

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE CODES SHOWN ON BUILDING CODE ANALYSIS
- LIVE LOADS:**
ROOF: SNOW LOAD/LIVE LOAD 30 PSF. DEAD LOAD TOP CHORD 7 PSF
DEAD LOAD BOTTOM CHORD 10 PSF
WIND SPEED OF 90 MPH-3 SECOND GUST.
1500 MIN. PSF SOIL BEARING. CAPACITY.
- CONCRETE:** ALL CONCRETE SHALL BE MIXED & PLACED IN ACCORDANCE WITH THE A.C.I. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-77) CONCRETE SHALL ATTAIN AN ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI.
- FOOTING:** FOOTING SHALL BE PLACED ON UNDISTURBED SOIL AND SHALL EXTEND INTO THE UNDISTURBED SOIL A MINIMUM OF 1'-0" BOTTOM OF FOOTING SHALL BE 2'-6" MIN. BELOW FINISHED GRADE.
- WELDING:** ALL WELDING SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AMERICAN WELDING SOCIETY.
- REINFORCING STEEL:** REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM 615 GRADE 60.
- ALL WOOD JOIST SHALL BE TREATED FOR TERMITES.
- THE SPECIES/GRADES FOR LUMBER SHALL BE SPRUCE-PINE-FIR # 1.
- ALL NOTES ARE TYPICAL FOR SIMILAR CONDITIONS THROUGHOUT THE PLANS
- ALL FIELD CONDITIONS MUST BE PER THE ADOPTED CODE OR IF ENGINEERED PRODUCTS ARE USED MUST BE PER THE MANUFACTURER AND DOCUMENTATION MUST BE PROVIDED TO THE FIELD INSPECTOR.
- DUCTWORK SHALL BE LOCATED IN BULKHEAD AS HIGH AS POSSIBLE
- IF ANY FUEL FIRED APPLANCE IS INSTALLED IN THIS EXISTING DWELLING OWNER/CONTRACTOR SHALL INSTALL CARBON MONOXIDE ALARM ON OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS.
- CONTRACTOR AND OWNER SHALL INSTALL A WINDOW WITH CLEAR OPENING OF 5.7 SQUARE FEET AT EVERY SLEEPING AREA, (WINDOW TYPE (A)) LOCATED AT 44" AFF.

INDEX OF DRAWING

A-0	COVER SHEET
A-1	FLOOR PLANS
A-2	SECTIONS
A-3	EXISTING PLANS
A-4	DETAILS
S-1	FRAMING PLANS
E-1	SPECIFICATIONS
E-2	POWER AND LIGHTING PLAN
E-2	SCHEDULES
M-1	HVAC FLOOR PLAN
M-2	NOTES
P-1	PLUMBING FLOOR PLANS
P-2	RISER DIAGRAMS

SCOPE OF WORK

- FIRST & SECOND FLOOR ALTERATION
- 5'x33' TWO STORY ADDITION
- 4'x33' THIRD LEVEL ADDITION.
- NEW ELECTRICAL SYSTEM
- NEW HVAC SYSTEM
- NEW PLUMBING SYSTEM

SCOPE OF IEBC ALTERATION LEVEL 3

BUILDING CODE ANALYSIS

APPLICABLE CODES:	
2017 DISTRICT OF COLUMBIA BUILDING CODE 2017 ICC RESIDENTIAL CODE 2017 D.C. GREEN CONSTRUCTION CODE 2017 D.C. ENERGY CONSERVATION CODE 2017 D.C. FIRE CODE 2017 D.C. MECHANICAL CODE 2017 D.C. PLUMBING CODE 2017 ICC EXISTING BUILDING CODE 2017 ICC FUEL GAS CODE 2011 NATIONAL ELECTRICAL CODE 2017 ICC FIRE CODE	
IBC-2012 USE & OCCUPANCY CLASSIFICATION	R-2
NFPA 101 TENANT OCCUPANCY CLASSIFICATION	RESIDENTIAL USE (APARTMENT BUILDING)
SEPARATED MIXED USE PER IBC/NFPA	N
CONSTRUCTION TYPE	V-A
BLDG. NUMBER OF STORIES ABOVE GRADE (W/BASEMENT).	3
HIGH RISE	NO
FIRE ALARM SYSTEM	Y
WULY SPRINKLED	YES
TOTAL BUILDING S.F.:	
THIRD FLOOR	UNIT 5 - 652 SF UNIT 6 - 652 SF
SECOND FLOOR	UNIT 3 - 658 SF UNIT 5 - 658 SF
FIRST FLOOR	UNIT 1 - 684 SF UNIT 2 - 684 SF
TOTAL	3985F
ALTERATION AND ADDITION PER IEBC	

SYMBOLS AND ABBREVIATIONS

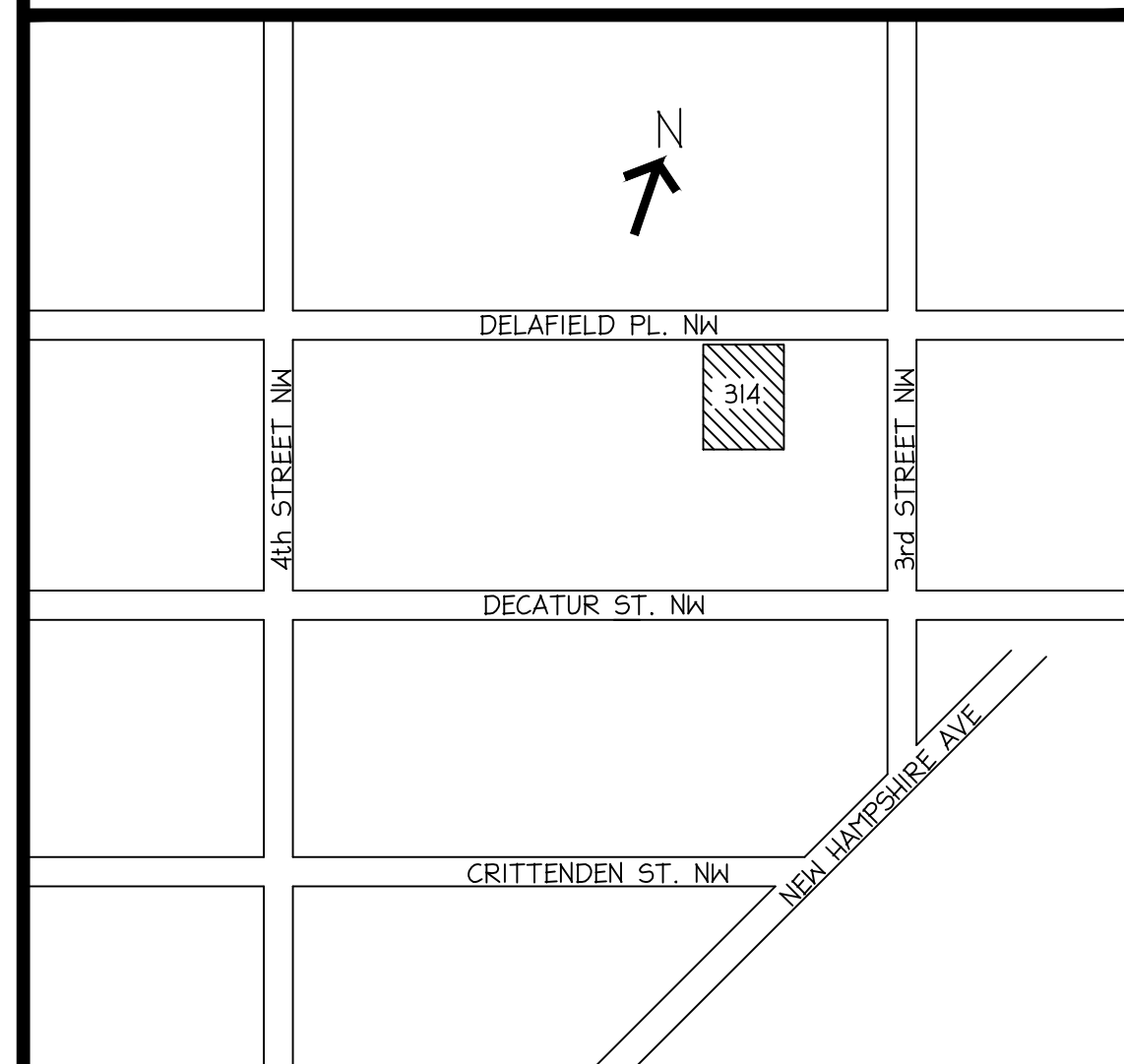
	INTERIOR ELEVATION REFERENCE
	WINDOW & DOOR DESIGNATION
	FLOOR LEVEL
	PARTITION OR WALL TYPE
	WOODEN 2"x4" STUDS
	BAT INSUL. OR SOUND ATTENUATION BLANKET
	GYPSTUM BOARD WALL
	EARTH
	EXISTING CONSTRUCTION TO REMAIN
	EXISTING FIXTURE OR WALL TO REMOVE
	NEW CONSTRUCTION
	SMOKE DETECTOR/CARBON MONOXIDE
	FAN No. 1
	TYPICAL WALL BRACE PANEL (WBL-X)

@ AHJ
A.F.F.
A.F.G.
ABV.
APPROX.
BLDG.
C.M.U.
CLG.
CL.
CONC.
CU-
CONST.
CONT.
D/M
DEMOL
DIA.
DIM.
DN.
DWG.
EA.
ELEV.
ELECT.
EQUIP.
EXIST.
FIN.
FIXT
FLR.
HDR
SF
PWDR

AT
AIR HANDLING UNIT
ABOVE FINISHED FLOOR
ABOVE FINISHED GRADE
ABOVE
APPROXIMATE
BUILDING
CONCRETE MASONRY UNIT
CEILING
CLOSET
CONCRETE
CONDENSING UNIT
CONSTRUCTION
CONTINUOUS
DISHWASHER
DEMOLITION
DIAMETER
DIMENSION
DOWN
DRAWING
EACH
ELEVATION
ELECTRICAL
EQUIPMENT
EXISTING
FINISH
FIXTURE
FLOOR
HEADER
SQUARE FEET
POWDER

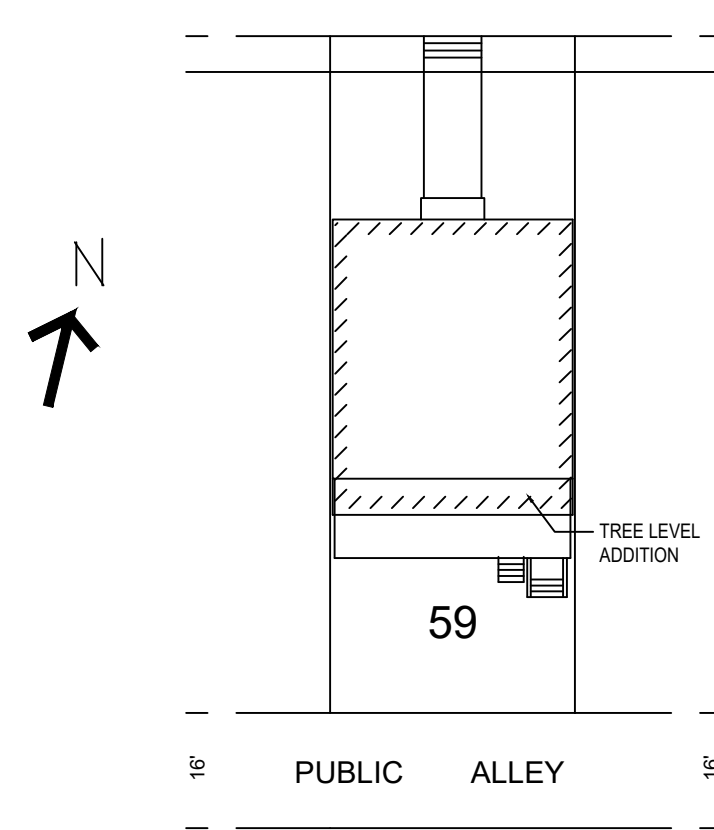
GYP. BD. GYPSTUM BOARD
H.M. HOLLOW METAL
HGT. HEIGHT
HORIZ. HORIZONTAL
IN. INCH
INSUL. INSULATION
INT. INTERIOR
J.B. JUNCTION BOX
KIT. KITCHEN
LAV. LAVATORY

VICINITY MAP



KEY PLAN

DELAFIELD PLACE, N.W.



