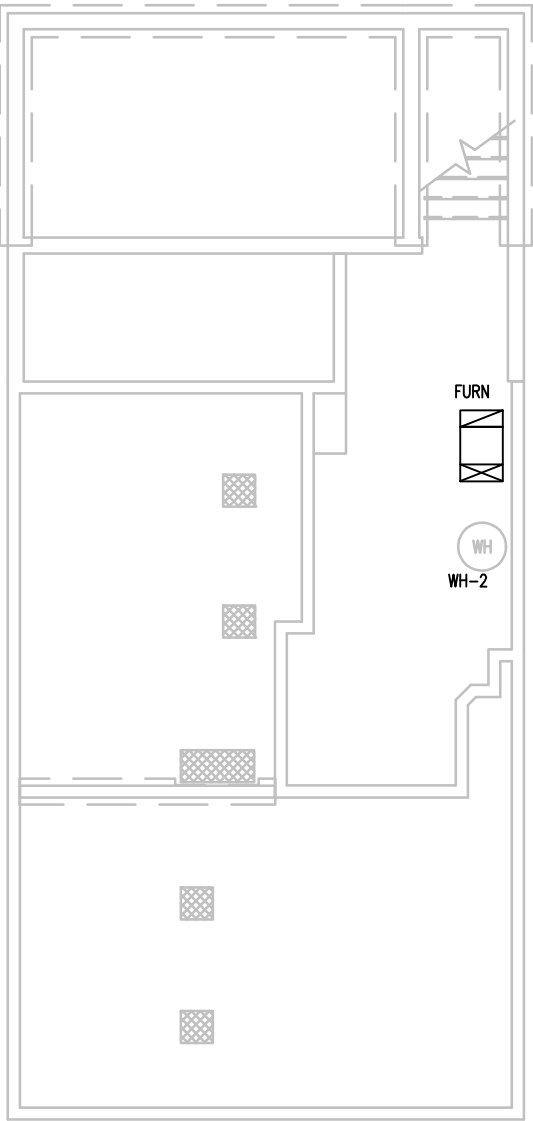
3220 Brothers Pl. SE  
Washington DC. 20032

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2.) Contractor must verify compliance with all local building codes in the jurisdiction where construction is to take place.

Square Footage

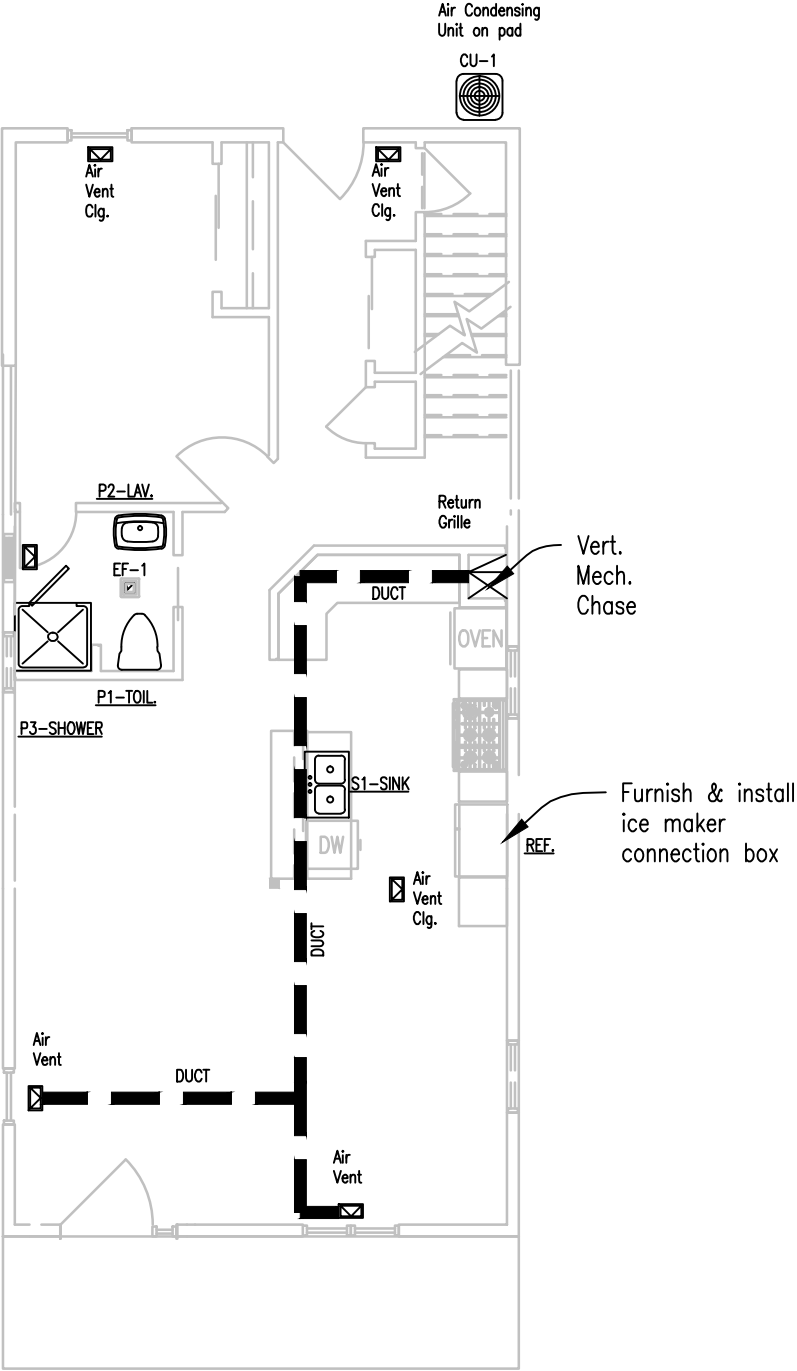
FIRST FLOOR	1,935
SECOND FLOOR	1,890
TOTAL	

JOB NO.	DATE
	10/16/2022
DRAWN	SHEET
AAJ	E2

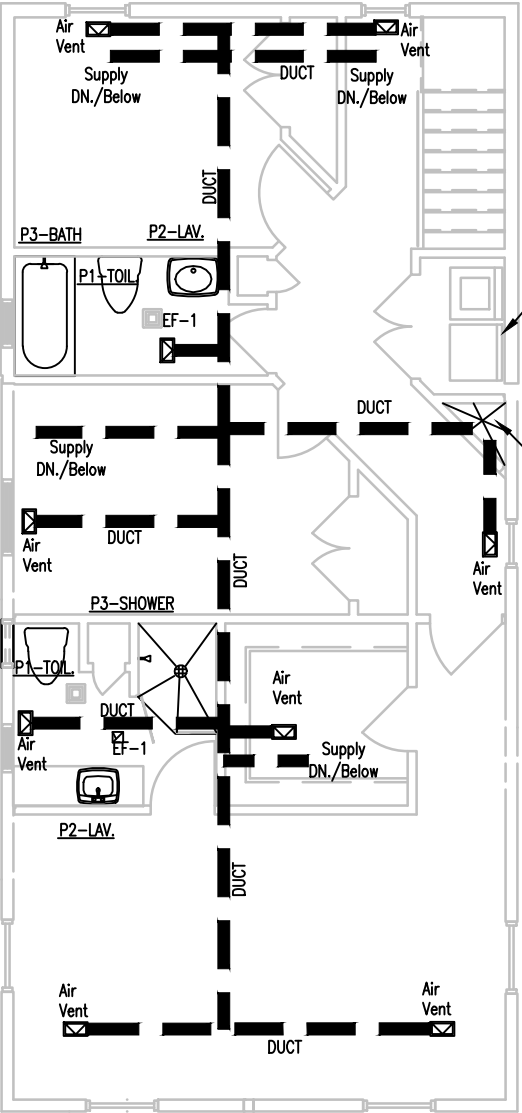


CELLAR LEVEL MECHANICAL  
SCALE: 1/8"=1'-0"

NOTE:  
MECHANICAL CONTRACTOR IS  
RESPONSIBLE FOR UNIT &  
DUCTS SIZE AND BALANCING  
SYSTEM FOR EVEN EFFICIENT  
HEATING AND COOLING



FIRST FLOOR MECHANICAL  
SCALE: 1/8"=1'-0"



SECOND FLOOR MECHANICAL  
SCALE: 1/8"=1'-0"

Furnish & install:  
\* washer connection  
box.  
\* dryer exhaust &  
associated plumb.  
  
Vert. Mech. Chase

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	10/18/2022
DRAWN	SHEET
AAJ	M1

# INTERIOR REMODEL & ADDITION

## 3220 BROTHERS PLACE SE.



SITE LOCATION MAP



### CODE APPLICATION

#### CODE APPLICATION SUMMARY

PROJECT ADDRESS: 3220 Brothers Pl. SE.  
Washington, DC.

SQUARE: 5990  
LOT: 0012  
AREA (SF): 2625  
USE GROUP: R-2  
CONST. TYPE: V-B

#### FIRE SUPPRESSION

FIRE SPRINKLER SYSTEM: N  
ALARM SYSTEM: Y  
SMOKE ALARMS: Y  
CARBON MONOXIDE ALARMS: Y  
STANDPIPE: Y  
FIRE EXTINGUISHER: Y  
EGRESS WIDTH: 36" 810.3 Occup. <50  
EGRESS WIDTH: 5.7 SF Min. [24"min.H, 20"min.W]  
44" Sill HT

	EXISTING	PROPOSED
OCCUPANCY/USE:	SINGLE-FAMILY	SINGLE-FAMILY
LIVING AREA:	1,340 SF	1,840 SF
NO. STORIES	2	2
BEDROOMS	3	4
BATHROOMS	1	3

### SCOPE OF WORK

1. ADDITION AT REAR OF RESIDENCE
2. FIRST & SECOND FLOOR REMODEL
3. CONSTRUCTION OF INTERIOR WOOD FRAMED GYPSUM BOARD PARTITIONS, DOORS, HARDWARE
4. INTERIOR FINISH (MILLWORK AND FLOORING).
5. REPLACEMENT OF MECHANICAL HVAC,
6. CONSTRUCTION COST ESTIMATE: \$62,000.

All Information and directives specified on documents for application comply with the following requirements including:

2017 District of Columbia Building Code  
2015 International Building Code  
2017 District of Columbia Energy Conservation Code  
2012 ICC Energy Conservation Code  
2017 District of Columbia Green Construction Code  
2012 ICC Green Construction Code  
2017 DC Construction Codes (DC Amendments & Associated ICC Model Codes)  
2012 ICC Residential Code for One- and Two-Family Dwellings  
2013 District of Columbia Property Maintenance Code  
2012 ICC Property Maintenance Code  
2013 District of Columbia Fire Code  
2012 ICC Fire Code  
2013 District of Columbia Mechanical Code  
2012 ICC Mechanical Code  
2013 District of Columbia Plumbing  
2012 ICC Plumbing Code  
2013 DCMR Title 12D DC Electrical Code  
2011 National Electrical Code  
2013 DCMR Title 12D DC Fuel Gas Code  
2012 ICC Fuel Gas Code  
2013 DCMR Title 12J DC Existing Building Code  
2012 ICC Existing Building Code

### DRAWING INDEX

COV	COVER SHEET: PROJ INFO
D1	DEMOLITION PLANS
A1	FLOOR PLANS
A2	ELEVATION & SECTION
A3	FOUNDATION & FLOOR FRAMING PLANS
A4	FLOOR & ROOF FRAMING PLANS
M1	MECHANICAL PLANS
MP	MECH. & PLUMB NOTES/SCHEDULES
E1	ELECTRICAL PLANS
EP	ELECTRICAL NOTES/SCHEDULES

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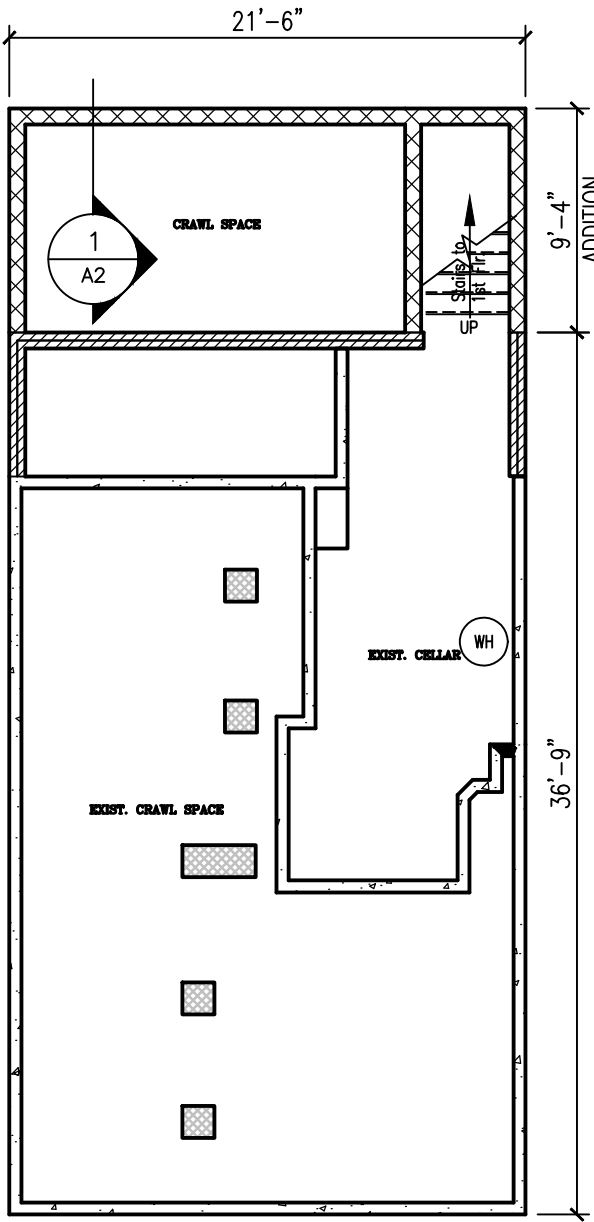
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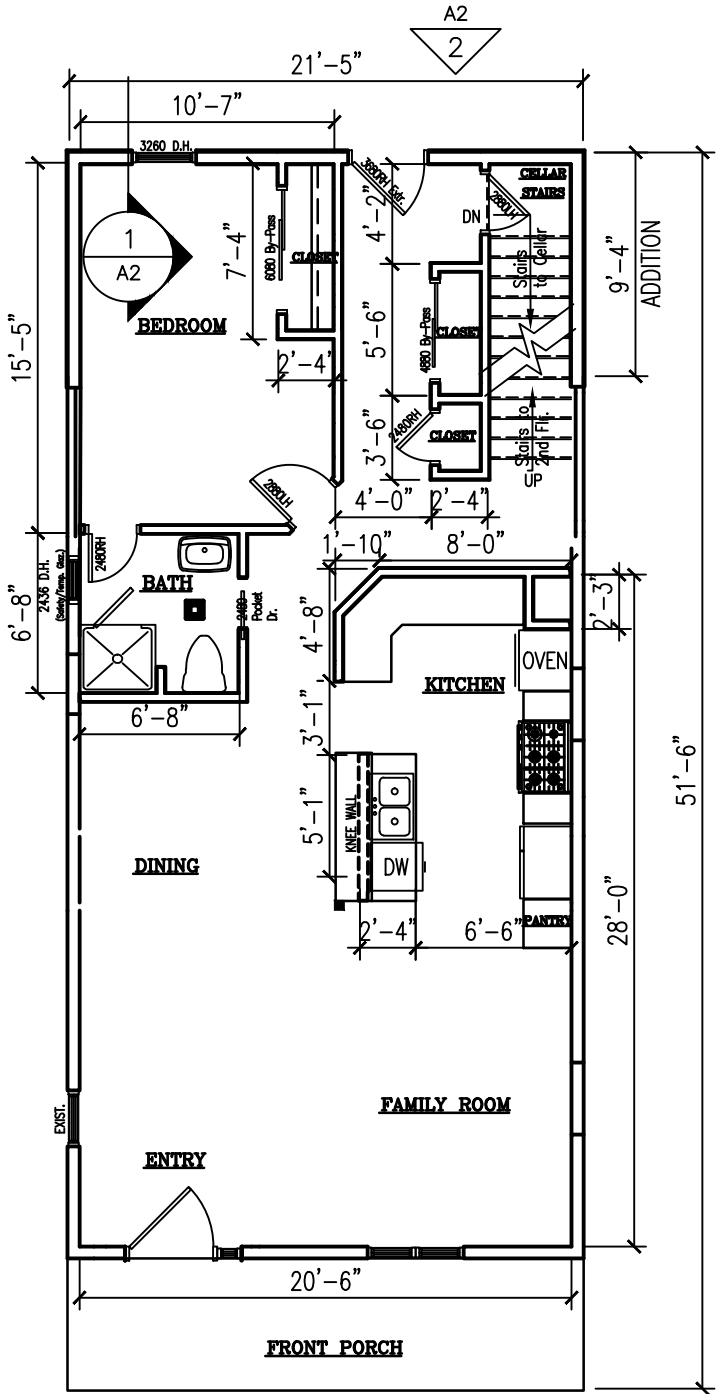
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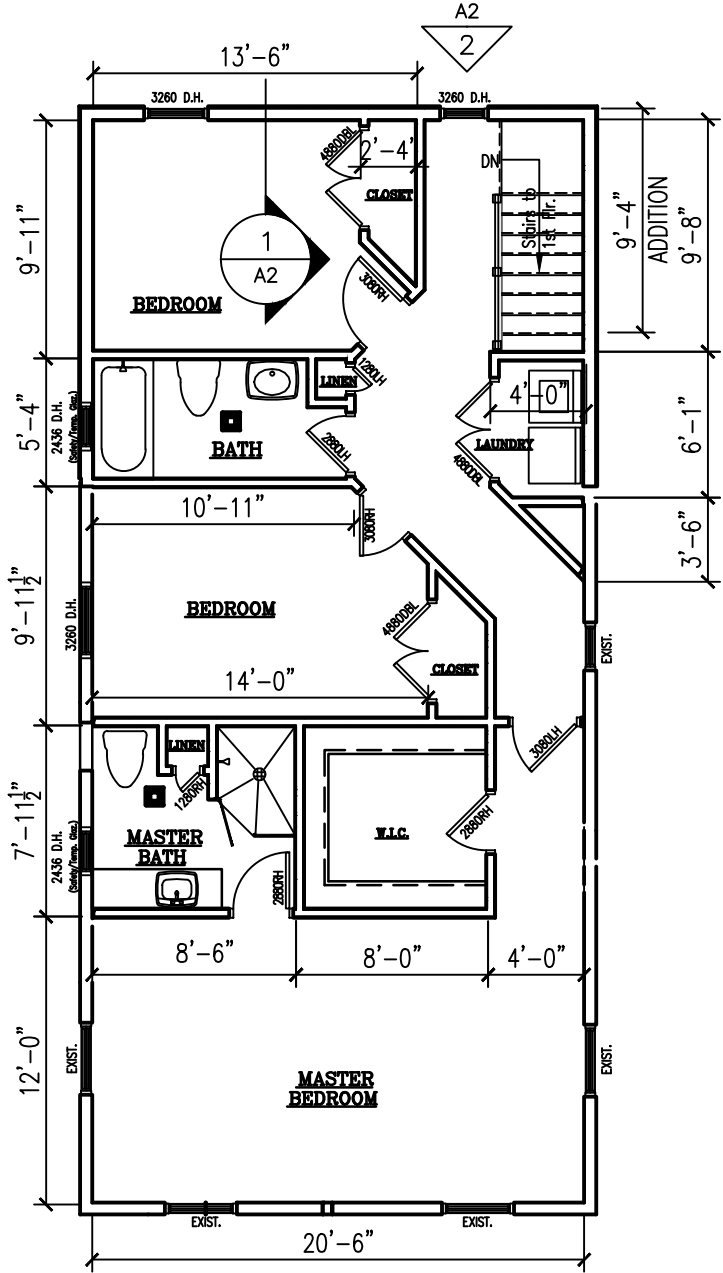
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DRAWN	SHEET
AAJ	COV