CABIESES APARTMENTS ADDITION
314 DELAFIELD STREET NW.
WASHINGTON, DC. 20011

COVER SHEET

TITLE:

DWG #

A-0

ENERGY REVIEW NOTES

- R401.2 THIS PROJECT SHALL COMPLY WITH SECTIONS 401 THRU R405 SECTION R406 2017 RESIDENTIAL ENERGY CODE.
- R401.3 A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON THE ELECTRICAL DISTRIBUTION PANEL BY BUILDER. THE CERTIFICATE SHALL LIST ALL THE R-VALUES OF INSULATION IN ATTIC, WALLS, FLR., U FACTORS FOR FENESTRATION & THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION AND THE RESULTS OF TESTS FOR AIR LEAKAGE AND DUCT SYSTEM. FOR ADDITIONAL INFO, SEE 2013 DC ENERGY CODE.
- R402.4 AIR LEAKAGE THIS THERMAL BUILDING ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE W/ THE REQUIREMENTS OF SECTIONS R402.4.1 THRU R402.4.5.
 - R402.4.1.1 INSTALLATION. THE COMPONENTS OF THE BUILDING THERMAL ENVELOPE AS LISTED IN TABLE R402.4.1.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE MFR'S INSTRUCTIONS AND THE CRITERIA LISTED IN TABLE R402.4.1.1 THIRD PARTY SHALL INSPECT AND VERIFY COMPLIANCE. (SEE SCHEDULE AT RIGHT).
 - R402.4.1.2 TESTING SHALL COMPLY WITH TABLE R402.4.1.2 TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E779 OR ASTM E1827 AND REPORTED AT PRESSURE OF 0.2" W.G. TESTING SHALL BE DONE BY THIRD PARTY FOR ADDITIONAL SEE 2017 ENERGY CODE.
 - R402.4.3. FENESTRATION AIR LEAKAGE. WINDOWS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER S.F. & SWING DOORS NO MORE THAN 0.5 CFM PER S.F. WHEN TESTED ACCORDING TO NFRC 400 OR AAMA/VKD14/CSA 101/1.5.2/A440 BY AN ACCREDITED INDEPENDENT LABORATORY AND LISTED AND LABELED BY THE MFR.
 - R402.5 MAXIMUM FENESTRATION U FACTOR AND SHGC. THE AREA WEIGHTED AVERAGE MAXIMUM FENESTRATION U FACTOR PERMITTED USING TRADE-OFFS FROM SECTION R402.1.5 OR SHALL BE 0.40 FOR VERTICAL FENESTRATION..
 - R403.1. CONTROLS - ONE THERMOSTAT SHALL BE PROVIDED FOR THIS HEATING & COOLING SYSTEM.
 - R403.1.1. PROGRAMMABLE THERMOSTAT - SEE NOTE 12 ON M01 ENERGY REVIEW NOTES.
 - R403.3.5. BUILDING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.
 - R403.9. SNOW MELTING SYSTEM CONTROLS MUST BE SUPPLIED THROUGH ENERGY SERVICE TO THE BUILDING, SHALL INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEM WHEN THE PAVEMENT TEMPERATURE IS ABOVE 50°F. & NO PRECIPITATION IS FALLING & AUTOMATIC OR MANUAL CONTROL THAT WILL ALLOW SHUT-OFF WHEN OUTDOOR TEMPERATURE IS ABOVE 40°F.

DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED MPH	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGED			WINTER DESIGN TEMP.	ICE SHIELD UNDER LAYMENT REQUIRED	FLOOD HAZARD	AIR FZ. INDEX	MEAN ANNUAL TEMP.
			WEATHERING	FROST LINE TEMP.	TERMITE					
30 PSF	110 MPH	B	SEVERE	30 IN.	MODERATE TO HEAVY	15° F	YES	JULY 2, 1979	300	50° F

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS

USE	LIVE LOAD
ATTIC WITHOUT STORAGE	10 PSF
GROUND SNOW LOAD	20 PSF
JOIST-SLEEPING AREAS LL	30 PSF
JOIST-NONSLEEPING AREAS LL	40 PSF
ROOMS OTHER THAN SLEEPING ROOMS	40
STAIRS	40
SLEEPING ROOMS	30

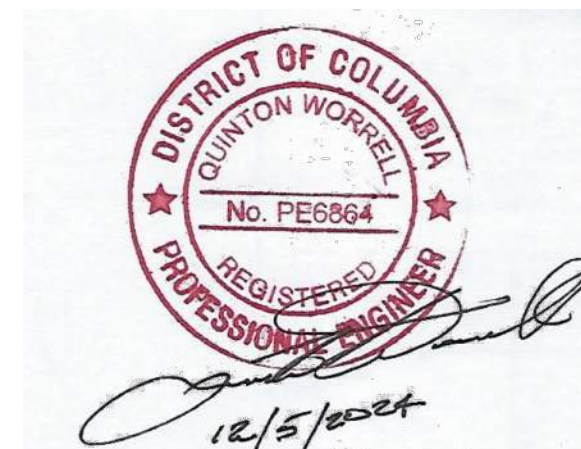
TABLE R402.1.4 U FACTORS

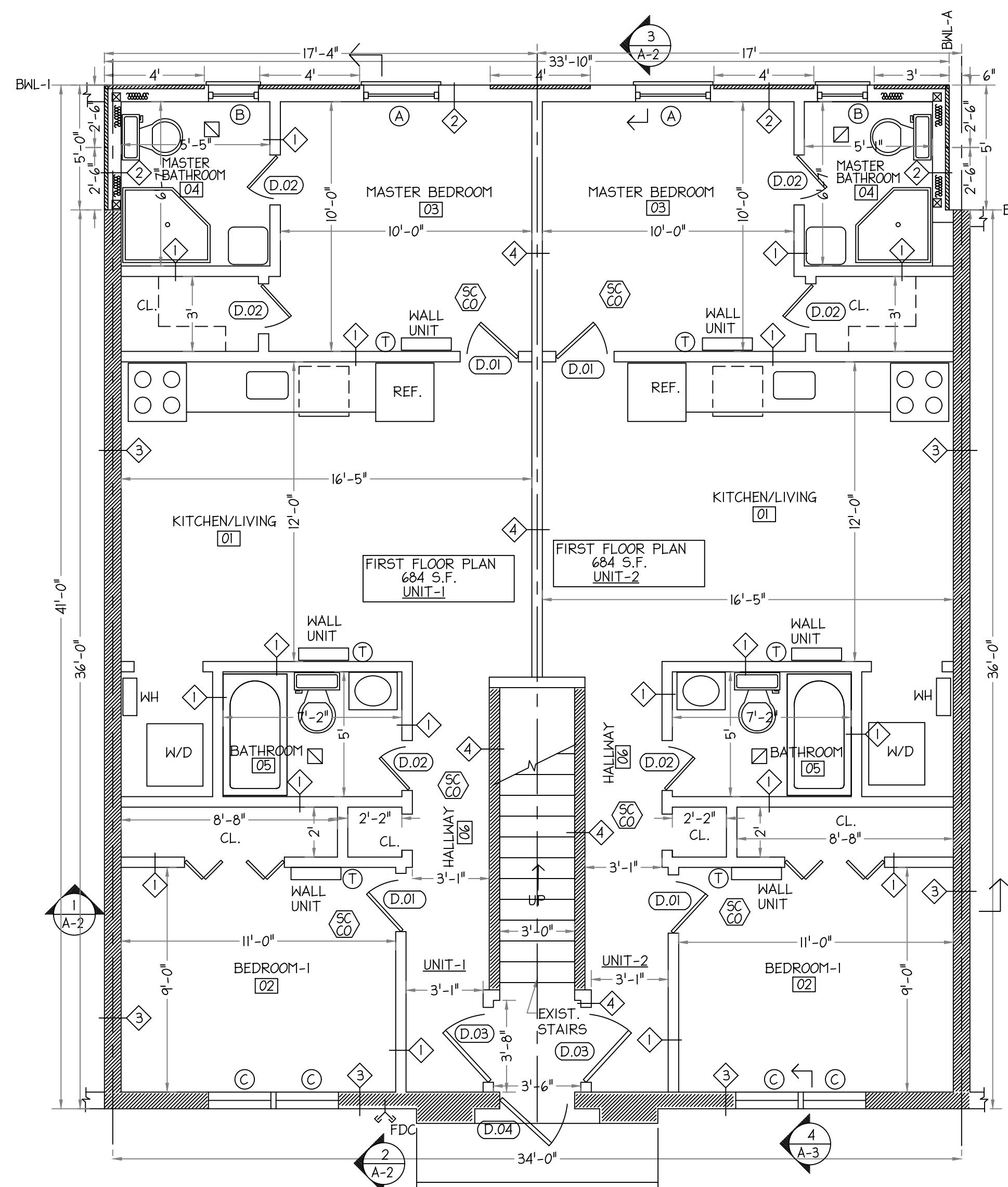
CLIMATE ZONE	FENESTRATION U FACTOR	CLG. U FACTOR	WALL FRAME U FACTOR	FLOOR U FACTOR	BSMINT. WALL U FACTOR
4	0.30	0.026	0.045	0.033	0.045

INSULATION & FENESTRATION BY COMPONENT 402.1

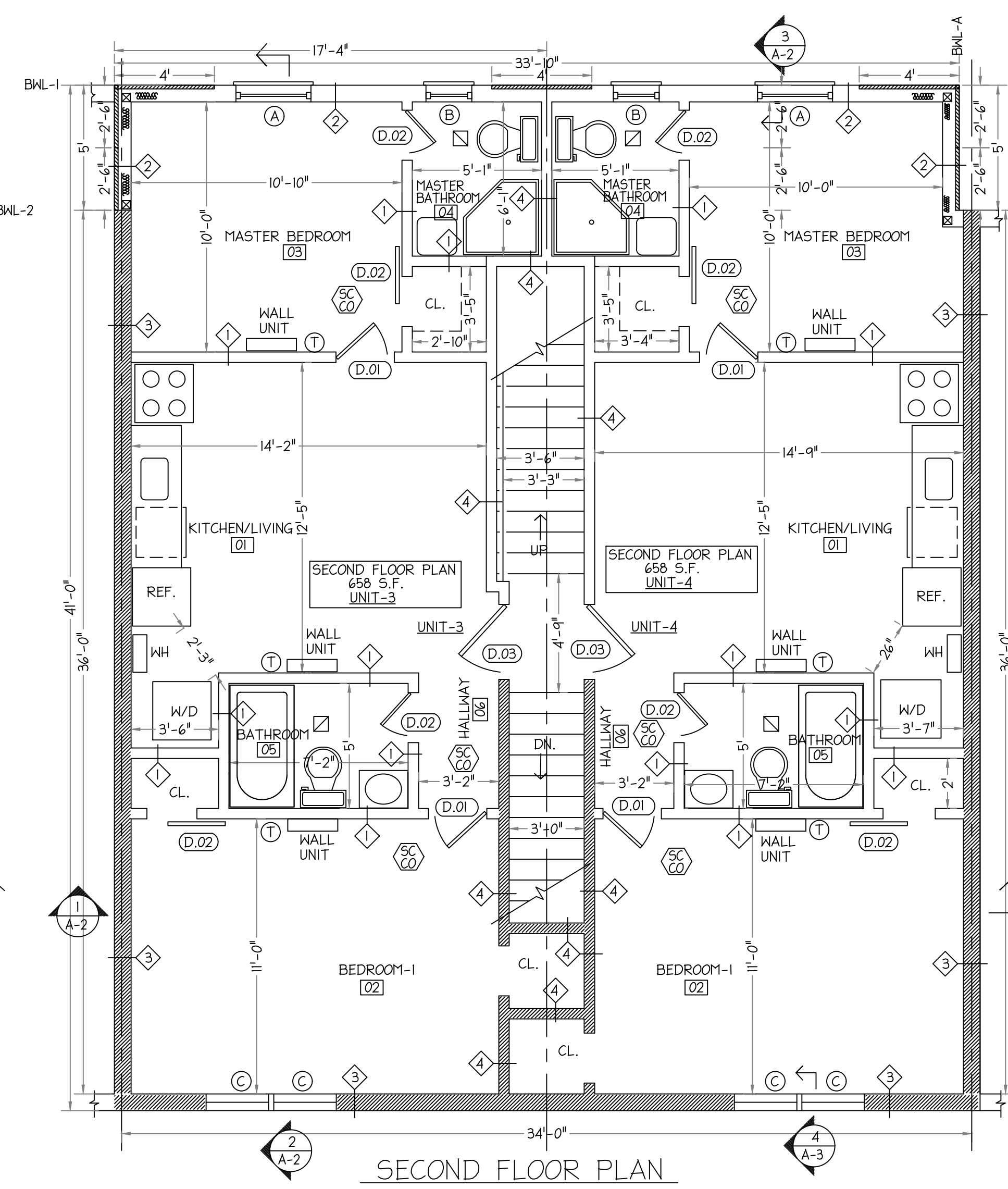
2017 ECC						
CLIMATE ZONE	FENESTRATION U-FACTOR	GLAZED FENESTRATION SHGC	BSMINT. WALL R-VALUE	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	FLOOR FRAME R-VALUE
4A	0.32	0.40	13 CAVITY	49	20 OR 13+5	R-13 IN CAVITY + R-10 CONTINUOUS EXTERIOR

- U-FACTORS OF FENESTRATION PRODUCTS ARE DETERMINED IN ACCORDANCE WITH THE NFRC OR THE DEFAULT TABLE VALUES.
- SHGC FACTORS OF FENESTRATION PRODUCTS ARE DETERMINED IN ACCORDANCE NFRC 400.
- FENESTRATION LISTED ND LABELED DOES NOT EXCEED CODE LIMITS PER WITH THE NFRC OR THE DEFAULT TABLE VALUES.

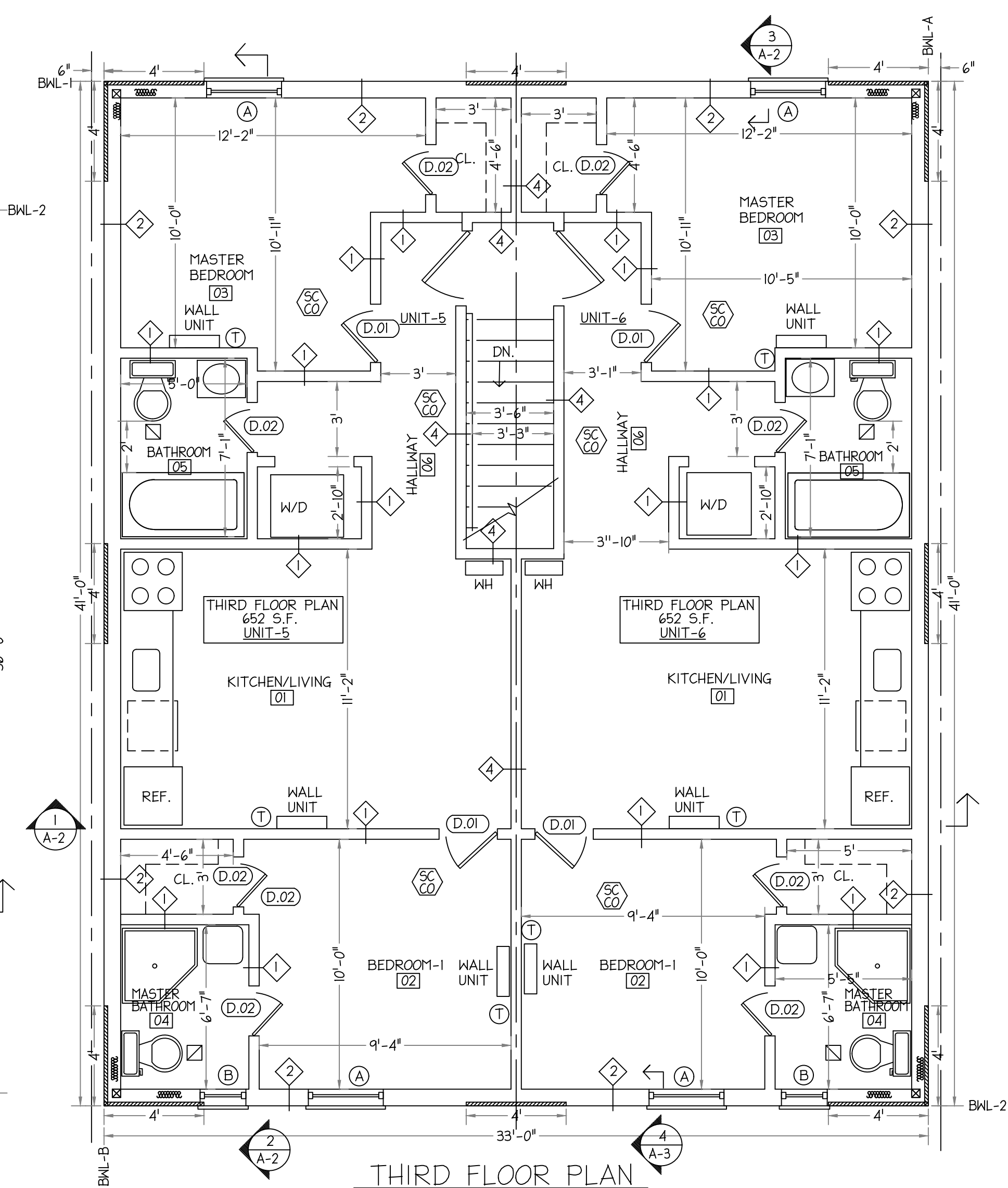




FIRST FLOOR PLAN
1/4"=1'-0"



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



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

WINDOW SCHEDULE			
<p>2. TEMPER GLASS SHALL BE PROVIDED IN WINDOWS & DOOR PANELS WHERE REQUIRED BY ALL APPLICABLE CODES.</p> <p>3. ONE INCH THICK INSULATION GLASS UNITS SHALL BE USED FOR GLASSING.</p> <p>4. WINDOW DESIGN BASED ON "AMERICAN CRAFTSMAN" DOUBLE PANE WITH LOW-E VINYL FRAME OVER HUNG OR EQUAL. (SEE SPECS.)</p> <p>5. U-FACTOR 0.38 PER TABLE C402.3 IECC 2012 CLIMATE ZONE 4 SHGC ORIENTATION SOUTH & EAST 0.40.</p> <p>6. PER TABLE C402.4.3 MAX. AIR LEAKAGE RATE 0.20 (CFM/SF) TEST PROCEDURE AAMA/WDMA/ OR NFRC 400.</p> <p>7. NEW WINDOWS REQUIRE TO BE INSTALLED WITH PROPER INSULATION AND CAULK SEALING OPENINGS PER C402.4.1.1.</p>			

DOOR SCHEDULE UNITS 1 & 2							
DOOR NUMBER	ROOM NAME	WIDTH	HEIGHT	THICK	DOOR MATERIAL	HARDWARE	FIRE RATING
(D.01)	BEDROOM-1 [02] MASTER BEDROOM [03]	2'-4"	7'-0"	1-3/4"	WOOD	HINGES, FLR. WOOD FRAME. DOOR STOP PRIVACY SET DOOR KNOBS	N/A
(D.02)	BATHROOM [05] MASTER BATHROOM [04] CLOSET	2'-0"	7'-0"	1-3/4"	WOOD	HINGES, FLR. WOOD FRAME. DOOR STOP DOOR KNOBS PRIVACY SET	N/A
(D.03)	HALLWAY [06] (ENTRANCE)	3'-0"	7'-0"	1-3/4"	WOOD	HINGES, FLR. WOOD FRAME. DOOR STOP DOOR KNOBS PRIVACY SET	- RODENT PROOF
(D.04)	MAIN ENTRANCE	3'-0"	7'-0"	1-3/4"	WOOD	HINGES, FLR. WOOD FRAME. DOOR STOP DOOR KNOBS PRIVACY SET CLOSER PANIC HARDWARE	2-HR - RODENT PROOF - EXIST.

BRACE WALL PANEL SCHEDULE									
WIND SPEED 115 MPH-THIRD FLOOR									
BRACE LINE #	WALL LINE SPACING	MIN. LENGHT OF BRACING PANEL	PROPOSED TOT. LENGHT OF PANEL	NOMINAL PANEL THICKNESS	WALL STUD SPACING	NAIL SIZE/SPACING			REMARKS
						EDGES INCH	FIELD INCH	SIZE	
WBL-1	41'-0"	7.5	12.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-2	41'-0"	7.5	12.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-A	33'-0"	6.0	12.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-B	33'-0"	6.0	12.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WIND SPEED 115 MPH-SECOND FLOOR									
WBL-1	5'-0"	3.5	5.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-2	5'-0"	3.5	5.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-A	33'-0"	11.5	12.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WIND SPEED 115 MPH-FIRST FLOOR									
WBL-1	5'-0"	5.0	6.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-2	5'-0"	5.0	6.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP
WBL-A	33'-0"	17.0	19.0	3/8"	16"	6	12	8d COMMON	METHOD CS-WSP

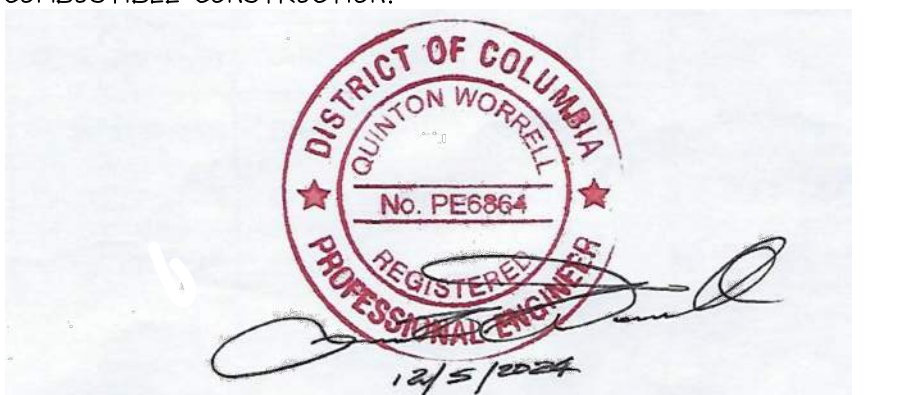
BRACING WALL PANEL NOTES

IBC 2017 BRACE WALL NOTE
2308.9.3 BRACING. BRACED WALL LINES SHALL CONSIST OF BRACED WALL PANELS THAT MEET THE REQUIREMENTS FOR LOCATIONS TYPE AND AMOUNT OF BRACING AS SHOWN IN FIGURE 2308.9.3 SPECIFIED IN TABLE 2308.9.3(1) AND ARE IN LINE OR OFFSET FROM EACH OTHER BY NO MORE THAN 4 FEET. BRACED WALL PANELS SHALL START NOT MORE THAN 12 HALF FEET FROM EACH END OF A BRACED WALL LINE. BRACED ARE SHOWN IN A001 AND S001 DRAWINGS AND CONSTRUCTED BY THE FOLLOWING METHOD.
WOOD STRUCTURAL PANEL SHEATHING WITH A THICKNESS NOT LES THAN 3/8 INCH FOR 16 INCH STUD SPACING