CELLAR PLAN  
1/8" = 1'-0" (PROPOSED)



FIRST FLOOR PLAN  
1/8" = 1'-0" (PROPOSED)



SECOND FLOOR PLAN  
1/8" = 1'-0" (PROPOSED)

LEGEND	
PLAN INDICATOR	DESCRIPTION
	EXISTING WALL/PARTITION TO REMAIN (+ 1/2" GYP. BD.)
	EXISTING WALL/PARTITION TO BE REMOVED
	1/2" GPDW EACH SIDE OF 2X4 WOOD STUDS AT 16" O.C.
	1/2" GPDW ONE SIDE OF 2X4 WOOD STUDS FURRING AT 16" O.C.
	1/2" GPDW (INTR. SIDE OF) 2X6 NOM. STUDS @ 16" O.C. R-13 BATT. INSULATION; PLY-WOOD SHEATHING, WEATHER BARRIER, & SIDING (EXTR. SIDE)

FIELD VERIFY ALL DIMENSIONS WITH EXISTING CONDITIONS

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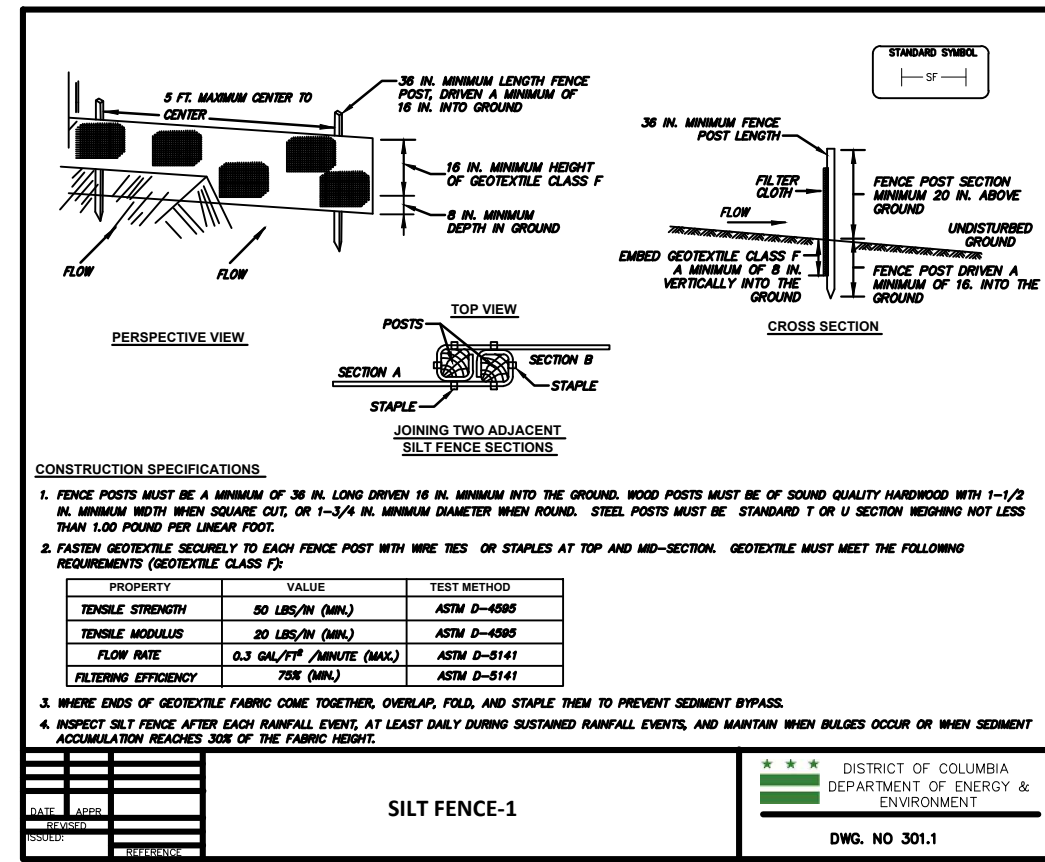
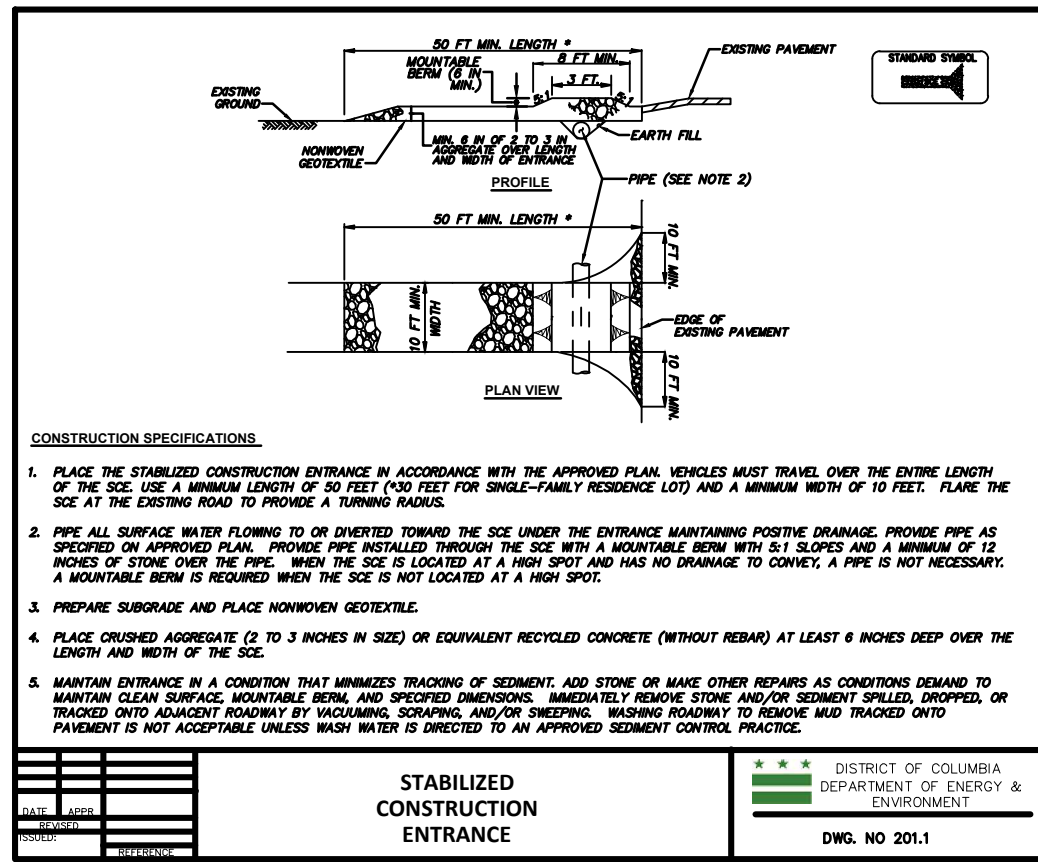
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DRAWN	SHEET
AAJ	A1





SILT FENCE DESIGN CRITERIA		
TABLE 3.1: SILT FENCE SLOPE LENGTH AND FENCE LENGTH CONSTRAINTS		
SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM) (FEET)	SILT FENCE LENGTH (MAXIMUM) (FEET)
FLATTER THAN 50:1 (20%)	UNLIMITED	UNLIMITED
> 50:1 TO 10:1 (2% to 10%)	125	1,000
> 10:1 TO 5:1 (2% to 20%)	100	750
> 5:1 TO 3:1 (20% to 33%)	60	500
> 3:1 TO 2:1 (33% to 50%)	40	250
> 2:1 (> 50%)	20	125

NOTE:

- IN AREAS OF LESS THAN 50% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY EROSION CONTROL MEASURE REQUIRED.
- TO AVOID CHROMATOGRAPHY, EXTEND THE ENDS OF THE SILT FENCE UPSTREAM TO PREVENT WATER AND SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.

APPROVED FOR CONSTRUCTION: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED FOR CONSTRUCTION: \_\_\_\_\_ DATE: \_\_\_\_\_

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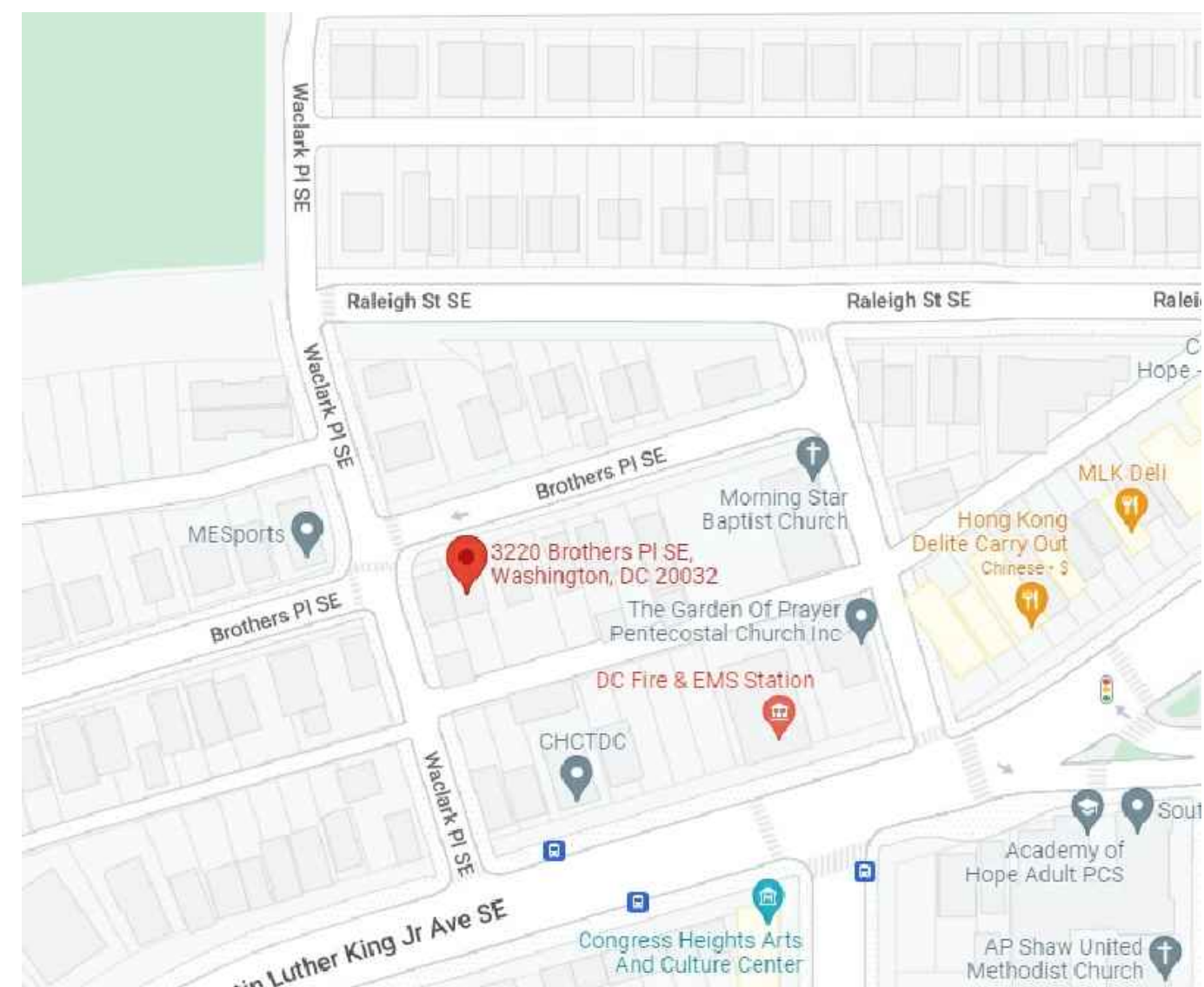
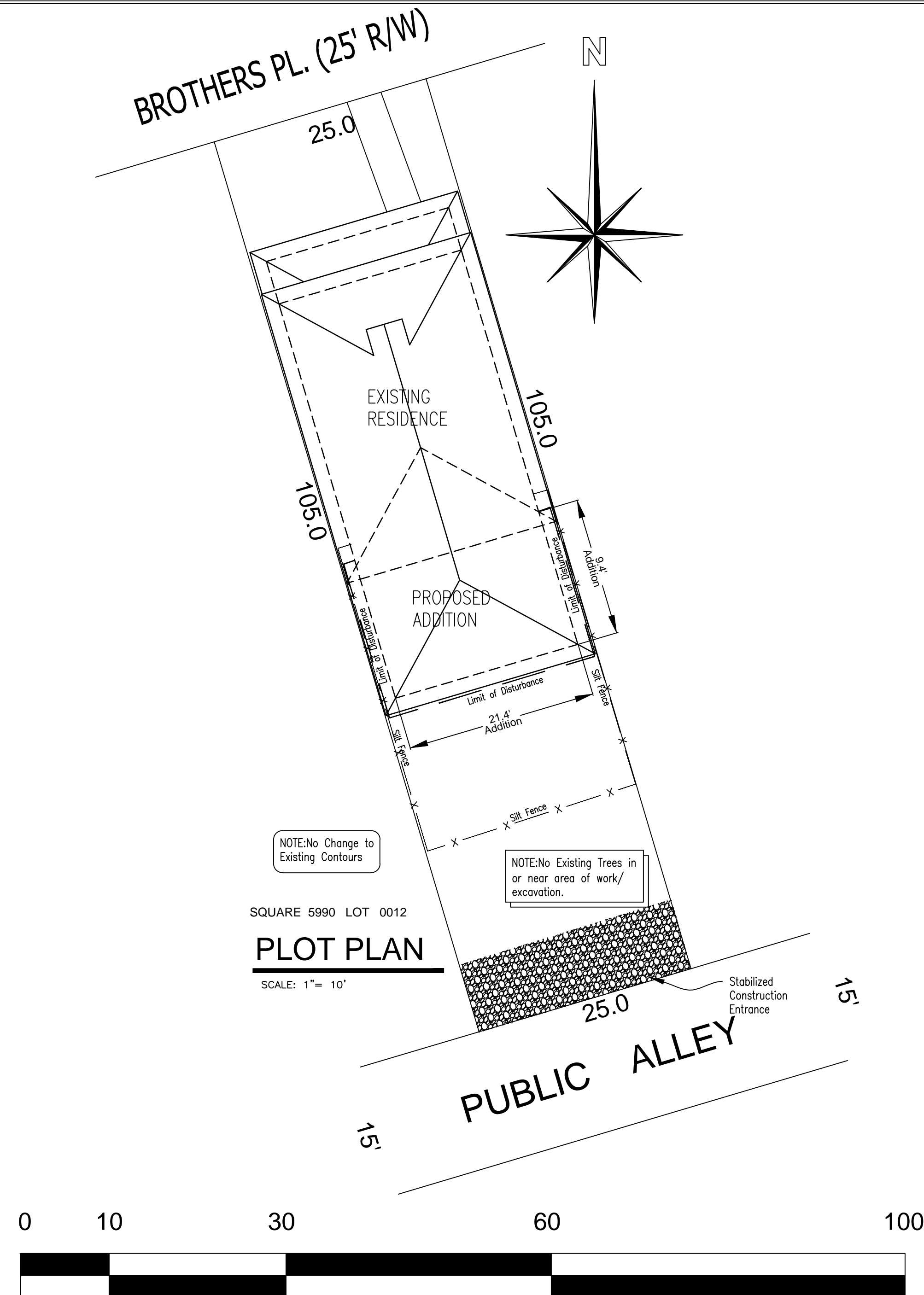
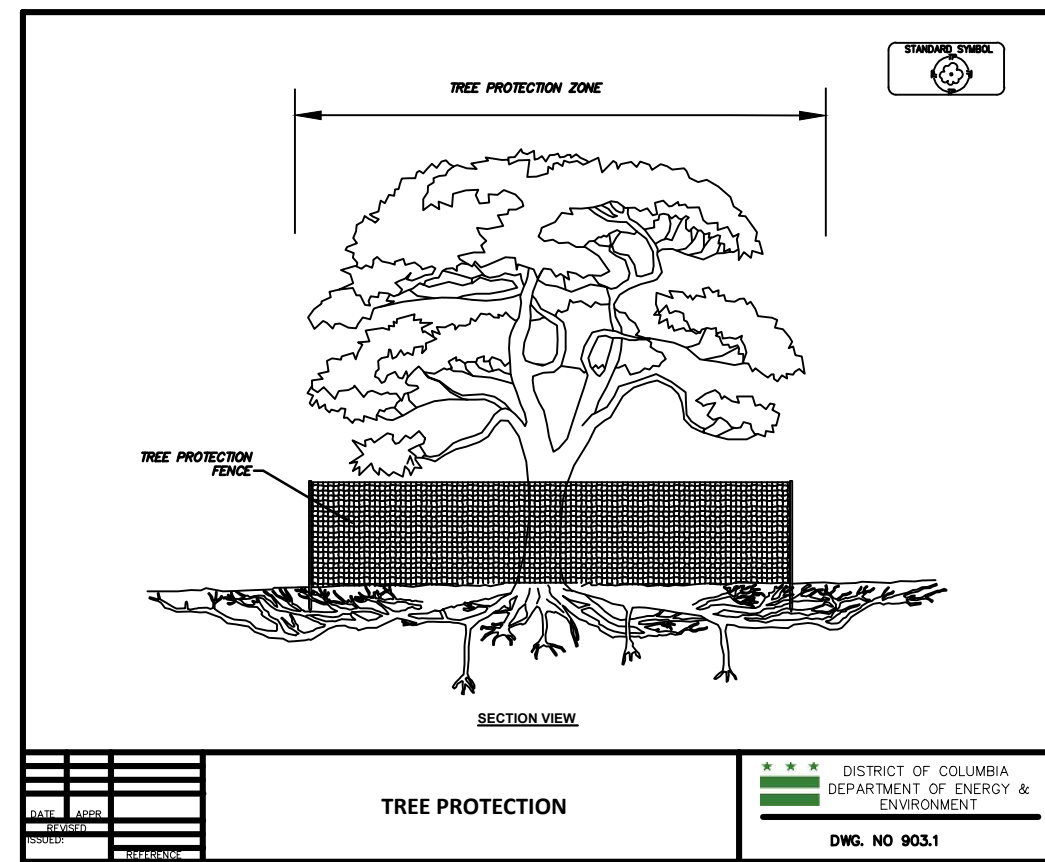
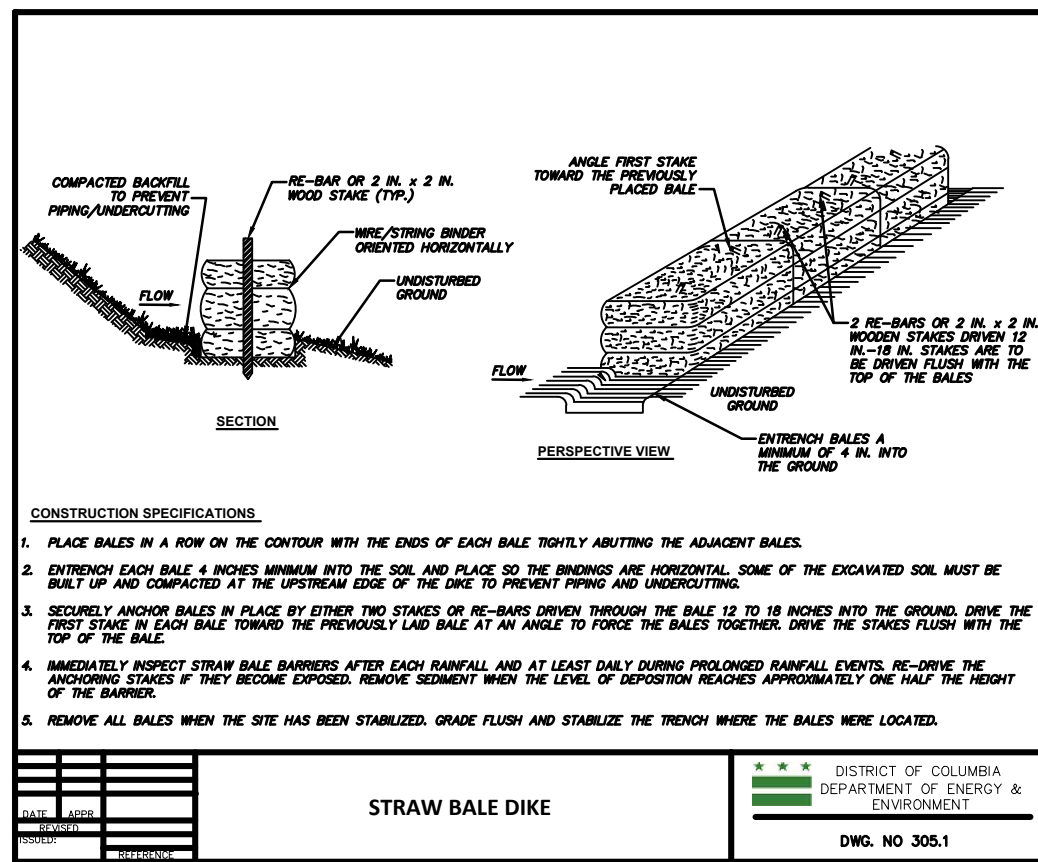
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APPROVED FOR CONSTRUCTION: \_\_\_\_\_ DATE: \_\_\_\_\_