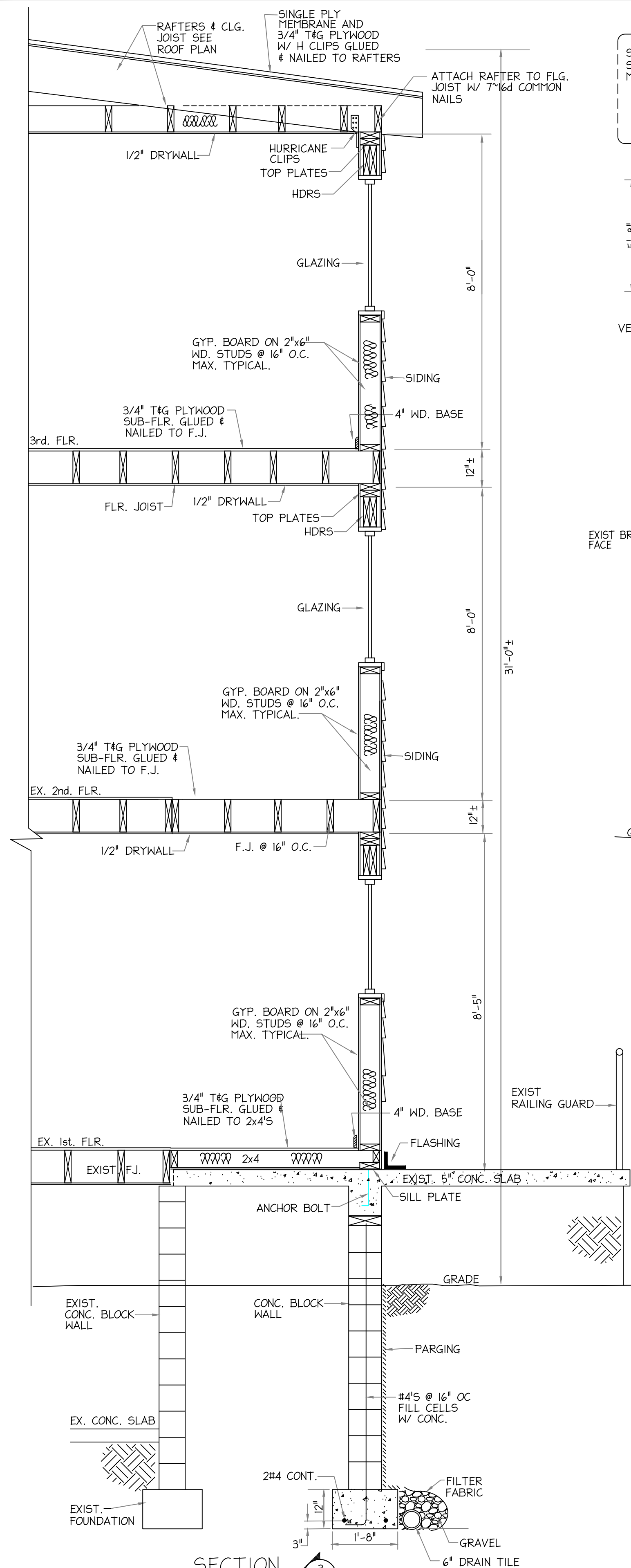
ROOM FINISH SCHEDULE UNITS 1 THRU 6									
RMT. No.	ROOM NAME	FLOOR	BASE		WALLS		CEILING		WALL & CEILING FINISH CLASS
			MATL.	HT.	MATL.	FIN.	MATL.	FIN.	
[01]	KITCHEN/LIVING	HARDWOOD	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C
[02]	BEDROOM-1	HARDWOOD	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C
[03]	MASTER BEDROOM	HARDWOOD	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C
[04]	MASTER BATHROOM	CERAMIC TILE	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C
[05]	BATHROOM	CERAMIC TILE	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C
[06]	HALLWAY	HARDWOOD	WOOD	4"	GWB	PAINTED	GWB	PAINTED	8'-0" A, B OR C

GENERAL NOTES

- DIMENSIONS:
- VERIFY DIMENSIONS, GRADES, BOUNDARIES AND CONSTRUCTION BEFORE PROCEEDING WITH CONSTRUCTION. IMMEDIATELY REPORT ANY DISCREPANCIES TO ARCHITECT.
 - FIRE RATED WALLS - DIMENSIONS INDICATED ON PLANS ARE TO FACE OF STUDS, TO CONCRETE WALLS AND / OR TO CMU WALLS.
 - DIMENSIONS - TYPICAL DRAWINGS: DIMENSIONS, NOTES, FINISHES AND FIXTURES INDICATED ON TYPICAL PLANS, SECTIONS OR DETAILS SHALL APPLY TO SIMILAR, SYMMETRICAL OR OPPOSITE PLANS, SECTIONS OR DETAILS.
 - MATERIALS - MATERIAL AND WORK SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS. VERIFY THAT SUBSTITUTIONS COMPLY WITH APPLICABLE CODES AND REGULATIONS.
 - PROVIDE ACCESS PANELS AT CEILING AND WALLS AS PER MECHANICAL, PLUMBING, ELECTRICAL, DRAWINGS. ACCESS PANELS SHALL HAVE SAME RATING AS WALL OR CEILING IN WHICH THEY ARE LOCATED.
 - GUARD AND RAIL HEIGHTS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS.
 - INTERIOR FINISHES SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS.
 - FINISH CLOSETS (FLOORS, BASE, WALLS, TRIM AND CEILINGS) TO MATCH ADJOINING ROOMS OR AREAS. PAINT EXPOSED WOOD.
 - CERAMIC TILE. INSTALL BY THINSET METHOD UNLESS OTHERWISE INDICATED. PROVIDE WATER RESISTANT GYPSUM BOARD BEHIND CERAMIC WALL TILE. INSTALL BY MORTAR METHOD WHERE INDICATED OR SPECIFIED.
 - RESILIENT FLOOR OR TILE APPLIED ON CONCRETE. PROVIDE WATER RESISTANT GYPSUM BOARD BEHIND CERAMIC WALL TILE.
 - INTERIOR PAINTING.
 - PAINT SHALL BE FLAT FINISH AT OFFICE AND HALLWAYS.
 - PAINT SHALL BE SEMI-GLOSS FINISH AT BATHROOMS, KITCHEN, COOKING ROOMS, MECHANICAL AND ELECTRICAL ROOMS, PUBLIC AREAS, DOORS, AND TRIM (U.N.O.).
 - PROVIDE FIRE BLOCKING EVERY TEN FEET HORIZONTALLY AND VERTICALLY IN CONCEALED COMBUSTIBLE CONSTRUCTION.

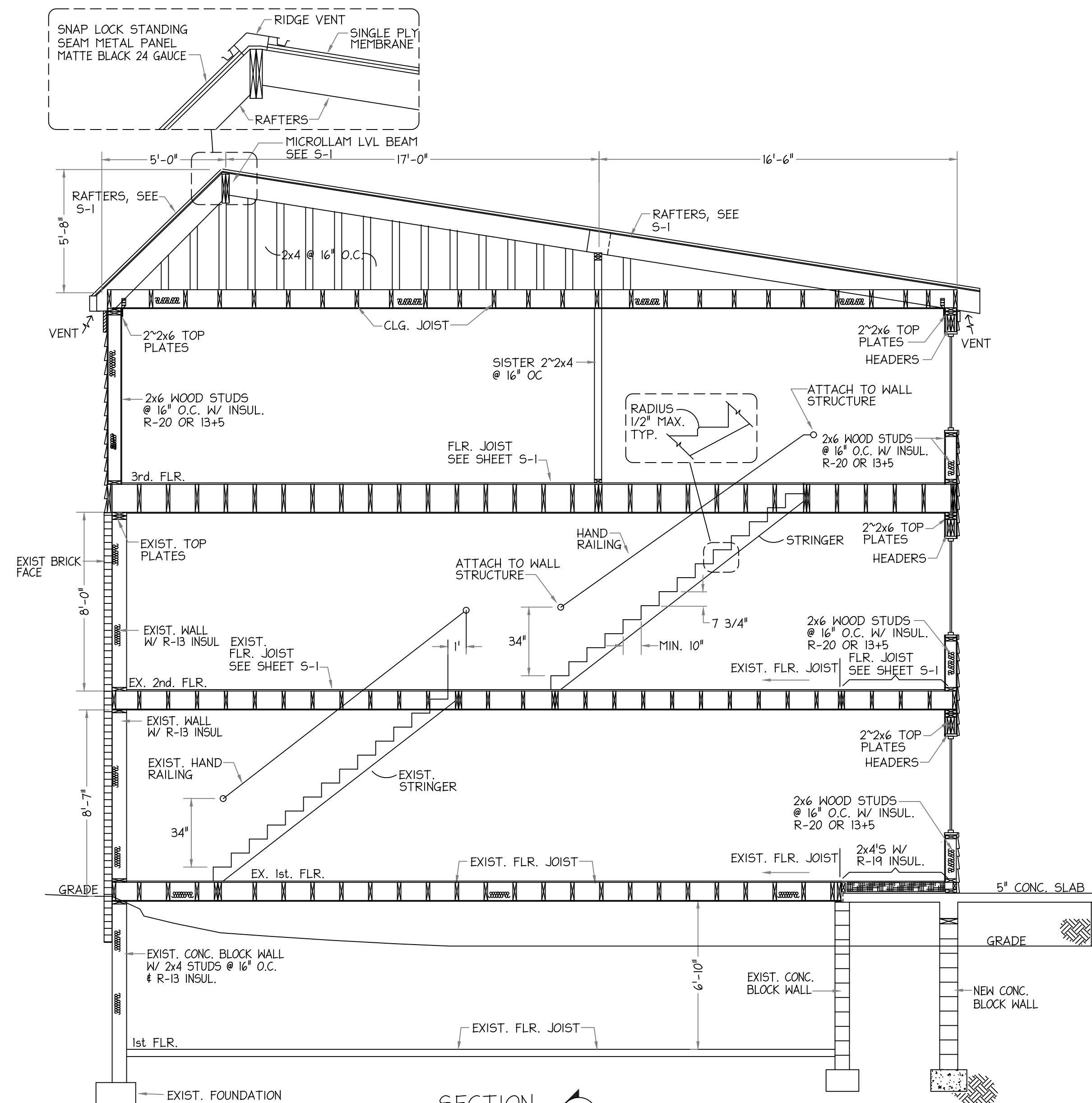


SCALE:	AS NOTED	CABIESES APARTMENTS - ADDITION 314 DELAFIELD PLACE NW WASHINGTON, DC. 20011	DRAWN BY: F.C.
DATE:	12-03-2024		DWG #
FLOOR PLANS			A-1