REVISIONS	



20 Brothers Place SE  
WASHINGTON DC 20032

Alphacore assumes no liability for any building in part or whole or other addition, restoration or structural modification to this plan. It is the responsibility of the purchaser of this plan to perform the following before beginning actual construction.

1. The contractor must verify all dimensions prior to proceeding with construction.

2. The Contractor must verify compliance with all local building codes in the jurisdiction where construction is to take place.

## SQUARE FOOTAGE

FIRST FLOOR	
SECOND FLOOR	
TOTAL	

JOB NUMBER	DATE
2211	10/18/2022
DRAWN	SHEET
AAJ	SEC-1



DISTRICT OF COLUMBIA GOVERNMENT  
OFFICE OF THE SURVEYOR

Washington, D.C., April 29, 2022

Plat for Building Permit of :

SQUARE 5990 LOT 12

Scale: 1 inch = 20 feet

Recorded in Book 15 Page 26

Receipt No. 22-04097

Drawn by: A.S.

Furnished to: AL JAMES

“I hereby certify that the dimensions and configuration of the lot(s) hereon depicted are consistent with the records of the Office of the Surveyor unless otherwise noted, but may not reflect actual field measurements. The dimensions and configuration of A&T lots are provided by the Office of Tax and Revenue and may not necessarily agree with the deed description(s).”

*Anup Shrestha*  
for Surveyor, D.C.

I hereby certify that on this plat on which the Office of the Surveyor has drawn the dimensions of this lot, I have accurately and completely depicted and labeled the following:  
1) all existing buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, and any existing face-on-line or party wall labeled as such, well as projections and improvements in public space - with complete and accurate dimensions;  
2) all proposed demolition or raze of existing buildings duly labeled as such; all proposed buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, any existing face-on-line or party wall labeled as such, as well as projections and improvements in public space and the improvements used to satisfy pervious surface or green area ratio requirements - with complete and accurate dimensions, in conformity with the plans submitted with building permit application B2300303; and  
3) any existing chimney or vent on an adjacent property that is located within 10 feet of this lot.

I also hereby certify that:

1) my depiction on this plat, as detailed above, is accurate and complete as of the date of my signature hereon;  
2) there is no elevation change exceeding ten feet measured between lot lines; or if so, this elevation change is depicted on a site plan submitted with the plans for this permit application;  
3) I have/have not (circle one) filed a subdivision application with the Office of the Surveyor;  
4) I have/have not (circle one) filed a subdivision application with the Office of Tax & Revenue; and  
5) if there are changes to the lot and its boundaries as shown on this plat, or to the proposed construction and plans as shown on this plat, that I shall obtain an updated plat from the Office of the Surveyor on which I will depict all existing and proposed construction and which I will then submit to the Office of the Zoning Administrator for review and approval prior to permit issuance.  
The Office of the Zoning Administrator will only accept a Building Plat issued by the Office of the Surveyor within the two years prior to the date DCRA accepts a Building Permit Application as complete.  
I acknowledge that any inaccuracy or errors in my depiction on this plat will subject any permit or certificate of occupancy issued in reliance on this plat to enforcement, including revocation under Sections 105.6(1) and 110.5.2 of the Building Code (Title 12A of the DCMR) as well as prosecution and penalties under Section 404 of D.C. Law 4-164 (D.C. Official Code §22-2405).

Signature: *Al James*

Date: Oct. 16, 2022

Printed Name: Al James Relationship  
to Lot Owner: Agent

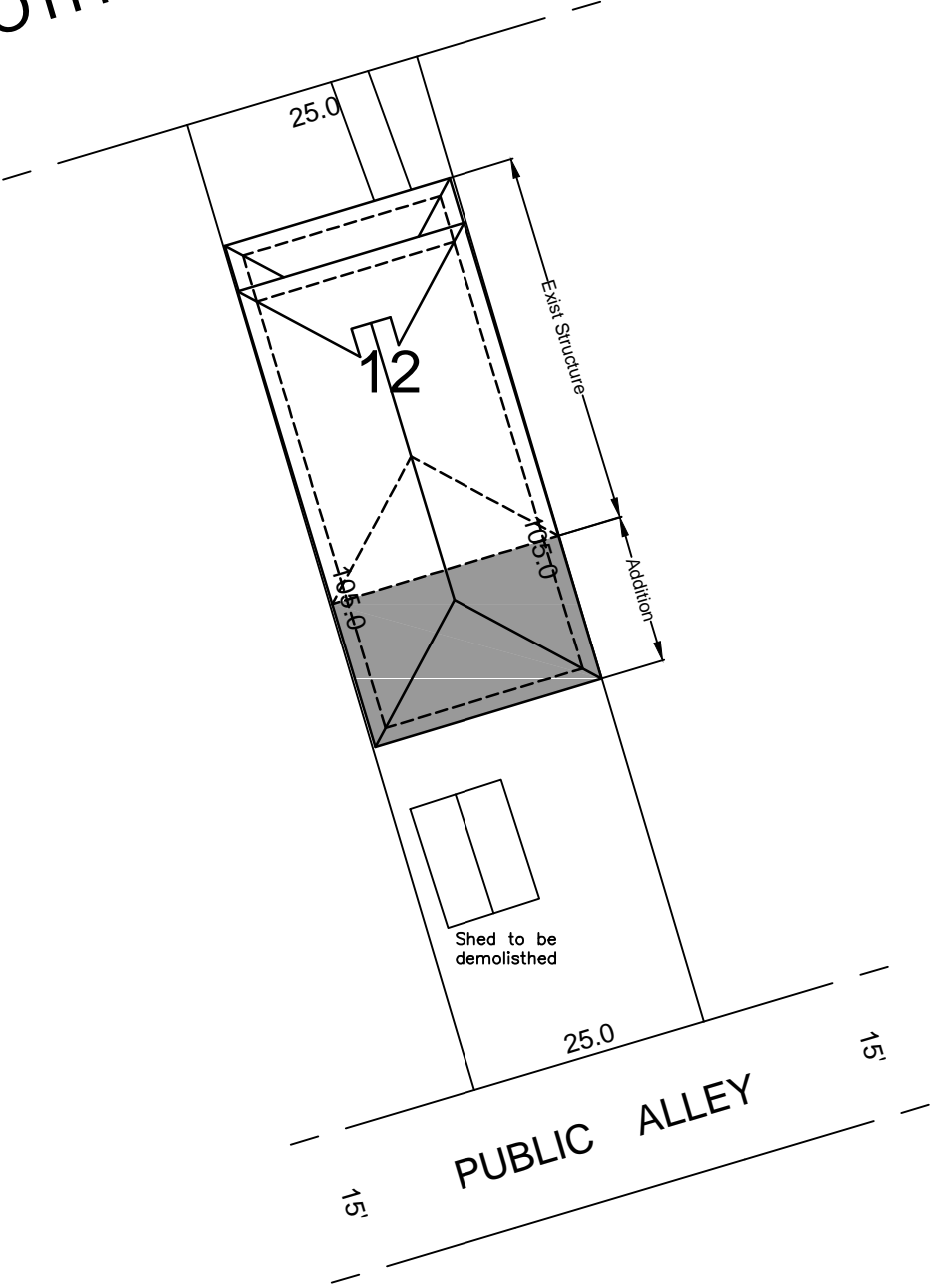
If a registered design professional, provide license number  
\_\_\_\_\_ and include stamp below.

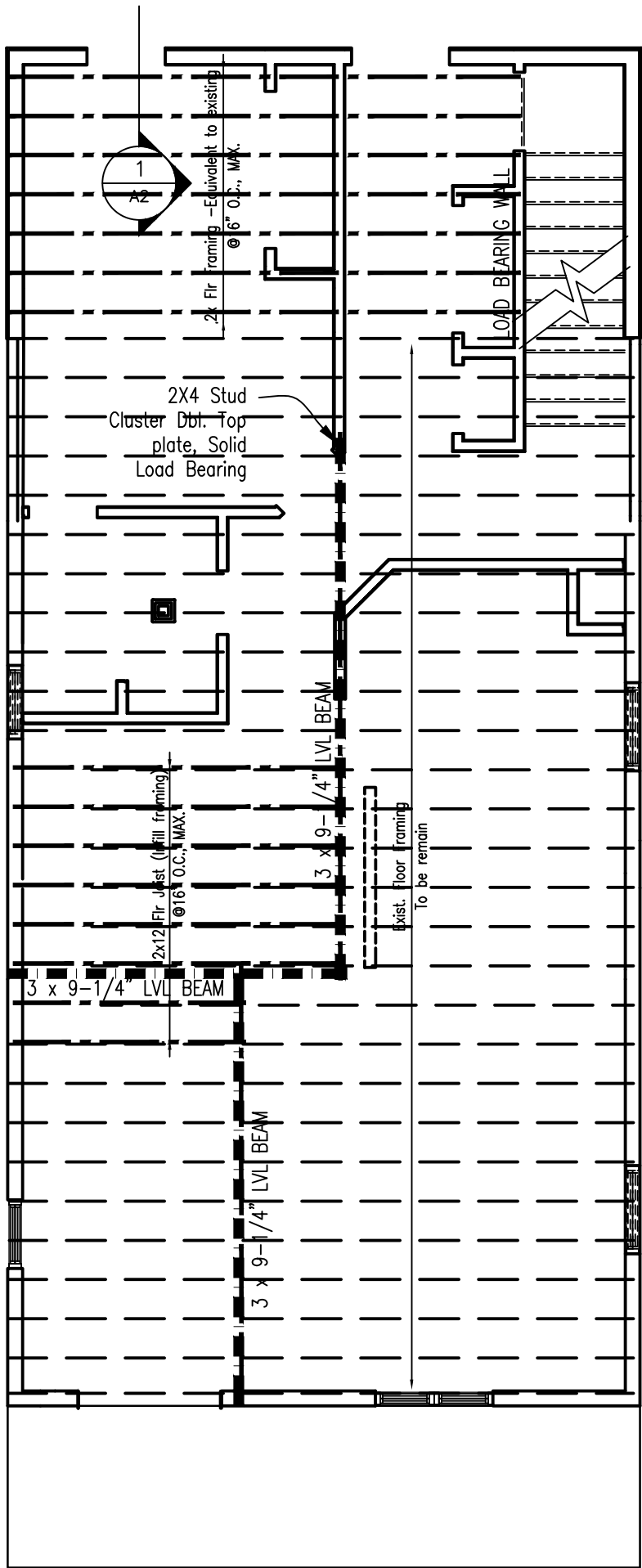


SCALE: 1:20

SQUARE 5990

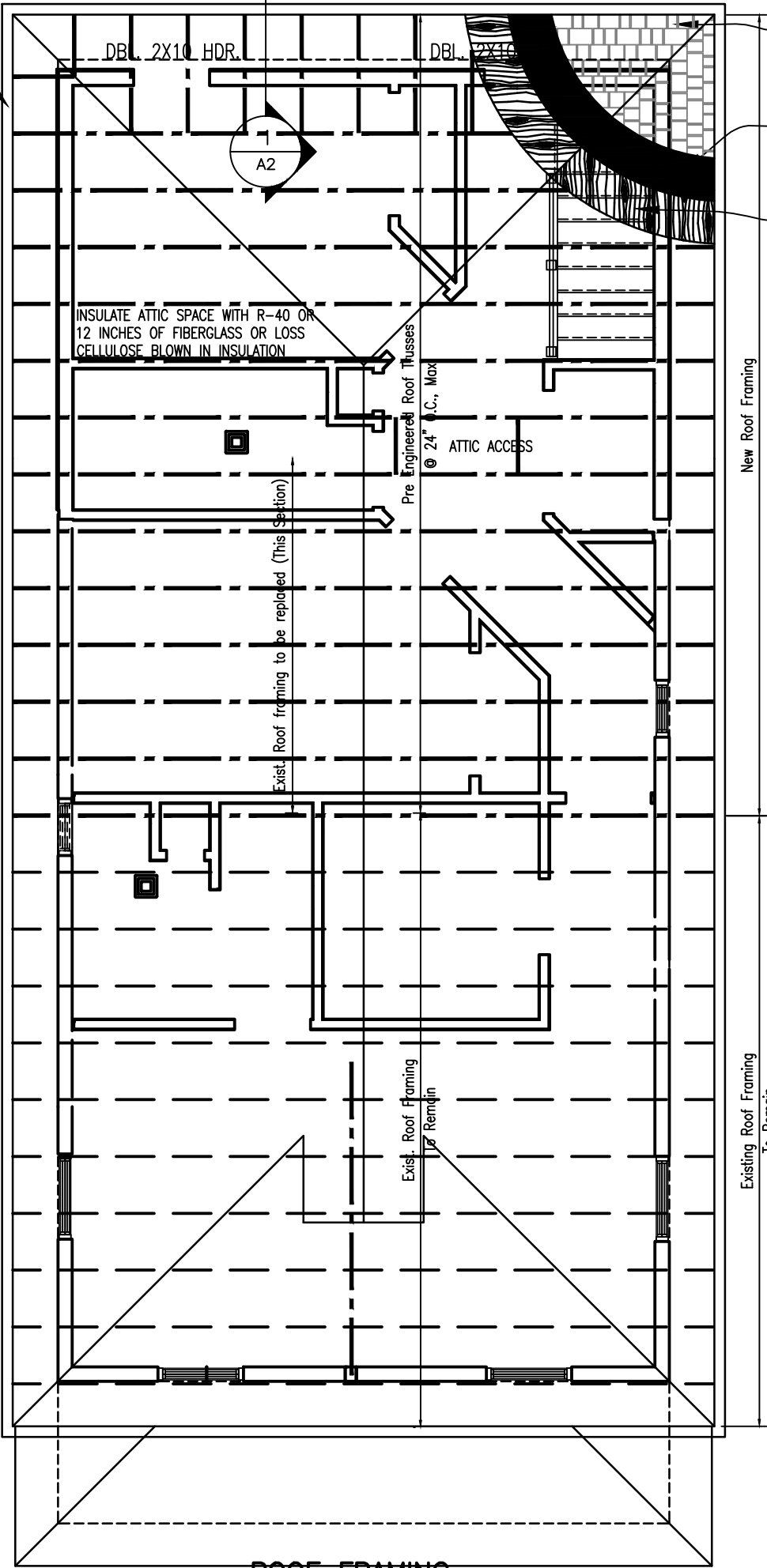
BROTHERS PLACE, S.E.





SECOND FLOOR FRAMING  
3/16" = 1'-0"

5" Alumn. Gutter & downspout on 2x6 fascia



ROOF FRAMING  
3/16" = 1'-0"

- Architectural asphaltic roof shingles (Vented Ridge Cap)
- 30lb. Building Felt/ Weather Barrier w/Ice & water shield at Eaves
- 3/4" Ply-wood/ O.S.B. Sheathing

RENOVATION PLANS

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A CUSTOM DESIGN

by A. Alphanso James

ALPHATECHTURE

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3220 Brothers Pl. SE  
Washington DC. 20032

- 1.) Builder or contractor must verify all dimensions prior to proceeding with construction.
- 2.) Contractor must verify compliance with all local building codes in the jurisdiction where construction is to take place.

Square Footage	
FIRST FLOOR	1,935
SECOND FLOOR	1,890
TOTAL	

JOB NO.	DATE
	10/16/2022

DRAWN	SHEET
AAJ	A4



# INTERIOR REMODEL & ADDITION

## 3220 BROTHERS PLACE SE.



### CODE APPLICATION

#### CODE APPLICATION SUMMARY

PROJECT ADDRESS: 3220 Brothers Pl. SE.  
Washington, DC.

SQUARE: 5990  
LOT: 0012  
AREA (SF): 2625  
USE GROUP: R-2  
CONST. TYPE: V-B

#### FIRE SUPPRESSION

FIRE SPRINKLER SYSTEM: N  
ALARM SYSTEM: Y  
SMOKE ALARMS: Y  
CARBON MONOXIDE ALARMS: Y  
STANDPIPE: Y  
FIRE EXTINGUISHER: Y  
EGRESS WIDTH: 36" 810.3 Occup. <50  
EGRESS WIDTH: 5.7 SF Min. [24"min.H, 20"min.W]  
44" Sill HT

	EXISTING	PROPOSED
OCCUPANCY/USE:	SINGLE-FAMILY	SINGLE-FAMILY
LIVING AREA:	1,340 SF	1,840 SF
NO. STORIES	2	2
BEDROOMS	3	4
BATHROOMS	1	3

#### SCOPE OF WORK

1. ADDITION AT REAR OF RESIDENCE
2. FIRST & SECOND FLOOR REMODEL
3. CONSTRUCTION OF INTERIOR WOOD FRAMED GYPSUM BOARD PARTITIONS, DOORS, HARDWARE
4. INTERIOR FINISH (MILLWORK AND FLOORING).
5. REPLACEMENT OF MECHANICAL HVAC,
6. CONSTRUCTION COST ESTIMATE: \$62,000.

All Information and directives specified on documents for application comply with the following requirements including:

- 2017 District of Columbia Building Code
- 2015 International Building Code
- 2017 District of Columbia Energy Conservation Code
- 2012 ICC Energy Conservation Code
- 2017 District of Columbia Green Construction Code
- 2012 ICC Green Construction Code
- 2017 DC Construction Codes (DC Amendments & Associated ICC Model Codes)
- 2012 ICC Residential Code for One- and Two-Family Dwellings
- 2013 District of Columbia Property Maintenance Code
- 2012 ICC Property Maintenance Code
- 2013 District of Columbia Fire Code
- 2012 ICC Fire Code
- 2013 District of Columbia Mechanical Code
- 2012 ICC Mechanical Code
- 2013 District of Columbia Plumbing
- 2012 ICC Plumbing Code
- 2013 DCMR Title 12D DC Electrical Code
- 2011 National Electrical Code
- 2013 DCMR Title 12D DC Fuel Gas Code
- 2012 ICC Fuel Gas Code
- 2013 DCMR Title 12J DC Existing Building Code
- 2012 ICC Existing Building Code

### DRAWING INDEX

COV	COVER SHEET: PROJ INFO
D-1	DEMOLITION PLANS
A-1	FLOOR PLANS
A-2	ELEVATION & SECTION
A-3	FOUNDATION & FLOOR FRAMING PLANS
A-4	FLOOR & ROOF FRAMING PLANS

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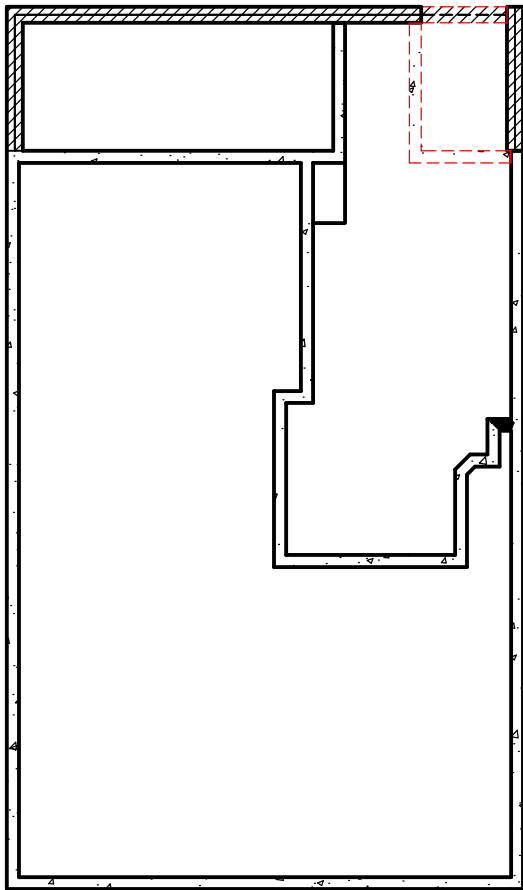
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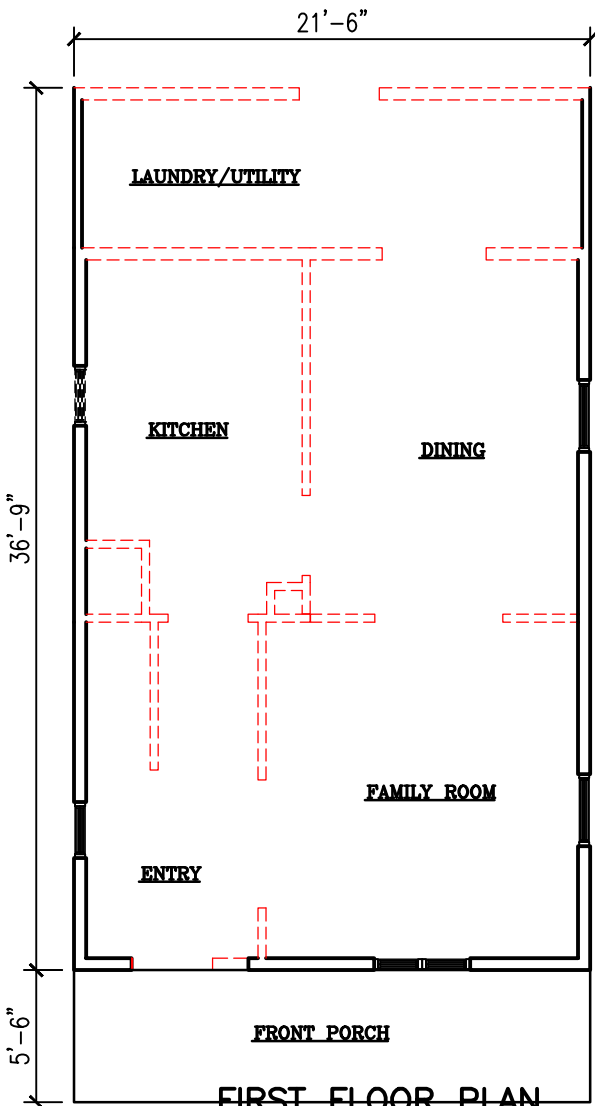
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TOTAL	

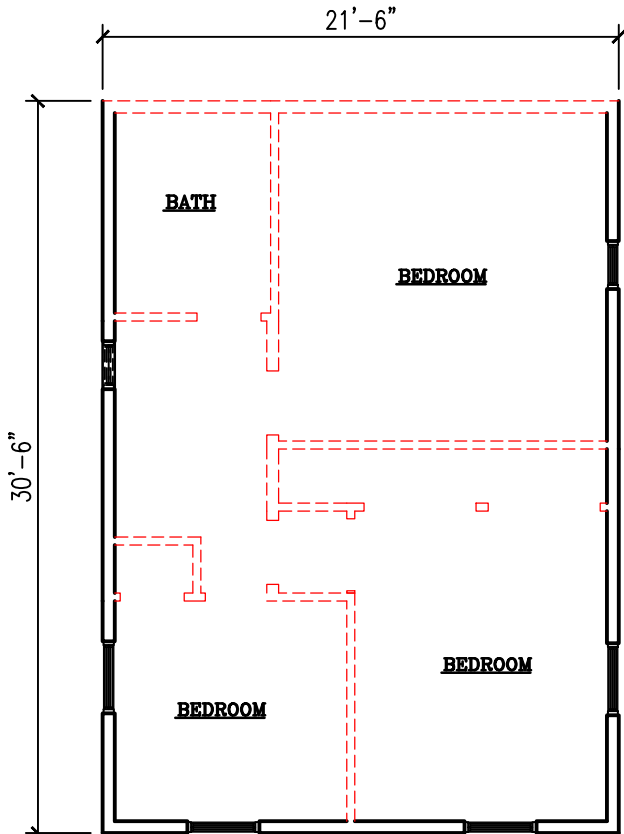
JOB NO.	DATE
	9/12/2022
DRAWN	SHEET
AAJ	COV



CELLAR PLAN  
1/8" = 1'-0" (EXISTING)



FIRST FLOOR PLAN  
1/8" = 1'-0" (EXISTING)



SECOND FLOOR PLAN  
1/8" = 1'-0" (EXISTING)

LEGEND	
PLAN INDICATOR	DESCRIPTION
	EXISTING WALL/PARTITION TO REMAIN (+ 1/2" GYP. BD.)
	EXISTING WALL/PARTITION TO BE REMOVED
	1/2" GPDW EACH SIDE OF 2X4 WOOD STUDS AT 16" O.C.
	1/2" GPDW ONE SIDE OF 2X4 WOOD STUDS FURRING AT 16" O.C.
	1/2" GPDW (INTR. SIDE OF) 2X6 NOM. STUDS @ 16" O.C. R-13 BATT. INSULATION; PLY-WOOD SHEATHING, WEATHER BARRIER, & SIDING (EXTR. SIDE)

FIELD VERIFY ALL DIMENSIONS WITH EXISTING CONDITIONS

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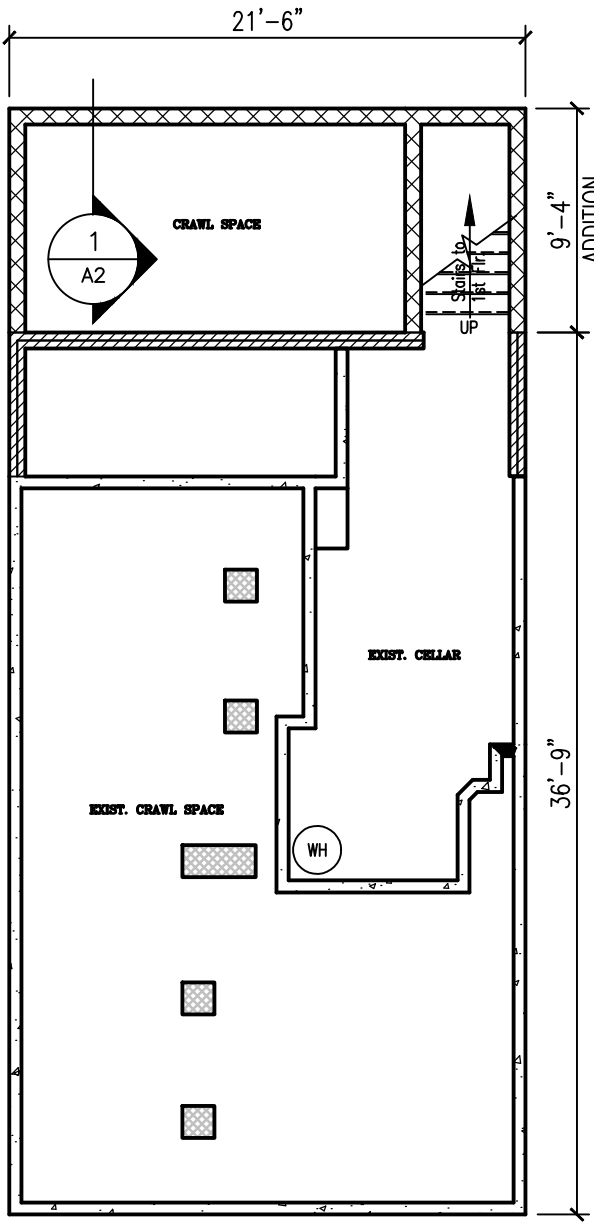
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Square Footage