FOUNDATION WALL NOTES

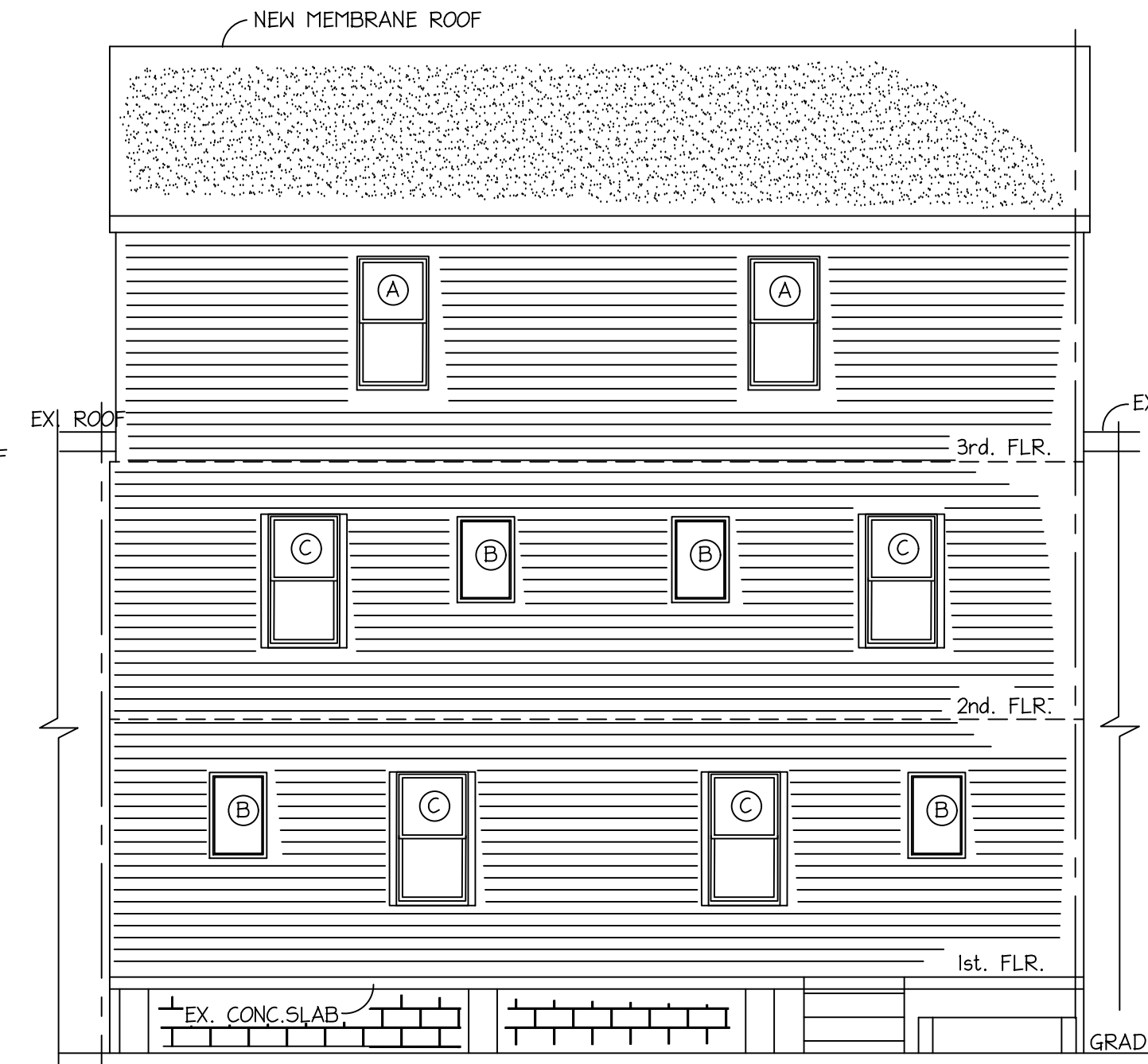
- DUOWALL HORIZONTAL REINFORCEMENT SHALL BE APPLIED TO EACH COURSE OF FOUNDATION WALL.
- ALL MASONRY WALL DESIGN SHALL COMPLY WITH ACI 530-02/TMS 402/02 CHAPTER 1, 2 AND 3 AND FOR MIN. 60 PCF. LATERAL SOIL PRESSURE AND SURCHARGES.
- VERTICAL STEEL REINFORCEMENT REBAR SHALL BE ASTM A615 GRADE 60.
- CELLS WITH VERTICAL REINFORCEMENT SHALL BE FILLED WITH GROUT.
- SOIL BEARING PRESSURE 1500 PSF.



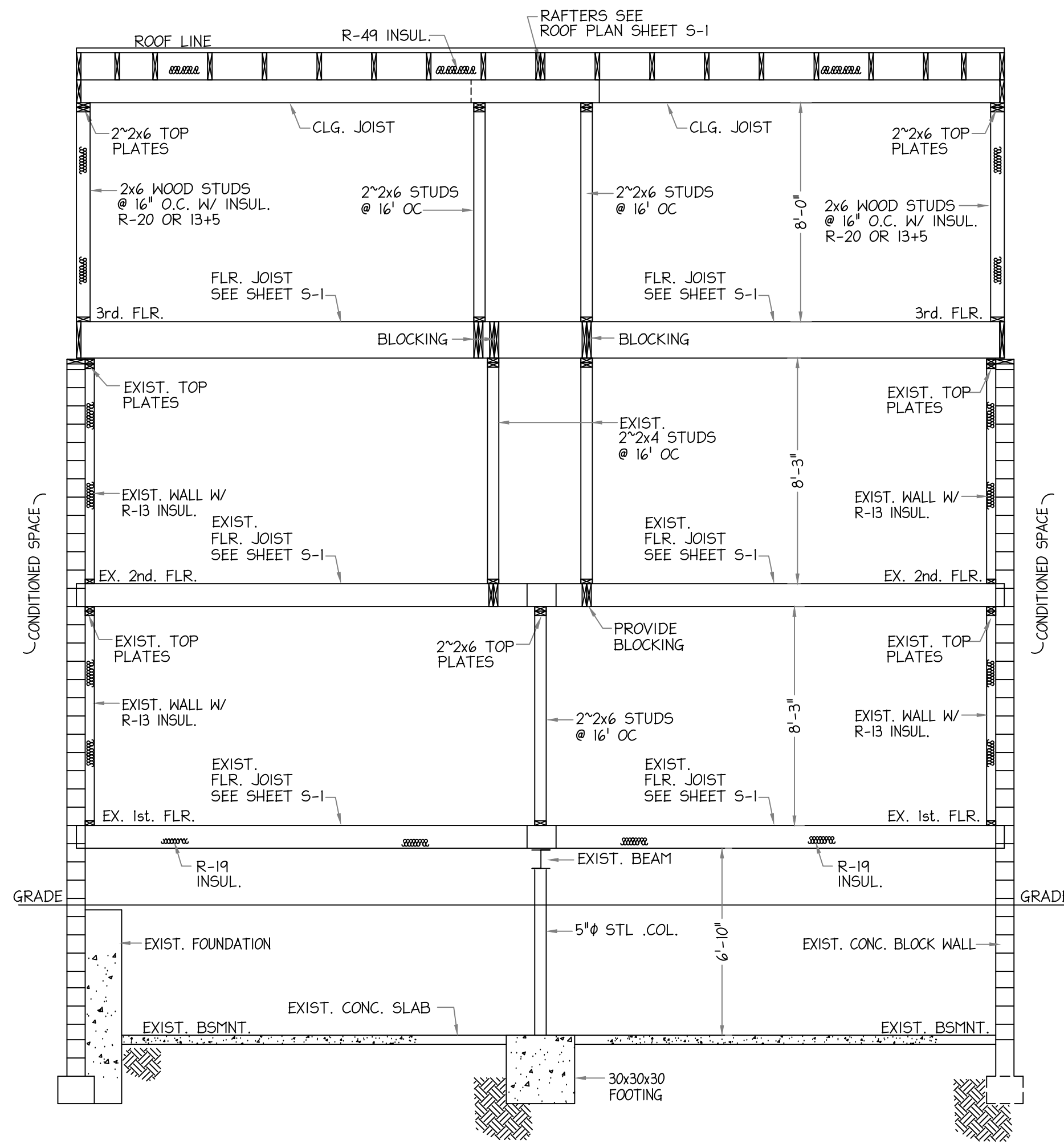
SECTION 2 SCALE: 1/4"=1'-0"



NORTH ELEVATION 3/16"=1'-0"



SOUTH ELEVATION 3/16"=1'-0"

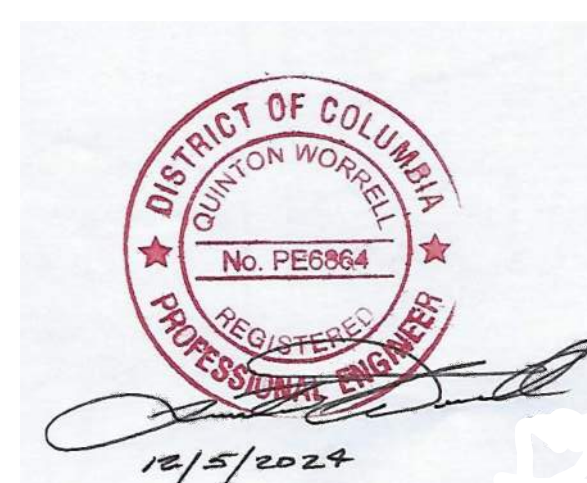
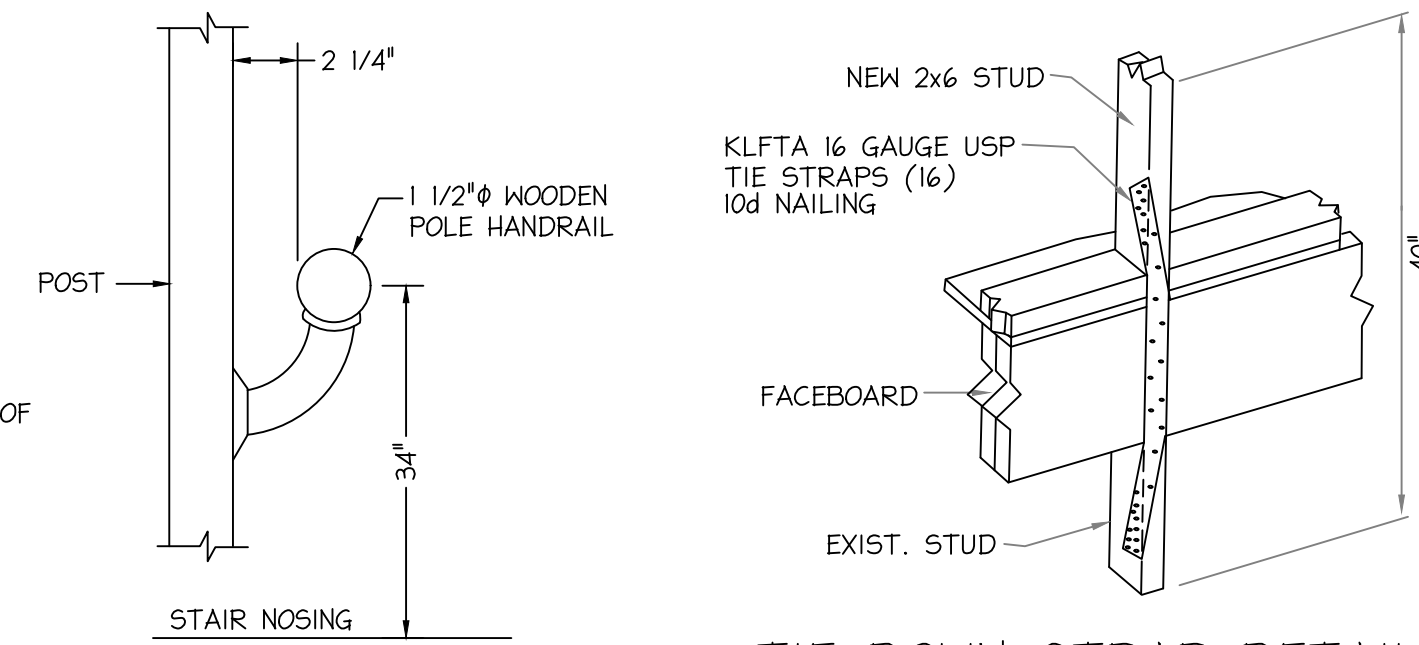