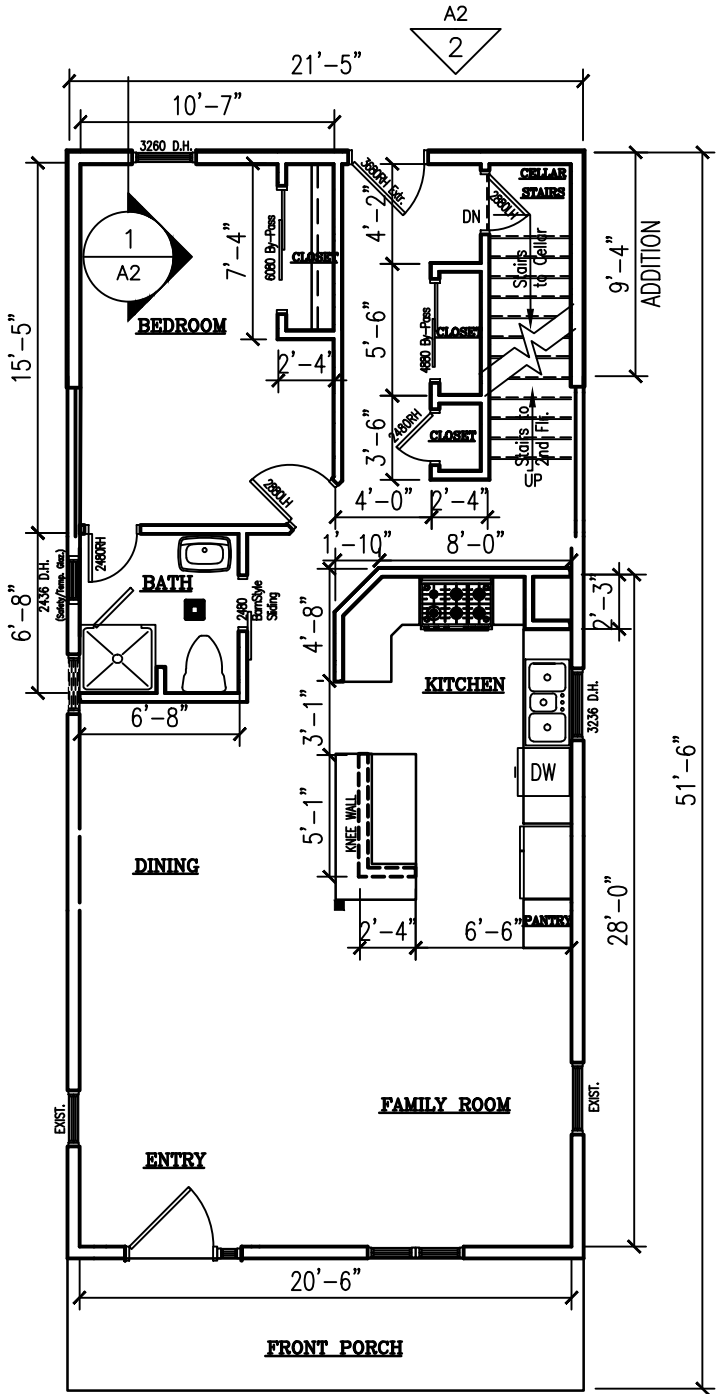
FIRST FLOOR	1,935
SECOND FLOOR	1,890
TOTAL	

JOB NO.	DATE
	9/12/2022
DRAWN	SHEET
AAJ	D-1

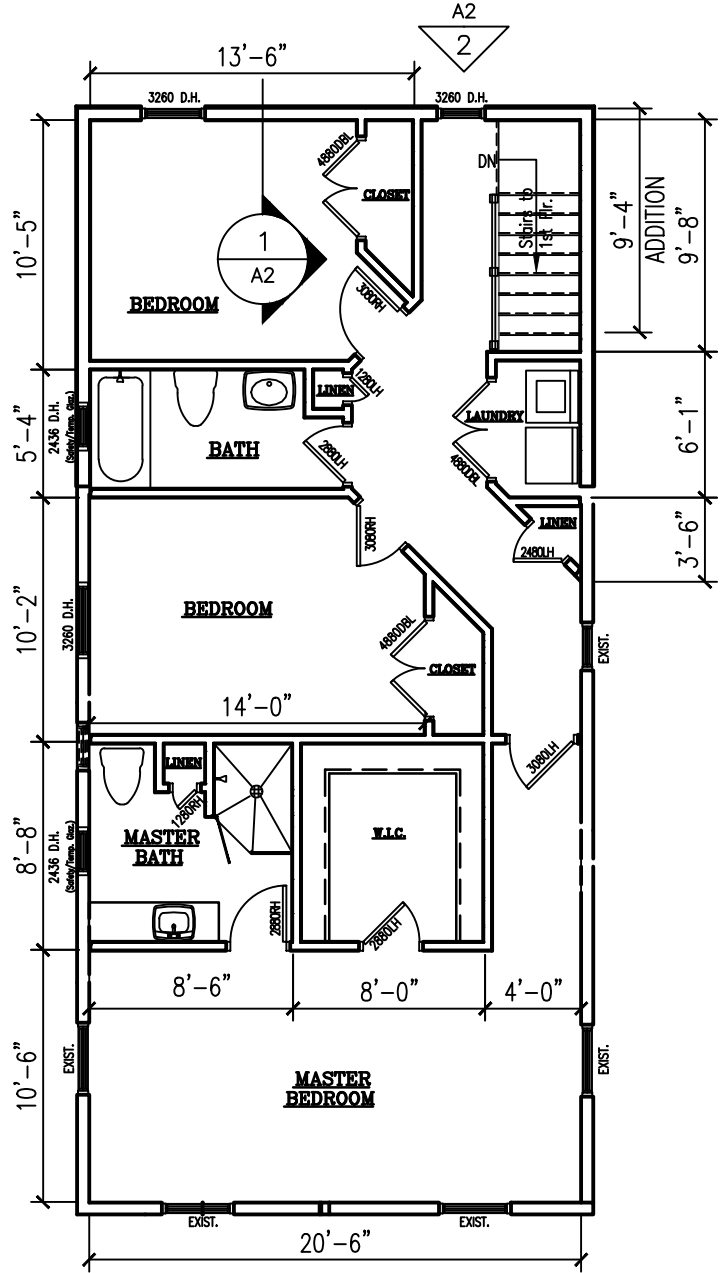




CELLAR PLAN  
1/8" = 1'-0" (PROPOSED)



FIRST FLOOR PLAN  
1/8" = 1'-0" (PROPOSED)



SECOND FLOOR PLAN  
1/8" = 1'-0" (PROPOSED)

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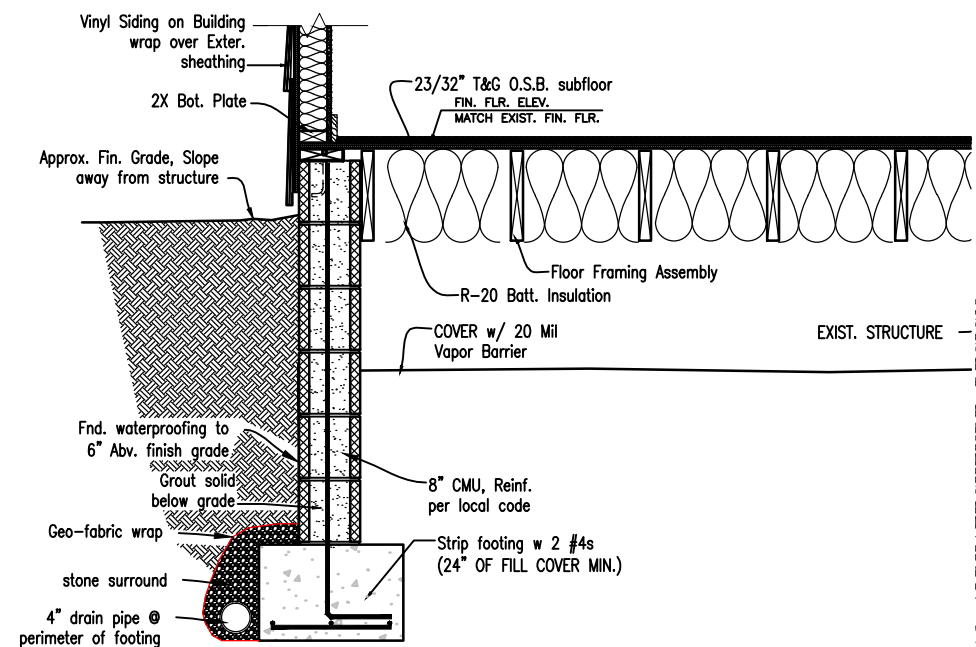
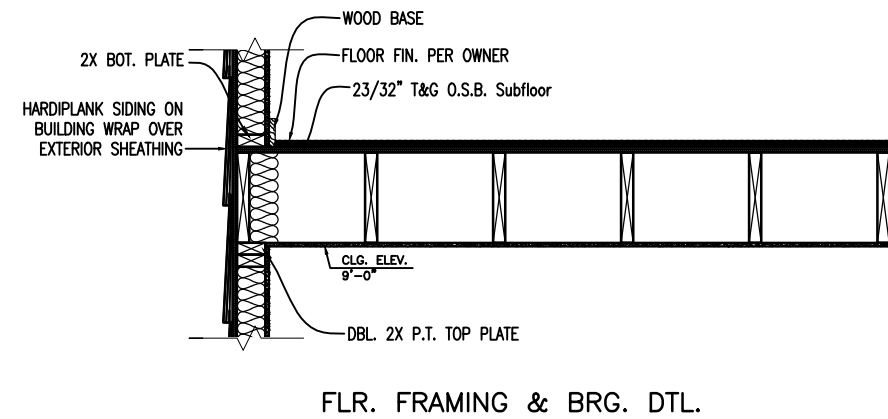
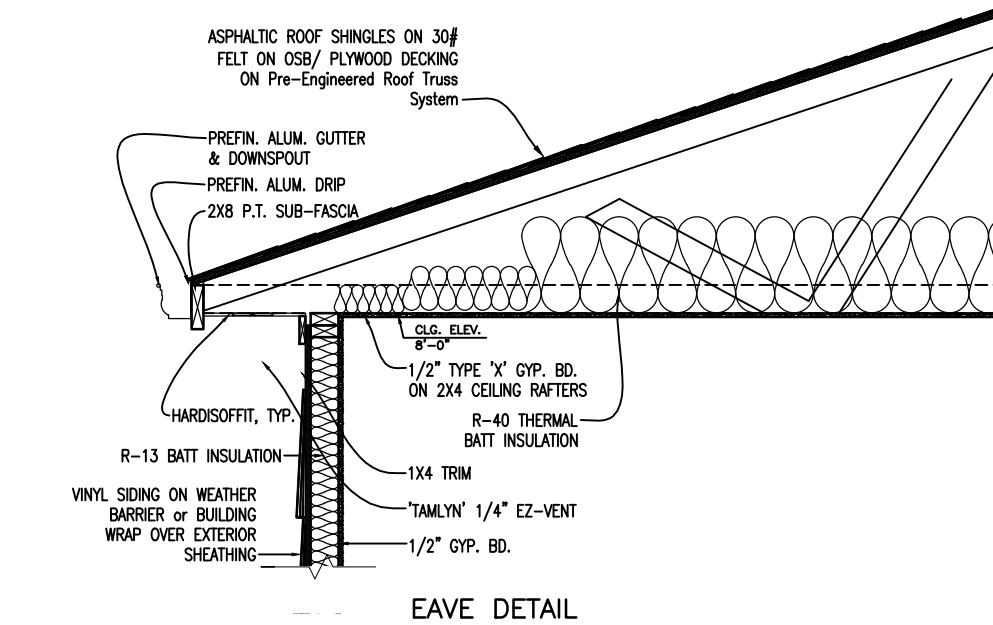
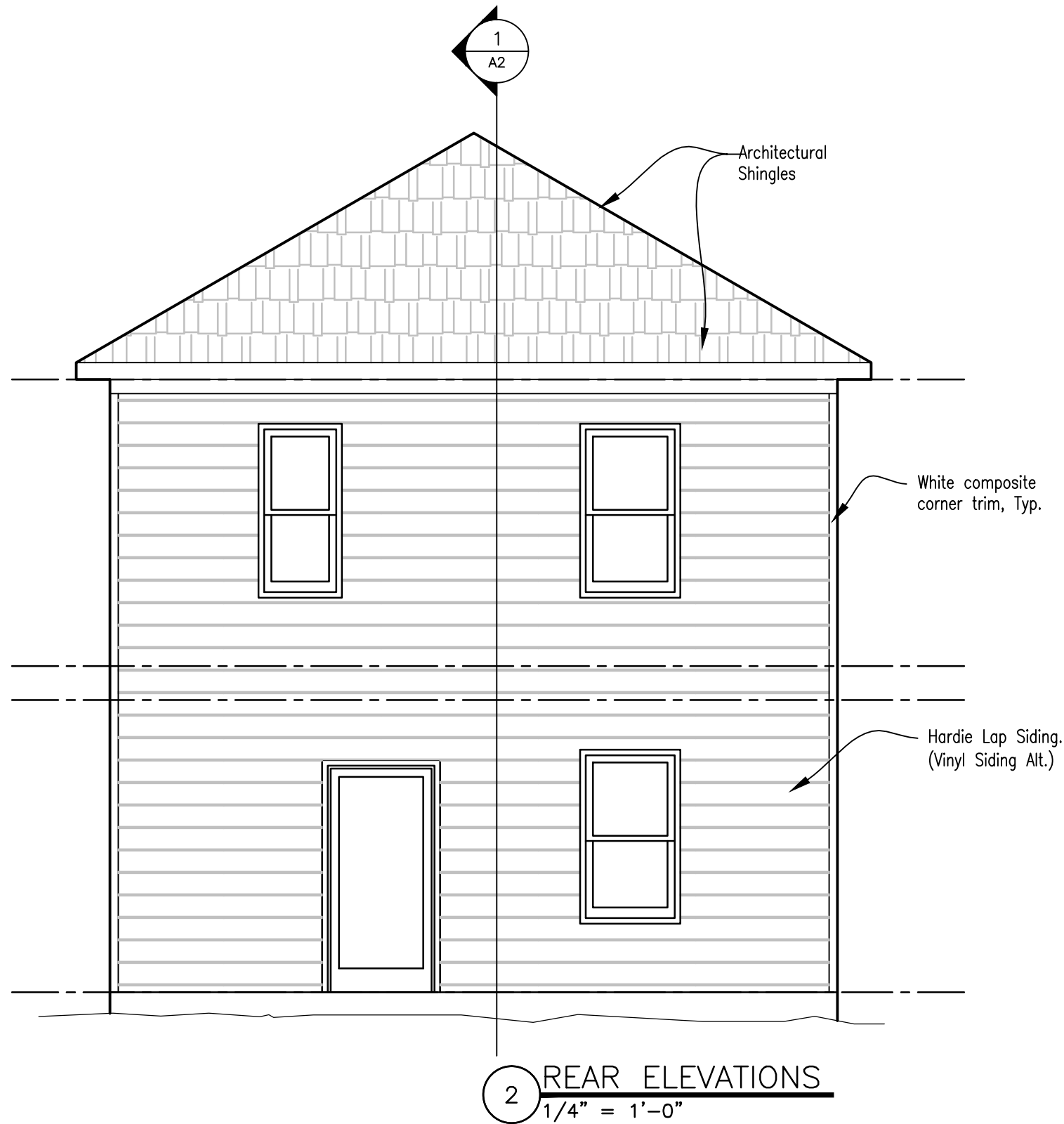
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TOTAL	

JOB NO.	DATE
	9/12/2022
DRAWN	SHEET
AAJ	A-1



1 WALL SECTION  
1/2" = 1'-0"

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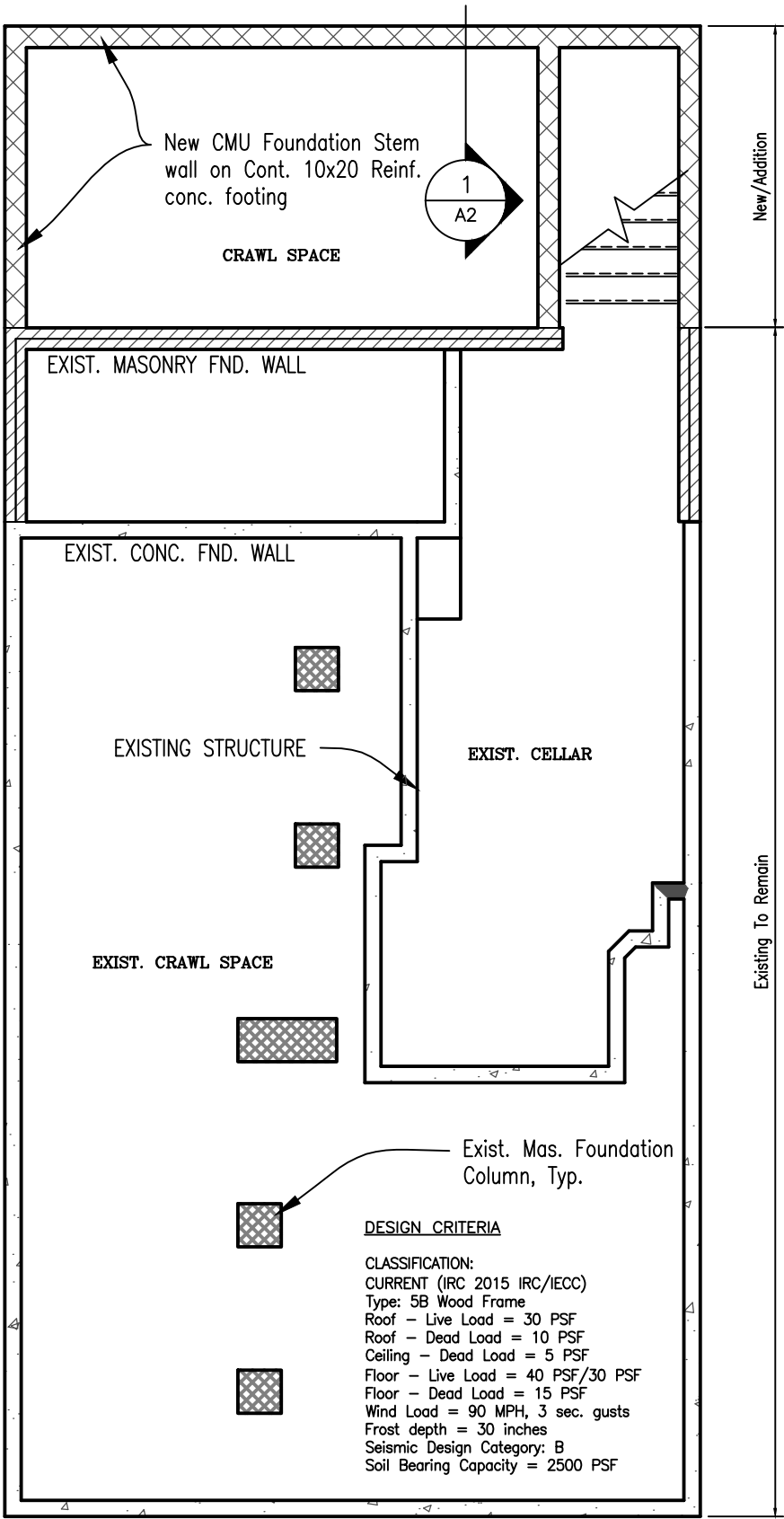
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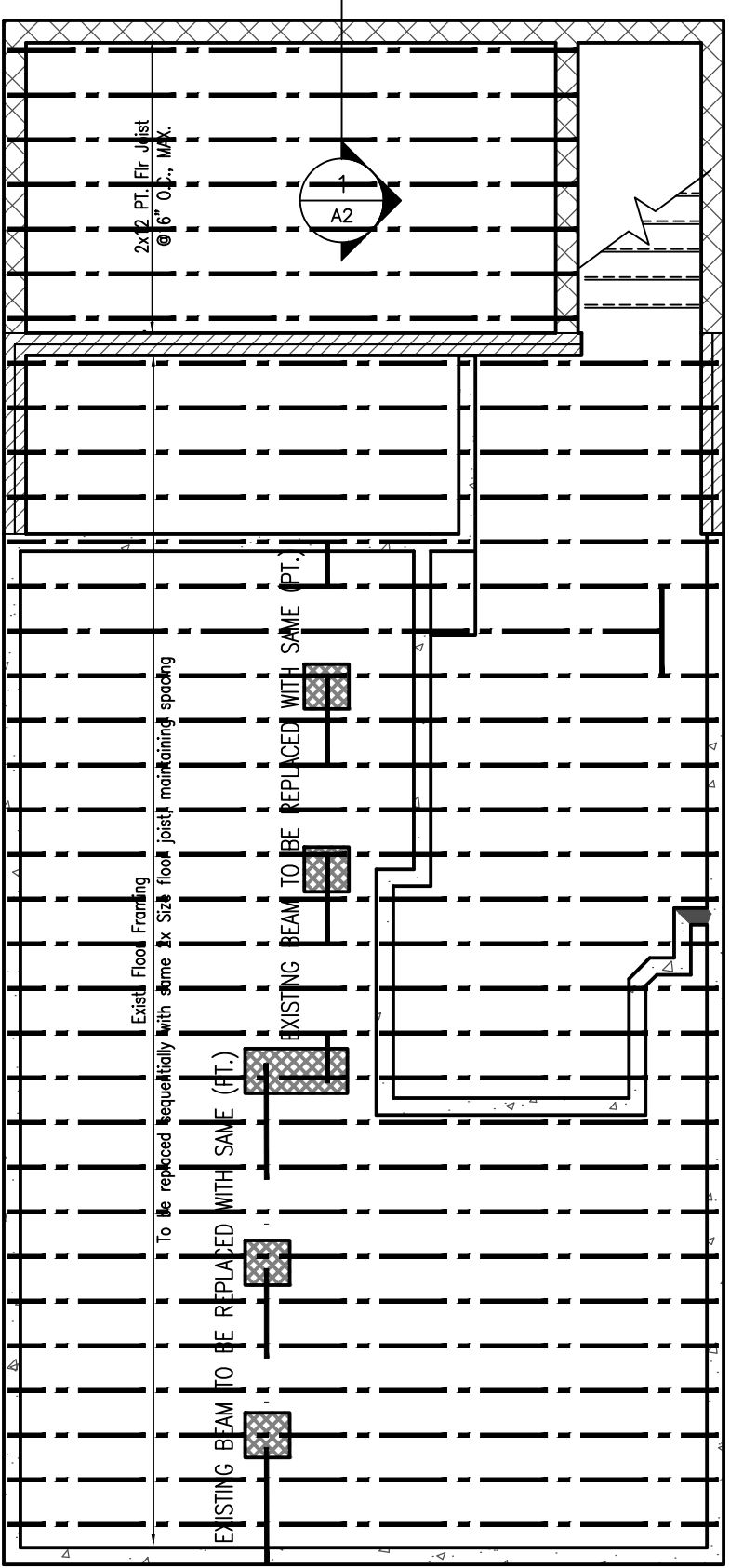
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TOTAL	

JOB NO.	DATE
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DRAWN	SHEET
AAJ	A2





**FOUNDATION PLAN**  
3/16" = 1'-0"



Thoroughly inspect all lumber and replace any lumber that shows signs of decay or deterioration with PT like kind.

**FIRST FLOOR FRAMING**  
3/16" = 1'-0"

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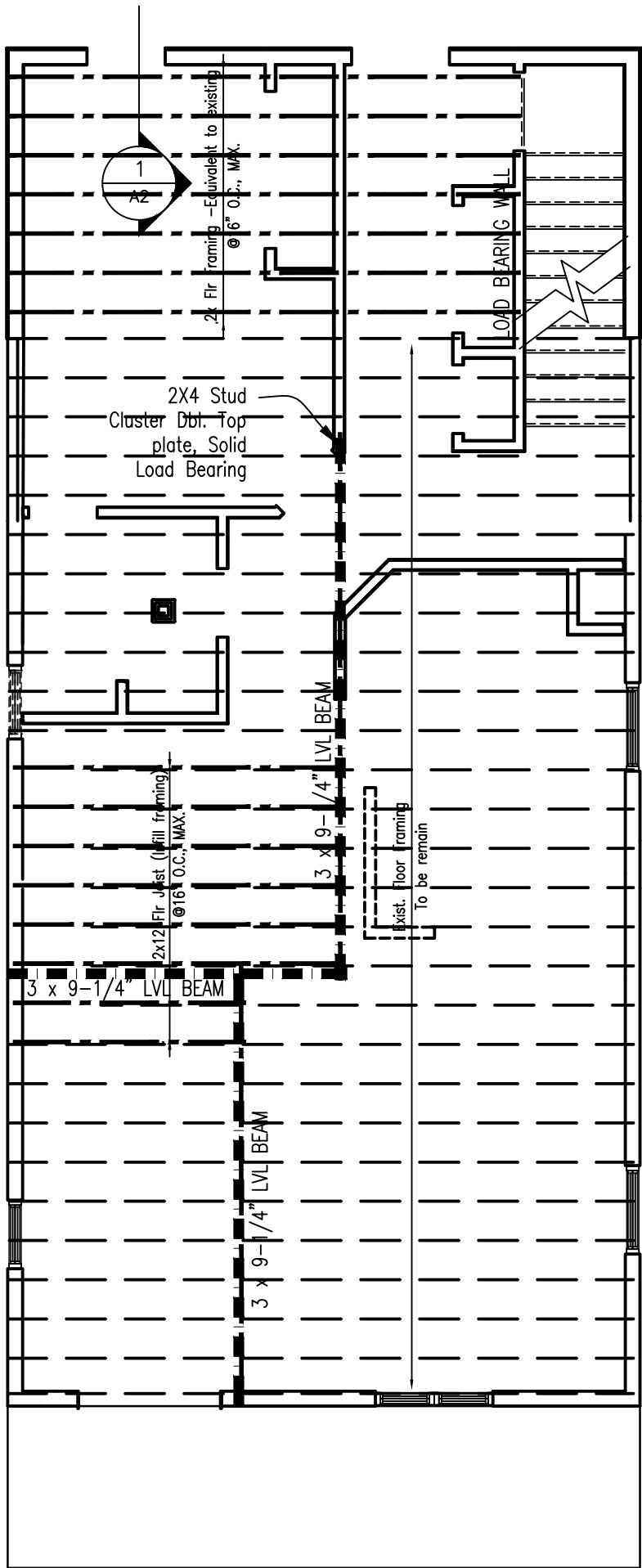
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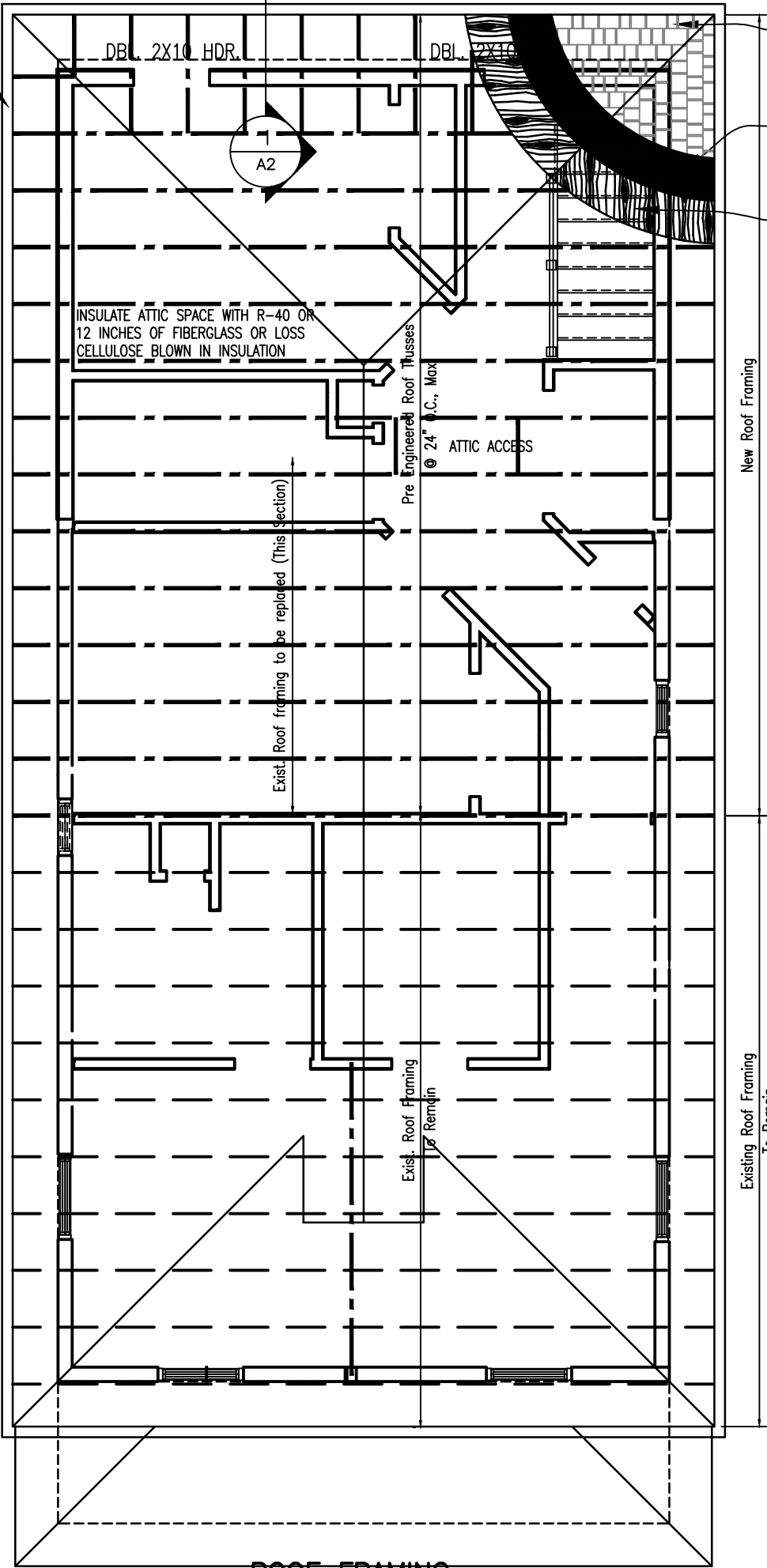
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TOTAL	

JOB NO.	DATE
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DRAWN	SHEET
AAJ	A3



SECOND FLOOR FRAMING  
3/16" = 1'-0"

5" Alumn. Gutter & downspout on 2x6 fascia



ROOF FRAMING  
3/16" = 1'-0"

- Architectural asphaltic roof shingles (Vented Ridge Cap)
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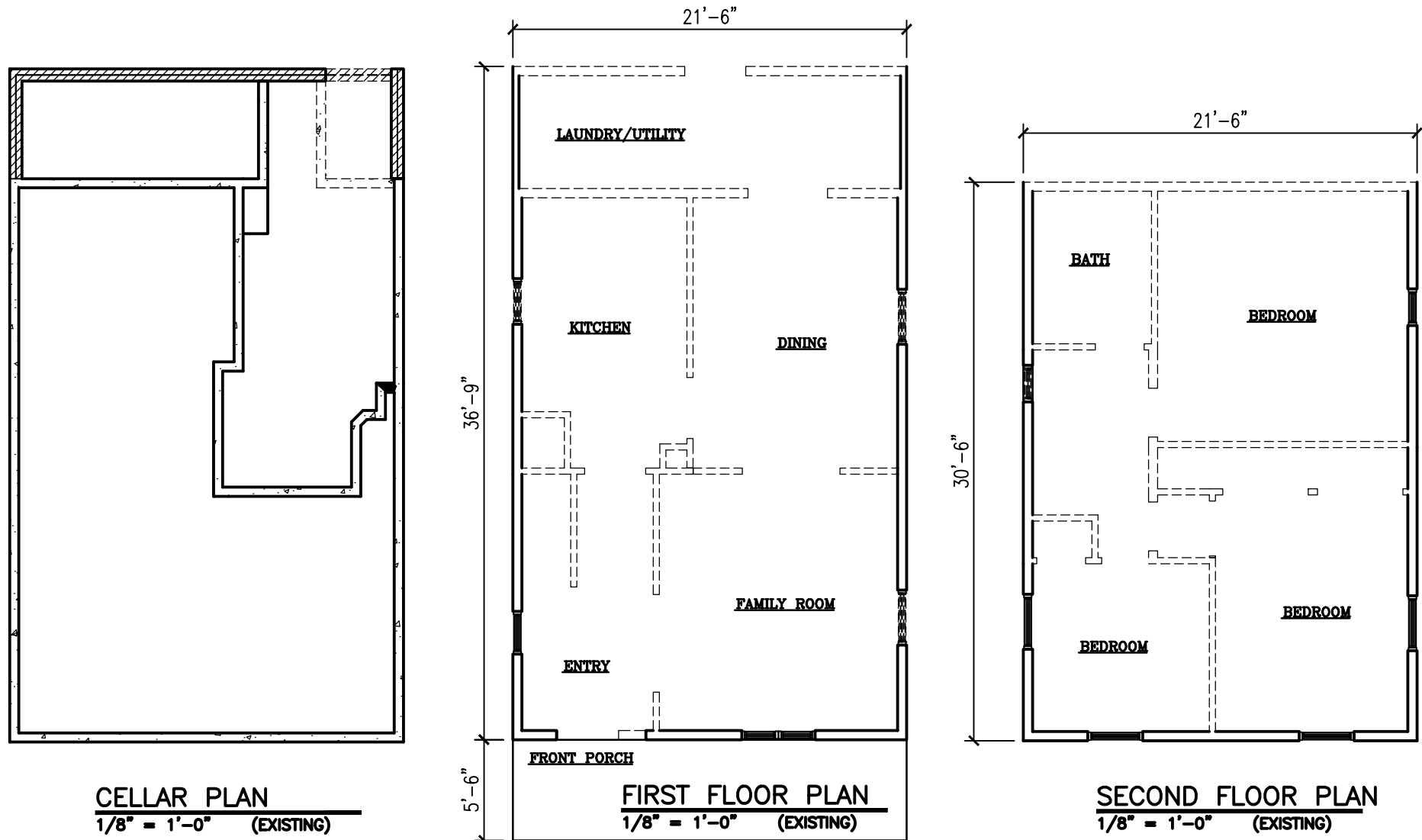
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DRAWN	SHEET
AAJ	A4

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- A. FOR EXTENT OF DEMOLITION WORK TO EXISTING INTERIOR WALLS REFER TO THE DEMOLITION PLAN
- B. TO ACCOMODATE WALL MODIFICATIONS AND NEW FINISHES & DECOR PROVIDE THE FOLLOWING DEMOLITION.
- C. STRIP EXISTING WALLS, SUSPEND WALLS AND SOFFITS OF FINISHES, TRIM, AND SUBSTRATE
- D. REMOVE FLOOR COVERING AS SHOWN
- E. DEMOLISH AND REMOVE REQUIRED SYSTEMS IN ASSOCIATION WITH RELOCATION OR REMOVAL OF EXISTING EQUIPMENT AND FIXTURES.
- F. DRAWINGS SHOW GENERAL DEMOLITION WORK TO BE PERFORMED HOWEVER IT DOES NOT RELIEVE THE CONTRACTOR FROM OTHER DEMOLITION REQUIRED TO PRODUCE THE BUILDING MODIFICATION SHOWN ON THE REMAINING CONTRACT DOCUMENTS, INCLUDING PLUMBING HVAC AND ELECTRICAL DRAWINGS
- G. CONTRACTOR SALVAGE ITEMS SHALL BE DISPOSED OF PROPERLY OFF SITE AND IN AN EXPEDITIOUS MANNER.
- H. PROTECT ALL EXISTING CONSTRUCTION SHOWN TO REMAIN, FROM DMAGE DURING DEMOLITION AND CONSTRUCTION, FOR THE EXTENT OF THE MODIFICATION WORK.
- I. PROVIDE A TEMPORARY DUST PARTITION/BARRIER TO PREVENT DUST AND DEBRIS FROM SETTLING IN ADJACENT AREAS NOT UNDER CONSTRUCTION AND AS DIRECTED REVIEWED AND APPROVED BY LIVING WELL MANAGEMENT.
- J. THE CONTRACTOR SHALL SUPERVISE, DIRECT, AND MONITOR THE WORK USING THE CONTRACTORS BEST SKILL AND ATTENTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, (UNLESS A SEQUENCE IS SPECIFIED BY THE OWNER OR CONTRACT DOCUMENTS) AND PROCEDURES, AND FOR COORDINATING ALL PORTIONS OF THE WORK.