SECTION 1 SCALE: 1/4"=1'-0"

THERMAL ENVELOPE INSULATION DETAIL

R-VALUE METHOD CLIMATE ZONE A

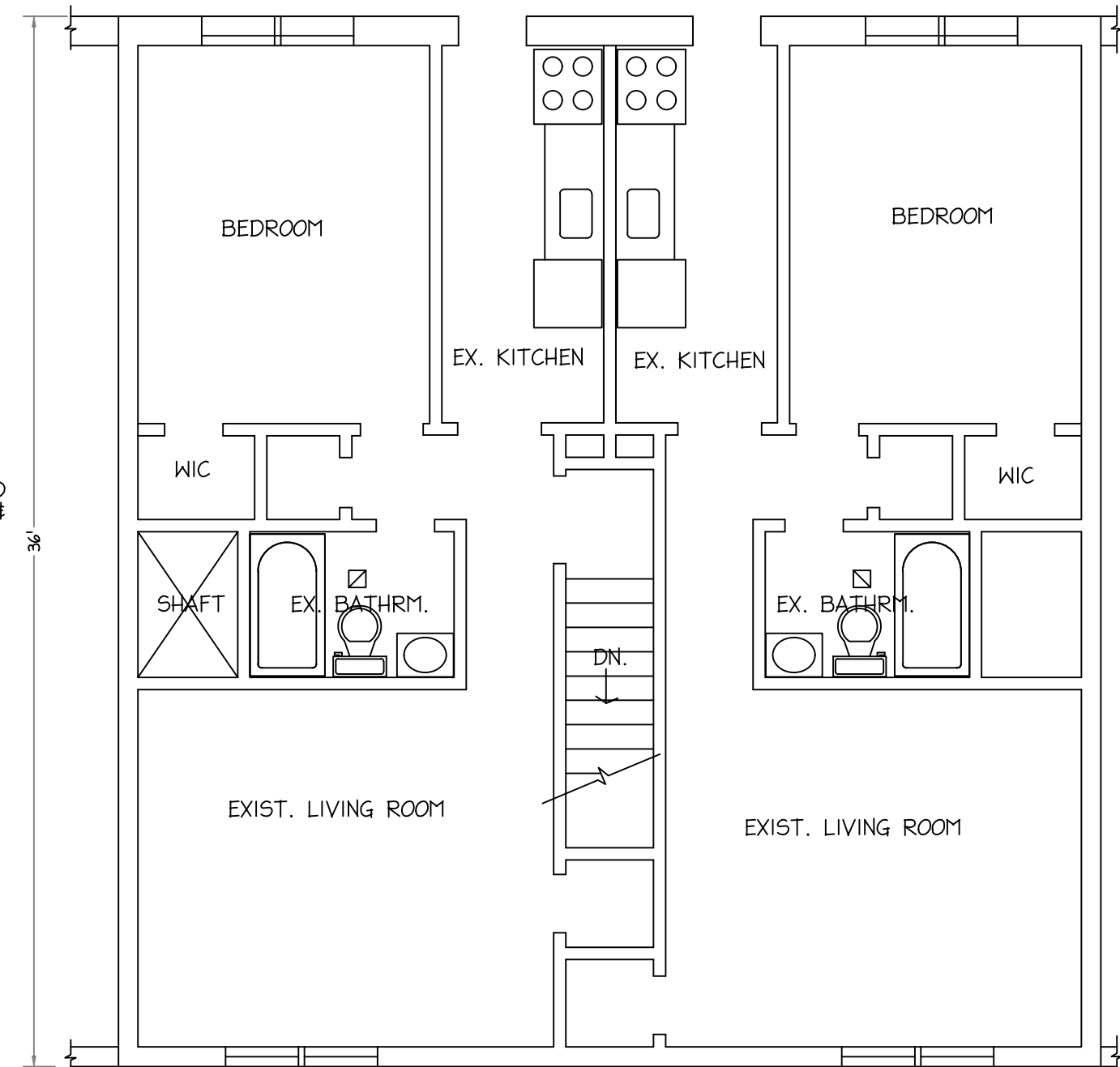
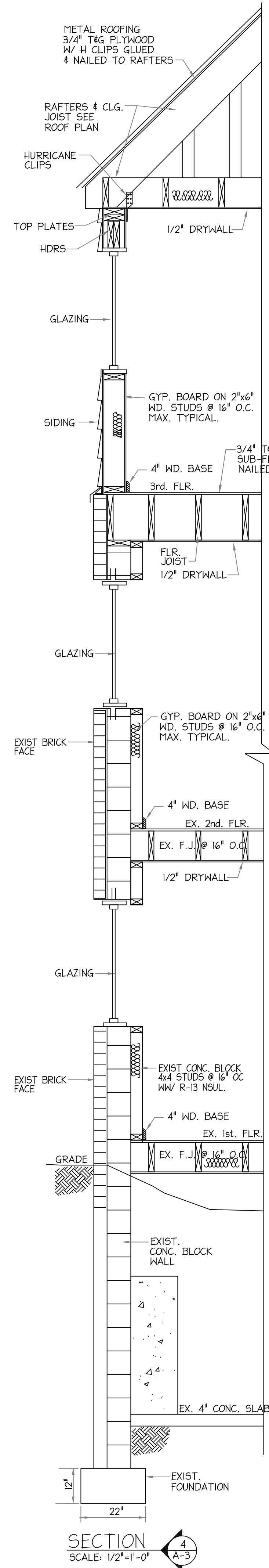
- AIR LEAKAGE-THERMAL ENVELOPE NOTE:**
- THIS ADDITION/EXISTING BUILDING SHALL BE TESTED FOR AIR LEAKAGE THERMAL ENVELOPE IN ACCORDANCE OF ASTM E 779 OR EQUIVALENT METHOD APPROVED BY CODE OFFICIAL.
 - INSULATION MARK SHALL BE INSTALLED SUCH THAT THE MFR'S R-VALUE MARK IS READILY OBSERVABLE UPON INSPECTION.
 - FOR ADDITIONAL INFO. ON THERMAL INSULATION ON A005.



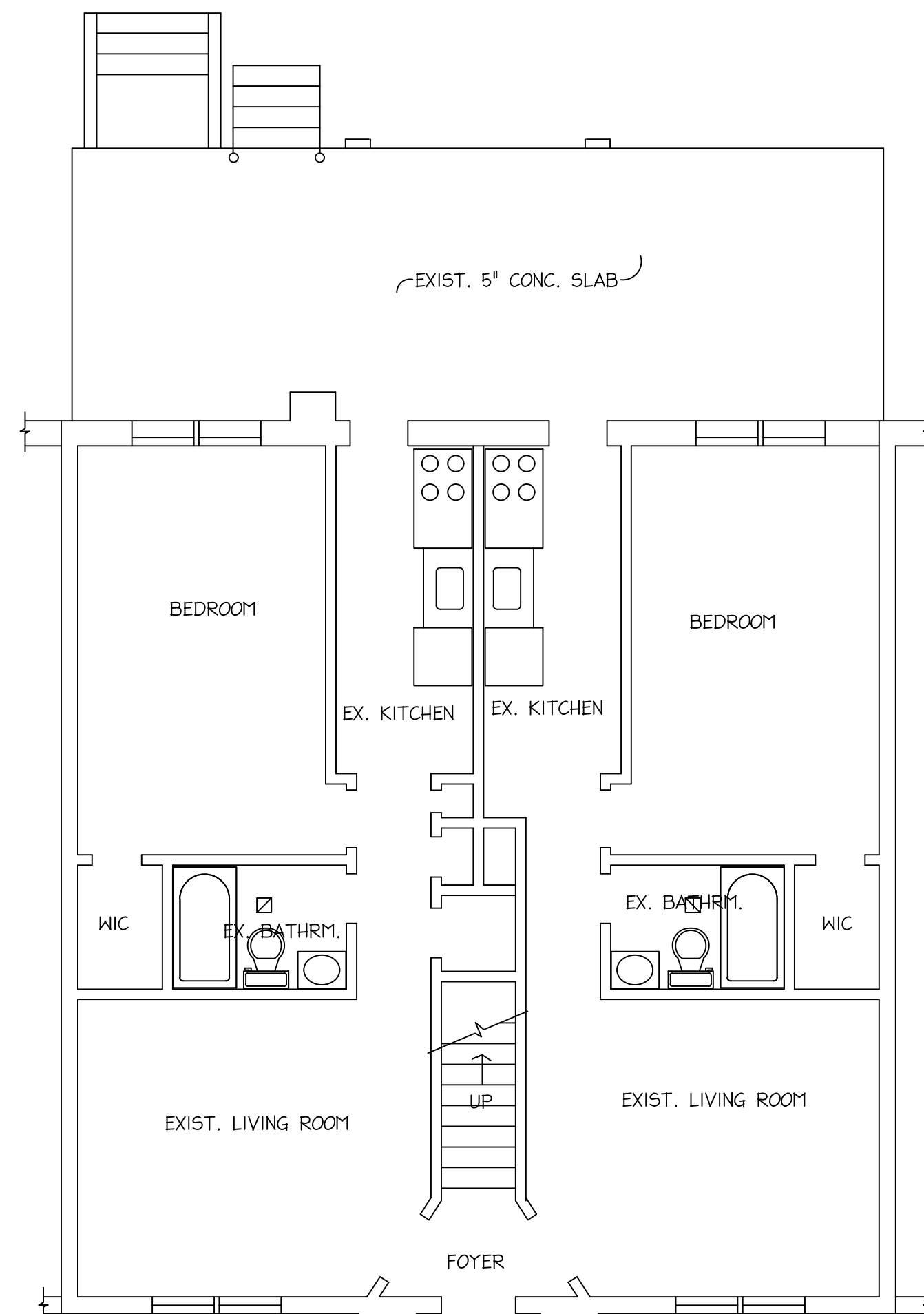
SCALE: AS NOTED	CABIESES APARTMENTS - ADDITION	DRAWN BY: F.C.
DATE: 12-03-2024	314 DELAFIELD PLACE NW	DWG #
	WASHINGTON, DC. 20011	