## GENERAL DEMOLITION NOTES

1. ALL CONSTRUCTION ITEMS SHOWN DASHED ARE TO BE DEMOLISHED AND REMOVED FROM SITE U.N.O.
2. FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING ITEMS TO REMAIN OR TO BE REMOVED. EXISTING ITEMS ATTACHED TO DASHED WALLS TO BE REMOVED ARE TO BE REMOVED U.N.O. DRAWINGS SHOW AS MANY ITEMS AS POSSIBLE FOR REFERENCE ONLY AND ARE NOT INTENDED TO COMPLETELY PREPRESENT ALL EXISTING CONDITIONS IN DETAIL. OWNER TO PROVIDE A LIST OF ITEMS TO BE SALVAGED.
3. FIELD VERIFY AND VISUALLY INSPECT ALL DIMENSIONS AND EXISTING CONDITIONS FOR APPLICATION OF PROPOSED CONSTRUCTION TECHNIQUES PRIOR TO PROPOSAL SUBMITTAL AND PRIOR TO ORDERING AND CONSTRUCTING CUT MATERIAL.
4. RELAY ANY CONFLICTS DETERMINED DURING THE COURSE OF PROPOSAL PREPARATION AND CONSTRUCTION IMMEDIATELY TO THE DESIGNER IN WRITING PRIOR TO RESOLVING SAID CONFLICT.
5. ANY UTILITY SYSTEMS REQUIRED TO BE ACTIVE FOR THE USE OF THE EXISTING RESIDENCE SHALL REMAIN ACTIVE DURING THE COURSE OF THIS WORK. ANY INTERRUPTION OF SERVICES SHALL BE CLOSELY COORDINATED WITH THE OWNER.
6. SAW CUT CONCRETE FLOOR SQUARE w/BUILDING SHOWN DASHED.
7. WHERE OUTLINED IN SCOPE OR NOTED; REMOVE EXISTING FLOOR MATERIALS & BASE INCLUDING GLUE AND MASTIC DOWN TO SUB-FLOOR U.N.O. TO BE REPAIRED OR REFINISHED.
8. VERIFY PLUMBING INVERTS BEFORE INITIATING ANY WORK
9. PATCH ALL HOLES AND POINT UP ALL BRICK FOUND TO HAVE DETERIORATED MORTAR JOINTS.
10. PROTECT ALL EXISTING STRUCTURE NOT SHOWN TO BE DEMOLISHED OR REMOVED.
11. PROTECT ALL EXISTING ITEMS AND SERVICES TO REMAIN. REPLACE ANY ITEMS DAMAGED DURING CONSTRUCTION.
12. COORDINATE ALL WORK WITH WORK BY OTHERS.
13. EXISTING EXTERIOR DOORS TO REMAIN UNLESS OTHERWISE NOTED.
14. ANY ELECTRICAL WIRING OR DEVICE OR PLUMBING DISCOVERED IN PARTITION WALLS TO BE REMOVED ARE TO BE ABANDONED, TERMINATED AND CAPPED AS REQUIRED WITHOUT AFFECTING THE OPERABILITY OF ADJACENT OR NEARBY INTERCONNECTED DEVICES OR FIXTURES.

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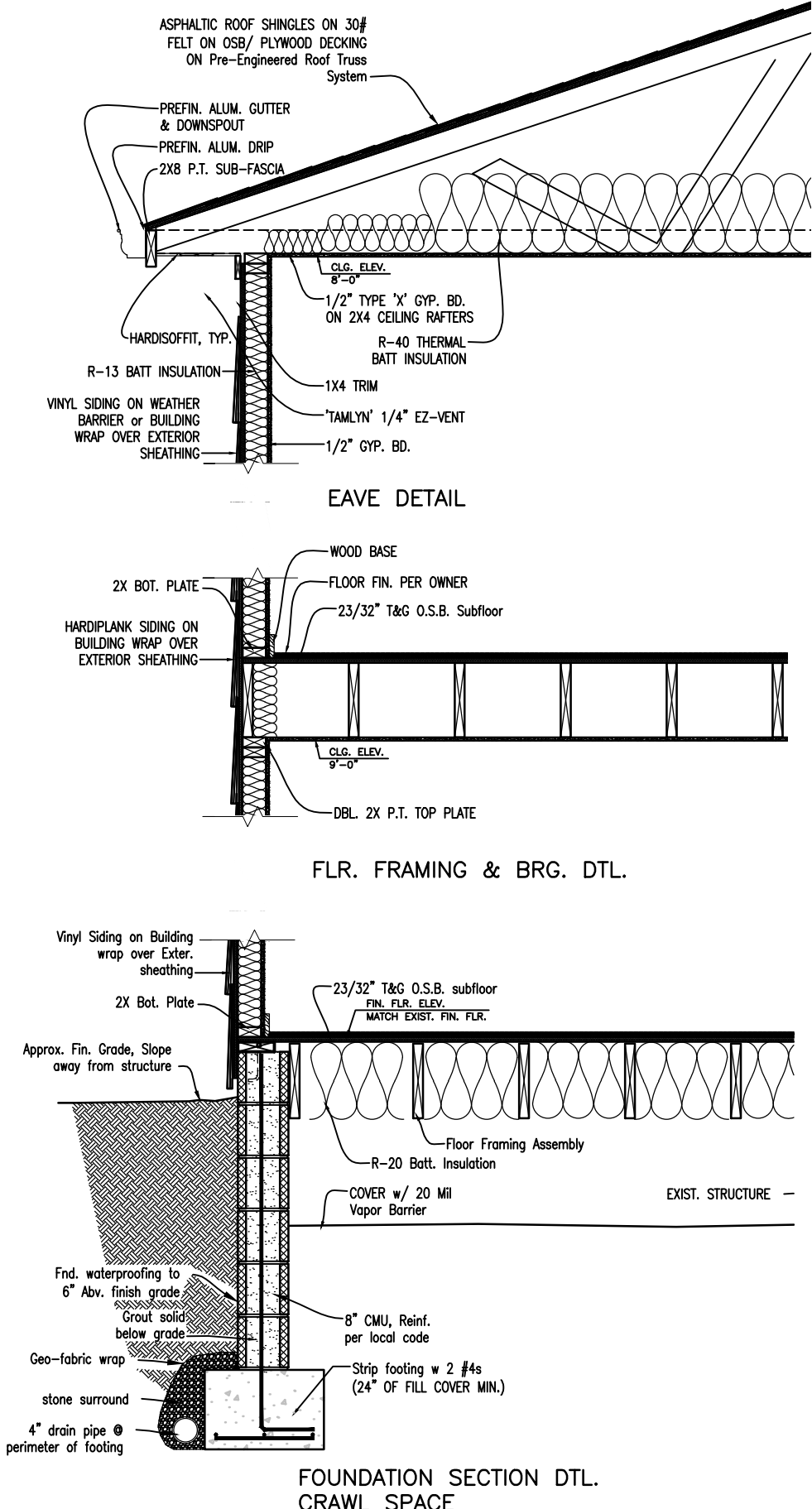
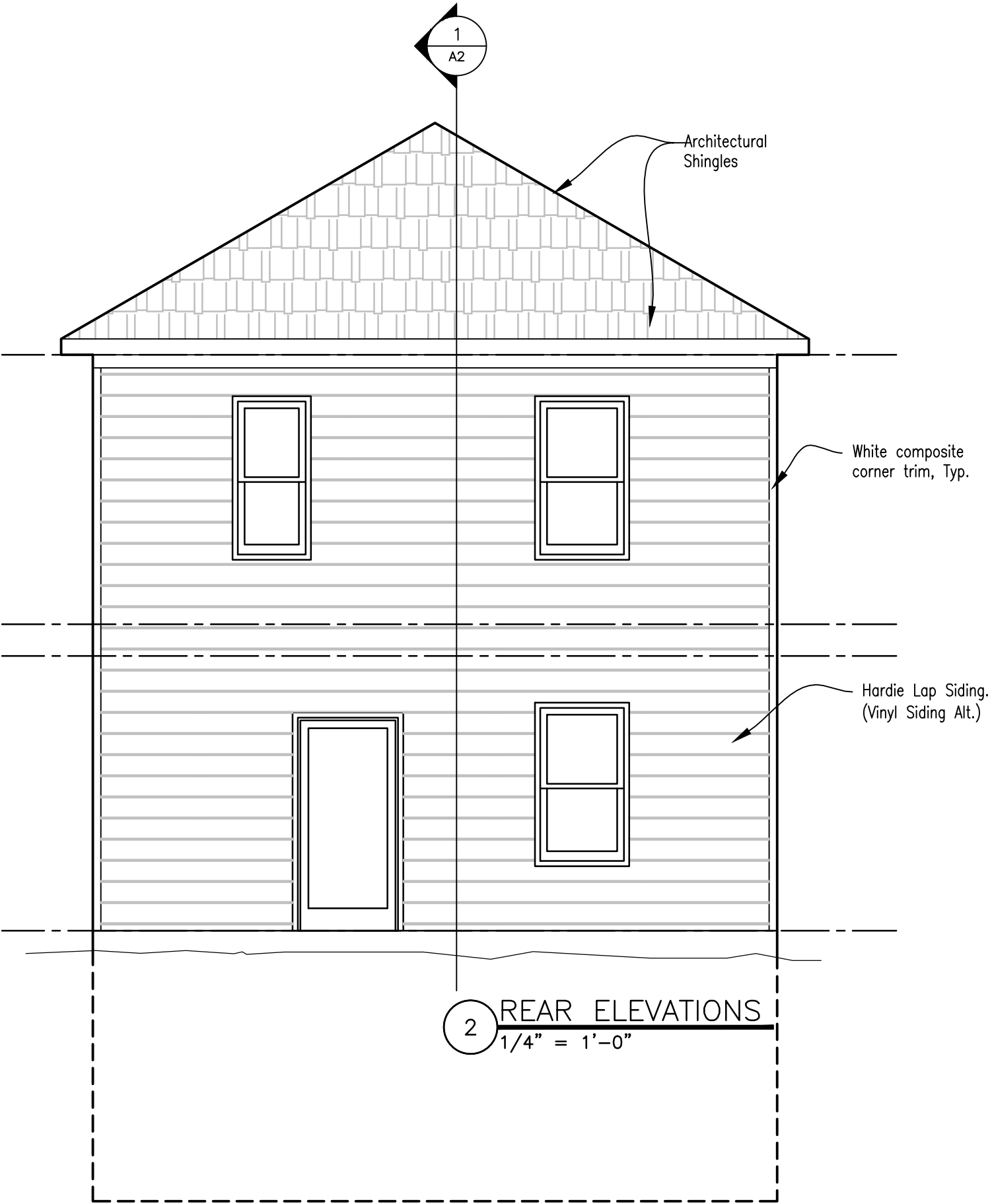
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SECOND FLOOR	1,890
TOTAL	

JOB NO.	DATE
	10/17/2022

DRAWN	SHEET
AAJ	D1



1 WALL SECTION  
1/2" = 1'-0"

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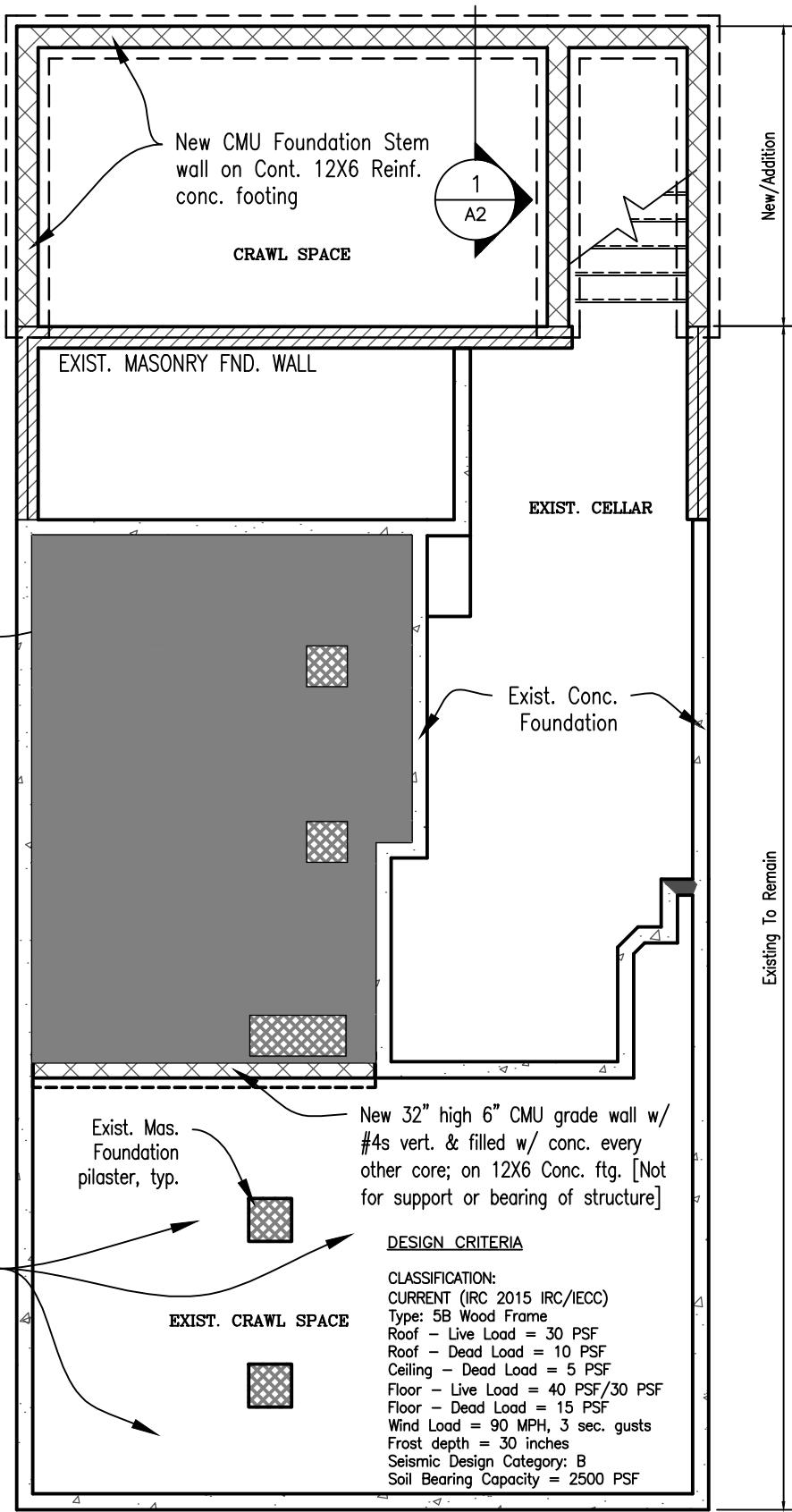


Remove dirt and fill material in this (shaded) area to achieve 48" clearance to underside of joists.

Sure up & encapsulate around base of existing masonry pilasters & ftgs. w/ reinforce poured concrete, as required.

Furnish and install crawlspace vapor barrier system, turned up on existing & new foundation walls & exist. pilasters.

Remove all debris, dirt and fill material down to lowest existing point and make level.  
Install vapor barrier over exposed dirt/soil.

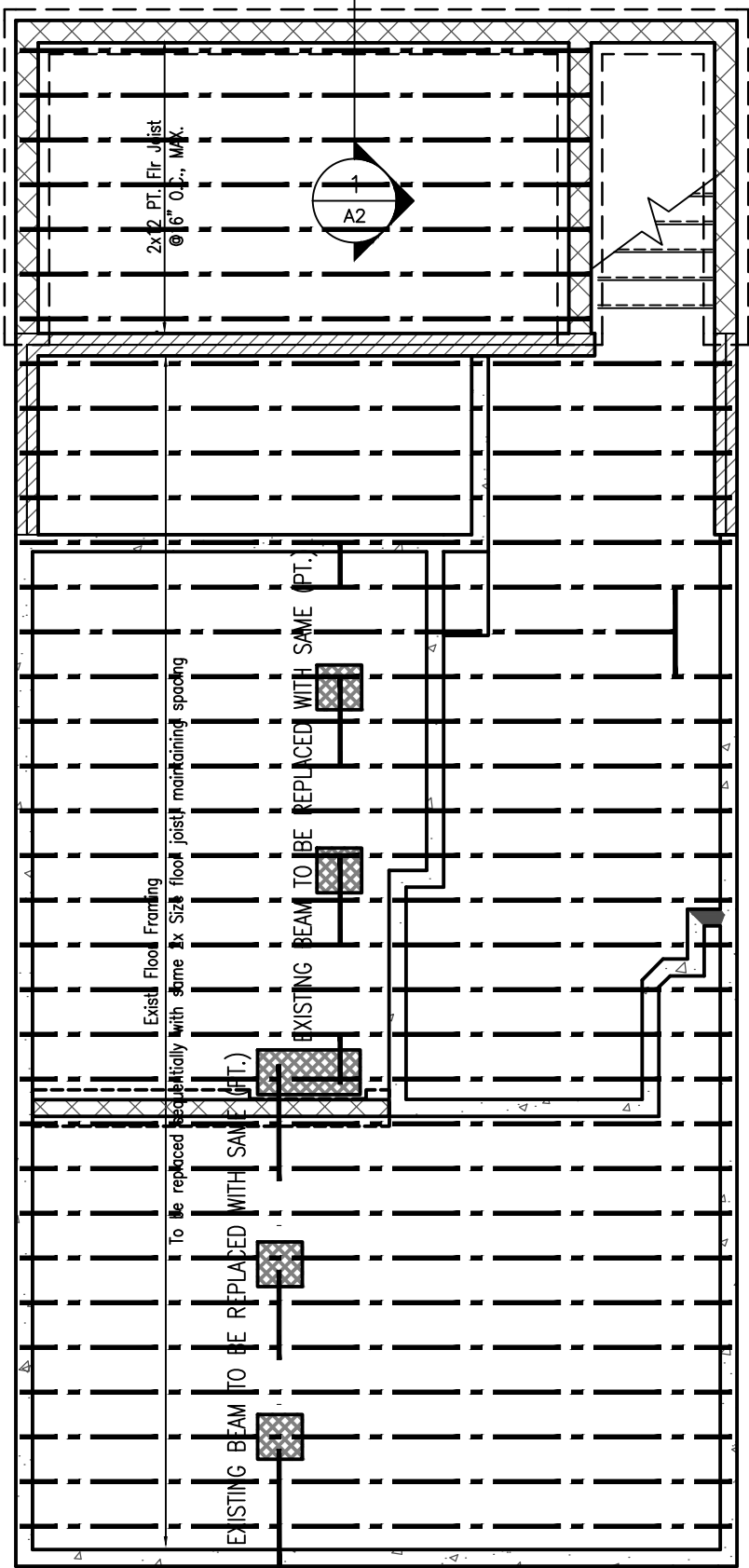


### FOUNDATION PLAN

3/16" = 1'-0"

#### DESIGN CRITERIA

CLASSIFICATION:  
CURRENT (IRC 2015 IRC/IECC)  
Type: 5B Wood Frame  
Roof - Live Load = 30 PSF  
Roof - Dead Load = 10 PSF  
Ceiling - Dead Load = 5 PSF  
Floor - Live Load = 40 PSF/30 PSF  
Floor - Dead Load = 15 PSF  
Wind Load = 90 MPH, 3 sec. gusts  
Frost depth = 30 inches  
Seismic Design Category: B  
Soil Bearing Capacity = 2500 PSF



### FIRST FLOOR FRAMING

3/16" = 1'-0"

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DRAWN	SHEET
AAJ	A3

Project Address:	3220 Brothers Pl. SE	<h2 style="text-align: center; color: red;">Water Supply Fixture Units Worksheet (MSW1)</h2> 
Square #:	5990	
Lot #:	12	
DC Water Tracking #:		
DCRA Tracking #:	B2300303	

**Predominant Supply Systems:**
☒ Flush Tank
 ☐ Flushometer Valve
 
 **Input Cells**

Fixture Type	Occupancy	Type of Supply Control	Number of Fixtures		Load Value		WSFU
Full-bath group**	Private	Flush Tank	3	X	3.60	=	10.80
	Private	Flushometer Valve	0	X	8.00	=	
Half-bath Group**	Private	Flush Tank	0	X	2.60	=	
Bathtub (with/ without shower head)	Private	Faucet	0	X	1.40	=	
	Public	Faucet	0	X	4.00	=	
Bidet	Private	Faucet	0	X	2.00	=	
Combination fixture	Private	Faucet	0	X	3.00	=	
Dishwashing machine	Private	Automatic	1	X	1.40	=	1.40
Drinking Fountain	Office, etc.	3/8" Valve	0	X	0.25	=	
Kitchen sink	Private	Faucet	1	X	1.40	=	1.40
	Commercial	Faucet	0	X	3.00	=	
Laundry tub**	Private	Faucet	0	X	1.40	=	
Lavatory sink	Private	Faucet	0	X	0.70	=	
	Public	Faucet	0	X	2.00	=	
Service sink	Public	Faucet	0	X	3.00	=	
Shower head	Private	Mixing Valve	0	X	1.40	=	
	Public	Mixing Valve	0	X	3.00	=	
Urinal**	Public	1" Flushometer Valve	0	X	10.00	=	
	Public	3/4" Flushometer Valve	0	X	5.00	=	
	Public	Flush Tank	0	X	3.00	=	
Washing machine (8 lb)	Private	Automatic	1	X	1.40	=	1.40
Washing machine (8 lb)	Public	Automatic	0	X	3.00	=	
Washing machine (15 lb)	Public	Automatic	0	X	4.00	=	
Water closet**	Private	Flush Tank	0	X	2.20	=	
	Private	Flushometer Valve	0	X	6.00	=	
	Private	Flushometer Tank	0	X	2.00	=	
	Public	Flushometer Valve	0	X	10.00	=	
	Public	Flush Tank	0	X	5.00	=	
	Public	Flushometer Tank	0	X	2.00	=	
Other			0	X	5.00	=	

<b>Total WSFU:</b>	<b>15.00</b>	
<b>Domestic Demand <sup>1</sup>:</b>	<b>17.50</b>	<b>GPM</b>

<sup>1</sup> Domestic demand is calculated as per International Plumbing Code 2012 edition.

\*\* See the definition on page 6

DC Water Use Only			
Reviewer's Name:		Date:	
		The application is:	
		Approved	
		Not Approved	
Comment:			

<b>Project Address:</b>	3220 Brothers Pl. SE	<h2 style="color: red;">Meter Sizing Worksheet (MSW1)</h2>	
<b>Square #:</b>	5990		
<b>Lot #:</b>	12		
<b>DC Water Tracking #:</b>	0		
<b>DCRA Tracking #:</b>	B2300303		

Proposed Meter Type: \_\_\_\_\_  
☒ Domestic Service Only  
☐ Combined Fire and Domestic Service

☒ One- or Two-Family Structure  
☐ Other Structure


Domestic Meter Size			
a	Total Water Supply Fixture Units (WSFU)	15.0	wsfu
b	Domestic Demand	17.5	gpm
c	Total Hose Bibs and/ or Lawn Sprinkler Demand	0.0	gpm
d	Total Continuous Mechanical Demand	0.0	gpm
e	Total Intermittent Mechanical Demand	0.0	gpm
f	Total DIM (Domestic + Irrigation + Mechanical (cont.) + Mechanical (inter.)) Demand	17.5	gpm
g	Domestic Booster Pump Proposed?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
h	<b>Pumped Demand</b>		<b>gpm</b>
i	Maximum DIM Demand (higher of g and h)	17.5	gpm
j	<b>Maximum DIM Demand in WSFU</b>	15.0	<b>wsfu</b>
k	<b>The Maximum Developed Length</b> <small>Sheet A</small>	172.8	<b>ft</b>
l	<b>Minimum Available Pressure</b> <small>Sheet A</small>	28.9	<b>psi</b>
<b>Domestic Service Pipe<sup>1</sup> Size</b>		<b>0.75</b>	<b>in</b>
<b>Domestic Distribution Pipe<sup>2</sup> Size</b>		<b>0.5</b>	<b>in</b>
<b>Domestic Meter Size**</b>		<b>0.63</b>	<b>in</b>

DIM- Domestic Irrigation Mechanical  
 SAF- System Availability Fee

<sup>1</sup>Service Pipe- The pipe from the water main to the water distribution system of the building served. The minimum service pipe size shall be 1" for new construction.

<sup>2</sup>Distribution Pipe- A pipe within the building structure from the water service pipe to the points of utilization.

<sup>3</sup>The fire service and distribution pipes shall be sized per construction code requirements or by hydraulic calculation in accordance with NFPA 13D, NFPA 13R, or NFPA 13, as applicable. The minimum service pipe size shall be 1" for new construction.

<sup>4</sup>If the designed value of the combined demand in WSFU is different from the above computed value, provide alternative computations per IPC/ IFC for the combined service line pipe size.


<sup>5</sup>The combined service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13D or NFPA 13R.

Note: If the developed length or water supply fixture units value falls outside the pipe sizing chart, this spreadsheet can not be used for the pipe sizing. The designer can provide either pipe sizing computations per IPC or he/she can use the modified version of the meter sizing worksheet.

\*\*Domestic meter size shall be computed based on the maximum DIM demand excluding fire demand. See AWWA water meter standards on Page 3 to determine domestic meter size. SAF meter size will be same as domestic meter size. The System Availability Fee (SAF) will be based on SAF meter size.

<b>Designer's Name:</b>	<b>Designer's Signature:</b>	<b>DC License #</b>
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Project Address:	3220 Brothers Pl. SE	<b>Sheet A (MSW1)</b>	
Square #:	5990		
Lot #:	12		
DC Water Tracking #:	0		
DCRA Tracking #:	B2300303		

   Input Cells

Maximum Developed Length			
The maximum developed length= (Actual length of pipe between the source of supply and the most remote fixture) X 1.2.			
		Dom./ Fire <sup>5</sup>	
a	Distance from water main to curb <sup>1</sup>	27.0	ft
b	Distance from curb to building face	24.0	ft
c	Building Length (at the longest point)	51.5	ft
d	Building Width (at the widest point)	21.5	ft
e	Building Height <sup>2</sup>	20.0	ft
f	Length of pipe between source of supply and the most remote fixture (a+b+c+d+e or user entered value) <sup>3</sup>	144.0	ft
g	The maximum developed length (value f x 1.2)	173	ft

AWWA Water Meter Standards		
Meter Size	High-Normal Flow Rate, gpm	Maximum Flow Rate, gpm
5/8" EX. ONLY (PD*)	10	20
3/4" EX. ONLY (PD*)	15	30
1" (PD*)	25	50
1-1/2" (PD*)	50	100
2" (PD*)	80	160

Source: AWWA, M22, 3rd Ed.

PD\*- Positive Displacement

Minimum Available Pressure			
Minimum available pressure = minimum static pressure available from the supply source - static pressure loss due to difference in elevations between the water supply source and the highest water supply outlet - meter loss - backflow prevention device/ assembly loss- any other loss (if any).			
		Dom./ Fire <sup>5</sup>	
h	Minimum static pressure available from the supply source <sup>4</sup>	50.0	psi
i	Static pressure loss (building height/2.31)	- 8.7	psi
j	Additional static pressure loss (if any)	- 0.0	psi
k	Meter loss <sup>6</sup>	- 10.9	psi
l	Backflow prevention device/ assembly loss <sup>6</sup>	- 1.5	psi
m	Any other loss	- 0.0	psi
n	Pressure gain due to pump (if any)	+ 0.0	psi
o	Minimum available pressure (g-h-i-j-k-l+m)	= 28.9	psi

<sup>1</sup>This number can be obtained from DC Water by filling out 'Request For Information Form (Meter Sizing Worksheet)'. The form is available on DC Water's website. This number will be negative if the water main is between the road curb and the property line.

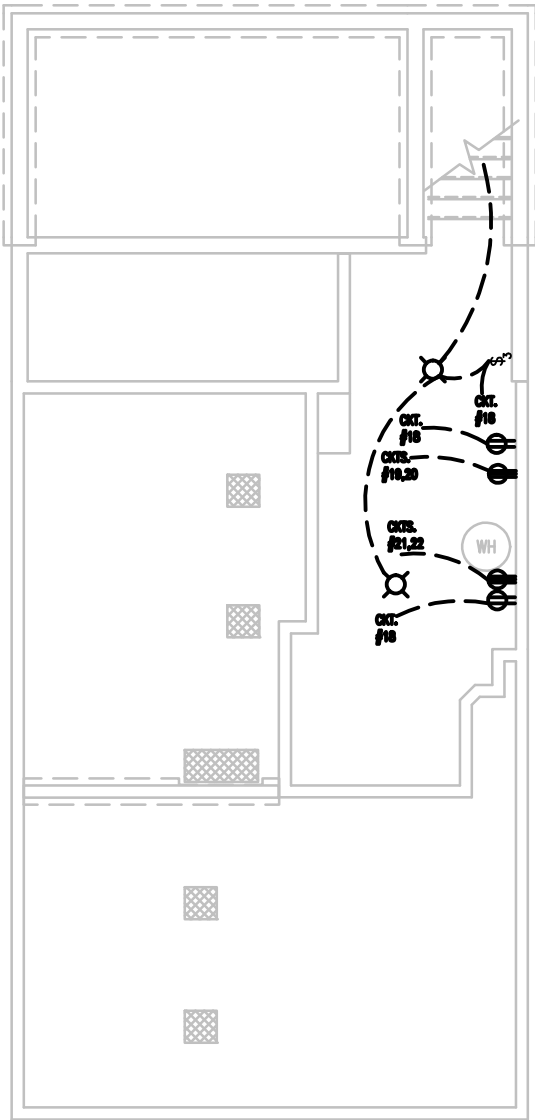
<sup>2</sup>Distance from ground to ceiling of the highest story.

<sup>3</sup>This value can be overridden if the actual length of the pipe is based on the design data.

<sup>4</sup>This number can be obtained from DC Water by filling out 'Request For Information Form (Meter Sizing Worksheet)'. The form is available on DC Water's website.

<sup>5</sup>Provide this information either for domestic service pipe or fire service pipe whichever is hydraulically more remote.

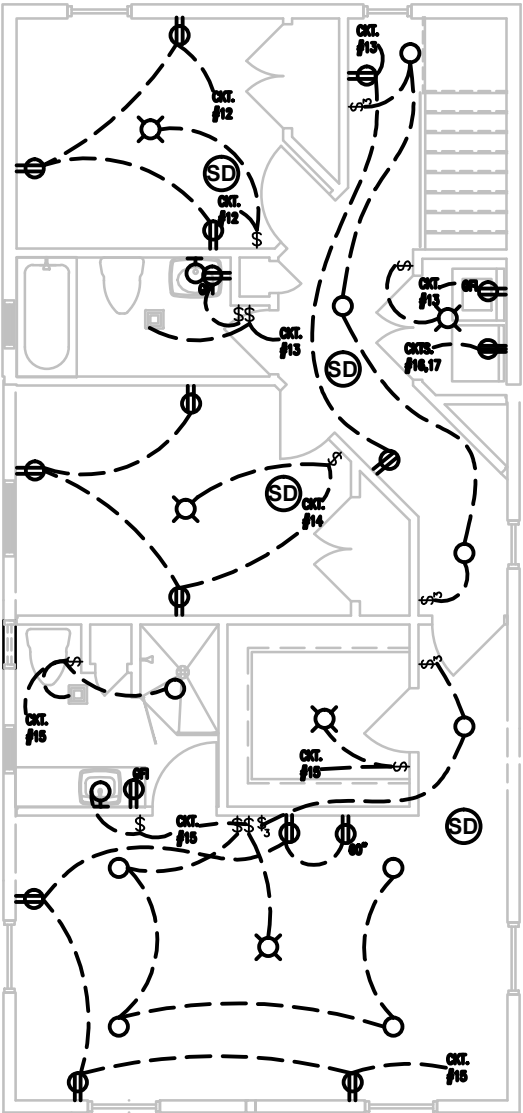
<sup>6</sup>See pressure loss values based on AWWA standards on Pages 7, 8, and 9 of this worksheet for a reference.



CELLAR LEVEL ELEC. PLAN  
SCALE: 1/8" = 1'-0"



FIRST FLOOR ELEC. PLAN  
SCALE: 1/8" = 1'-0"



SECOND FLOOR ELEC. PLAN  
SCALE: 1/8" = 1'-0"

SYMBOL LEGEND	
\$	Light switch – Standard
\$₃	3-WAY Light switch
⦿	Standard tamper resistant duplex outlet
⦿⦿	Ground fault circuit interrupter elec. outlet
⦿⦿	220V Elec. outlet
Ⓢ	Elec. Junction box for hardwire connection w/ service switch
⦿	Wall mount light fixture
⦿	Surface mount ceiling light fixture
○	Recessed Ceiling can/ downlight
SD	Smoke Detector

NOTE: Duplex receptacles are to be tamper resistant.  
All electrical devices, wiring & connection per local code

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A CUSTOM DESIGN

by A. Alphanso James

ALPHATECHTURE

• Bowie Md. • 301.485.9329 •

3220 Brothers Pl. SE

Washington DC. 20032

1.) Builder or contractor must verify all dimensions prior to proceeding with construction.

2.) Contractor must verify compliance with all local building codes in the jurisdiction where construction is to take place.

Square Footage	
FIRST FLOOR	1,935
SECOND FLOOR	1,890
TOTAL	

JOB NO.	DATE
	10/18/2022
DRAWN	SHEET
AAJ	E1