SECTIONS

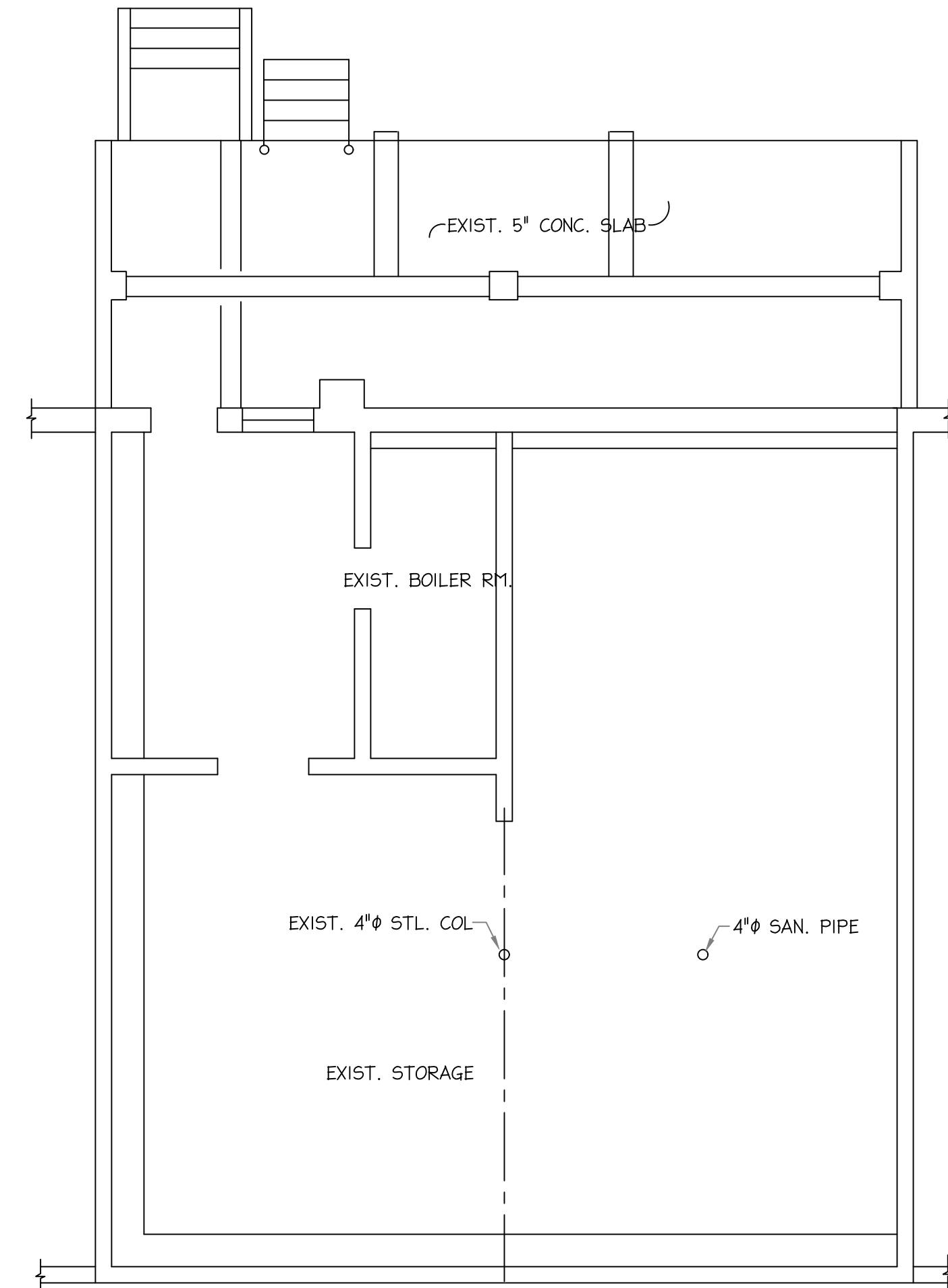
A-2



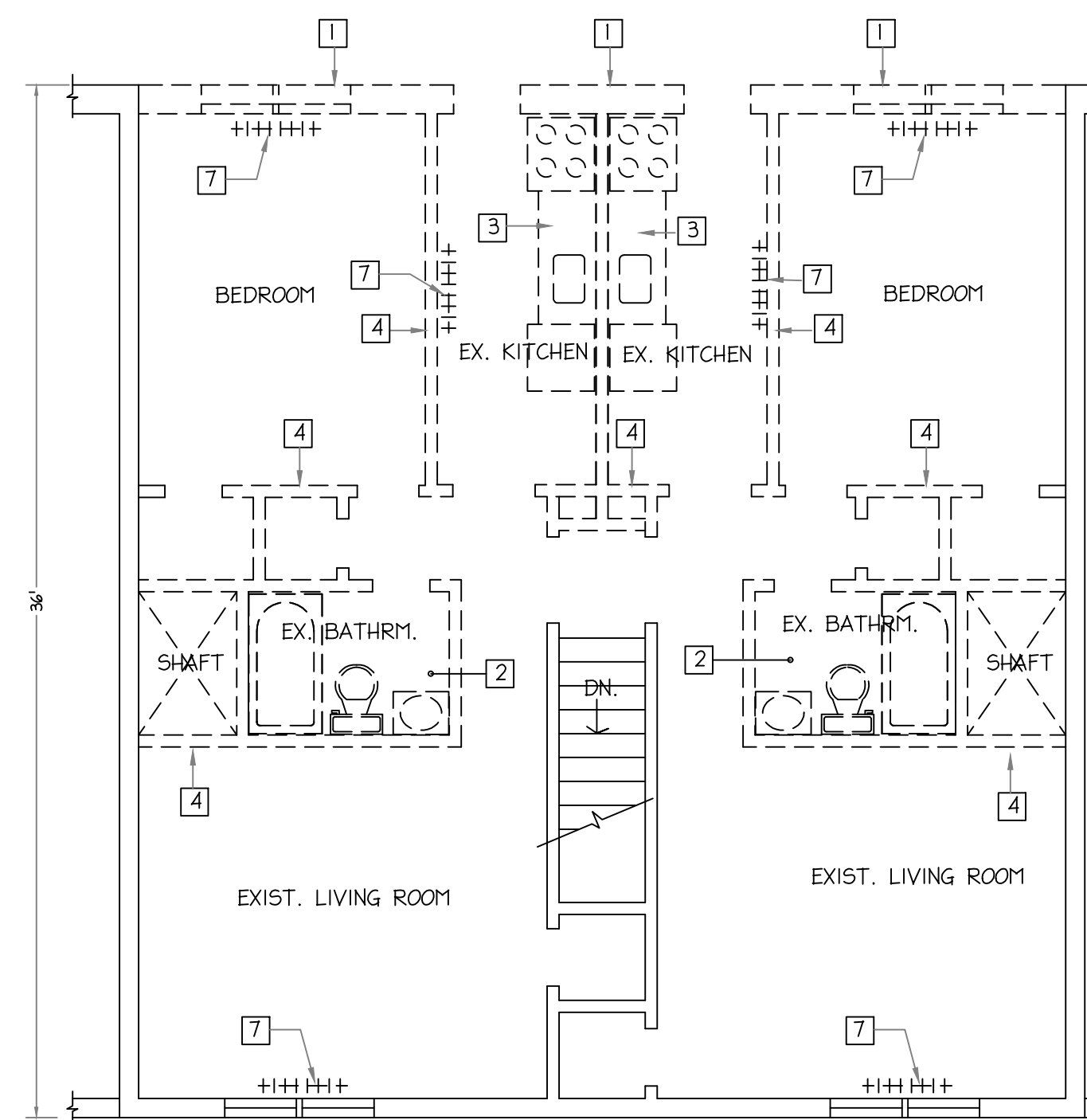
EXISTING SECOND FLOOR PLAN
3/16"=1'-0"



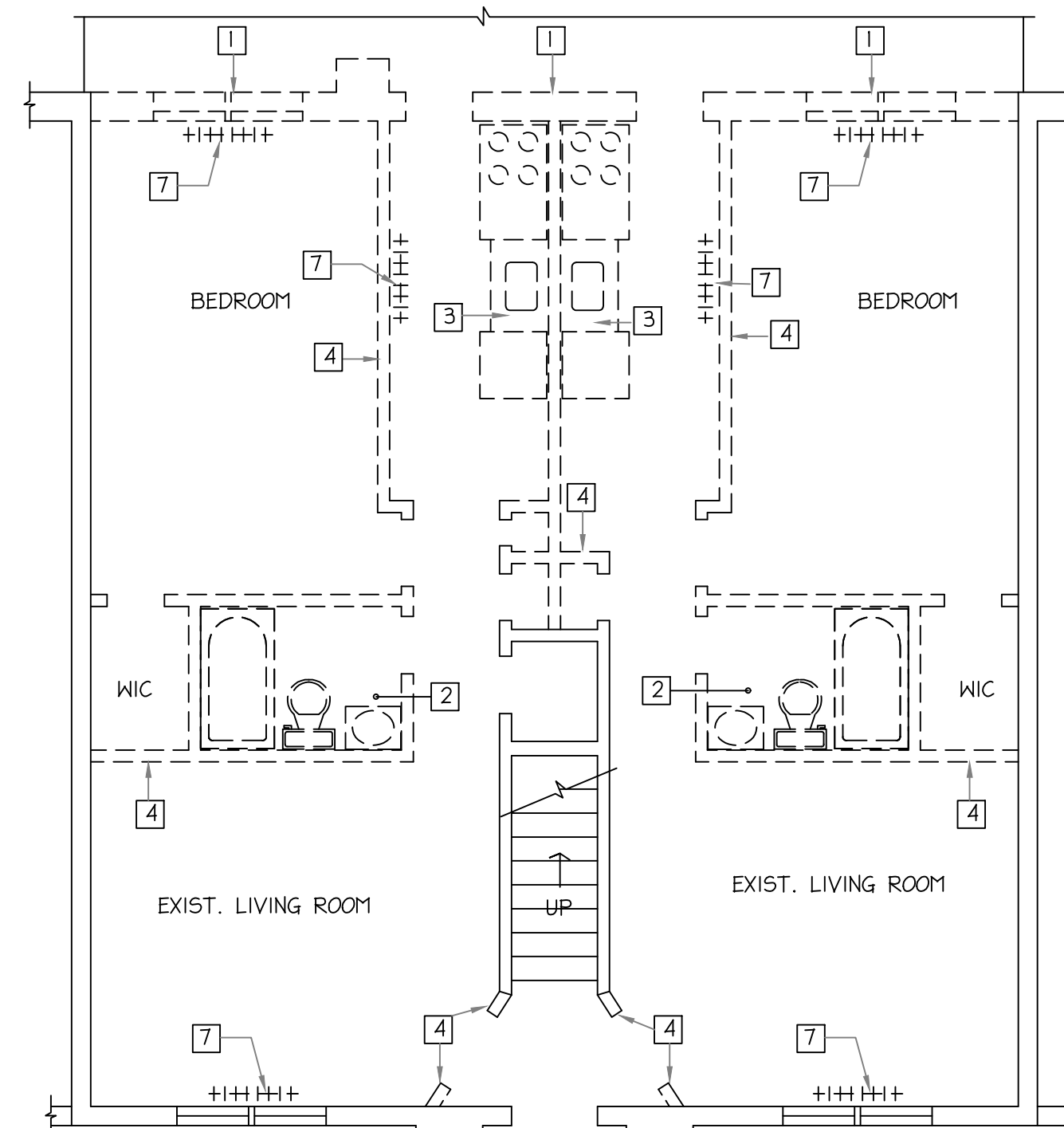
EXISTING FIRST FLOOR PLAN
3/16"=1'-0"



EXIST BASEMENT PLAN
3/16"=1'-0"



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



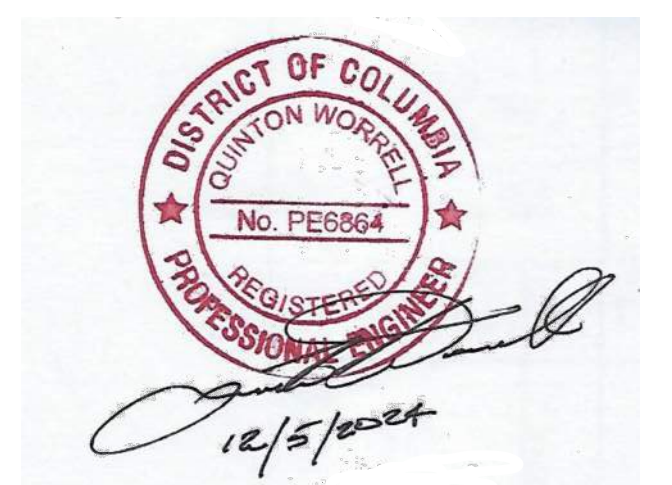
FIRST FLOOR DEMOLITION PLAN
3/16"=1'-0"

DEMOLITION NOTES

- 1 REMOVE EXISTING CONC. BLOCK WALL, BRICK & ASSOC. WINDOWS & DOOR.
- 2 REMOVE EXISTING BATHROOM WALLS & ASSOC. PLUMBING FIXTURES, CAP WATER AND SANITARY PIPING ABOVE CEILING, BELOW FLOOR. CUT WIRING BACK TO SOURCE.
- 3 REMOVE EXISTING KITCHEN WALLS & ASSOC. PLUMBING FIXTURES, CAP WATER AND SANITARY PIPING ABOVE CEILING, BELOW FLOOR. CUT WIRING BACK TO SOURCE.
- 4 REMOVE PARTITION AND ASSOC. WIRING CUT WIRING BACK TO SOURCE.
- 5 REMOVE ALL ROOF STRUCTURE, RAFTERS, PLYWOOD MEMBRANE, ETC. (NOT SHOWN).
- 6 REMOVE GAS METER, ALL ASSOC. PIPING & ASSOCIATED FIXTURES
- 7 REMOVE RADIATOR & ASSOC. PIPING & BOILER LOCATED AT BSMT.

LEGEND

- EXISTING WALL OR PARTITION TO REMAIN.
- - - - - EXISTING WALL OR PARTITION TO REMOVE.

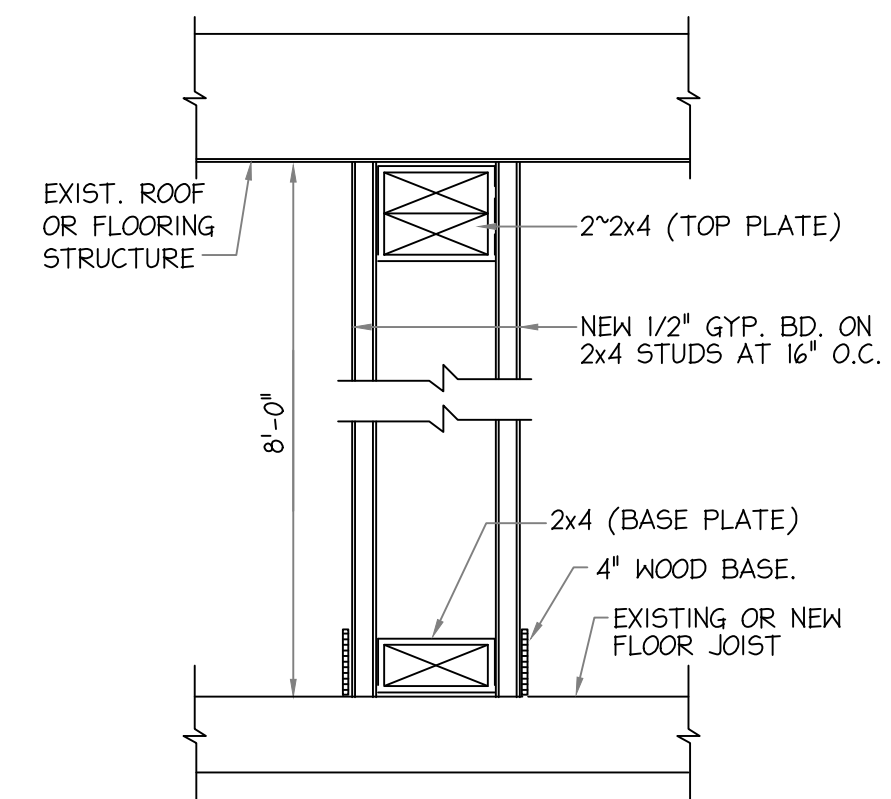


SCALE: AS NOTED	CABIESES APARTMENTS - ADDITION 314 DELAFIELD PLACE NW WASHINGTON, DC. 20011	DRAWN BY: F.C.
DATE: 12-03-2024		DWG #

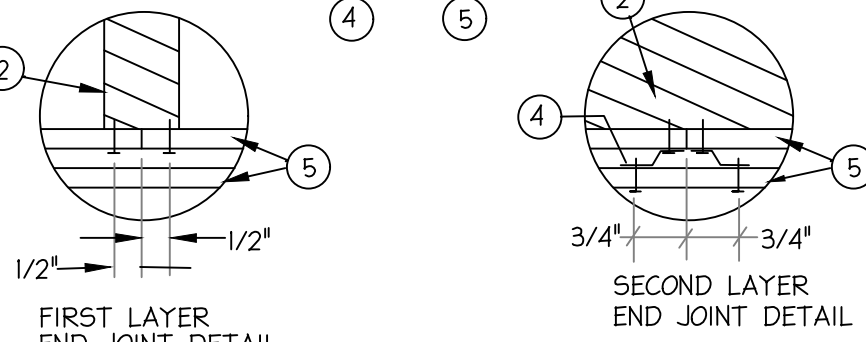
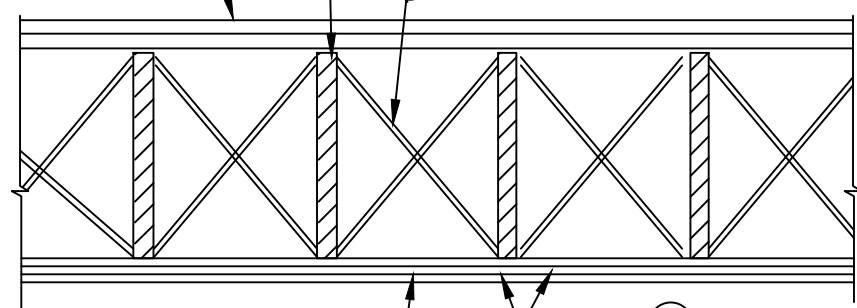
EXISTING PLANS

A-3

WALL SCHEDULE



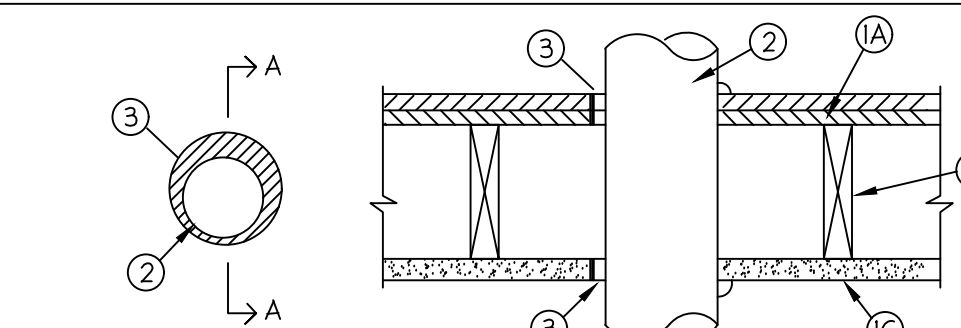
1 TYPICAL PARTITION DETAIL
NO TO SCALE



- FLOORING SYSTEM - CONSIST OF THE FOLLOWING:
DIAGONALLY TO JOIST.
SUBFLOORING- MIN 1 BY 6 IN T & G LUMBER FASTENED DIAGONALLY TO JOIST.
VAPOR BARRIER- NOM. 0.010 IN THICK COMMERCIAL ROSIN-SIZED BUILDING PAPER.
FINISH FLOORING- 1 BY 3 IN T & G END MATCHED, LAID PERPENDICULAR TO JOIST.
- WOOD JOIST - MIN. 2 BY 10 SPACED AT 16" O.C. AND EFFECTIVELY FIRE BLOCKED IN ACCORDANCE WITH LOCAL CODES.
- CROSS BRIDGING- MIN. 1 BY 3 OR 2 BY 10 SOLID BLOCKING
3A- HORIZONTAL- USED IN LIEU OF ITEM 3 IN SAME JOIST BAY AS CEILING DAMPER (ITEM 4) WHEN CEILING DAMPER IS EMPLOYED. WOOD 2x4 IN SECURED BETWEEN JOIST WITH NAILS.
- CEILING DAMPER- MAX NOM. AREA SHALL BE 100 SQ IN MAX RECTANGULAR SIZE SHALL BE 12 IN WIDE BY 16-1/2 IN LONG. MAX HEIGHT OF DAMPER SHALL BE 8-3/4. AGGREGATE DAMPER OPENINGS SHALL NOT EXCEED 99 SQ IN PER 100 SQ FT OF CEILING AREA. DAMPER INSTALLED IN ACCORDANCE WITH THE MFR INSTALLATION INSTRUCTIONS PROVIDED WITH THE DAMPER. A STEEL GRILLE (ITEM 7) SHALL BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS.
AIR KING VENTILATION PRODUCTS-SERIES AS, SERIES AK.
- GYPSUM BOARD- NOM. 1/2 OR 5/8 IN THICK 4 FT WIDE GYPSUM BOARD INSTALLED WITH LONG DIMENSION PERPENDICULAR TO JOIST AND SECURED WITH 5d and 6d CEMENT COATED COOLER NAILS SPACED 6 IN O.C. FOR 1/2 IN AND 5/8 IN THICK GYPSUM BOARD RESPECTIVELY. NAILS SPACED 3/4 AND 1/2 IN FROM SIDE AND END JOINTS, RESPECTIVELY.
CERTAINTED GYPSUM INC. TYPE FRPC OR PROROC TYPE C.
- FINISHING SYSTEM- (NOT SHOWN) VINYL DRY OR PREMIXED JOINT COMPOUND, APPLIED IN TWO COATS TO JOINTS AND SCREW-HEADS. NOM. 2 IN WIDE PAPER TAPE EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.

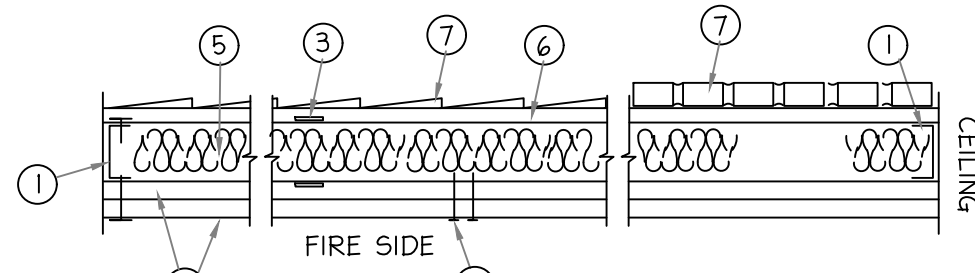
DESIGN No. L536 RATING -2 HR
NO TO SCALE

APPLY TO CEILING/FLOORING FIRST FLOORS TO THIRD FLOORS
NEW & EXISTING CONDITIONS



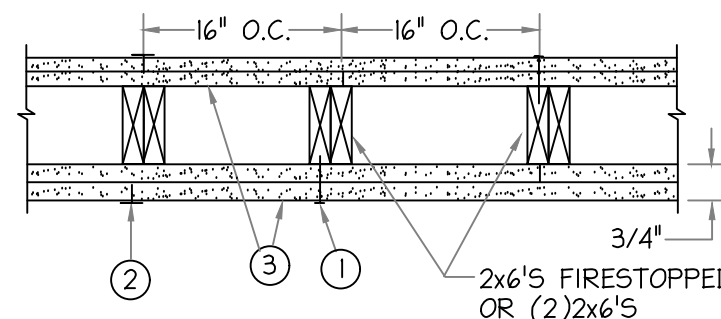
- FLOOR-CEILING ASSEMBLY - THE 1 HOUR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANT DIRECTORY. THE GENERAL CONSTRUCTION DETAILS OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:
A. FLOOR SYSTEM - LUMBER OR PLYWOOD SYMBLOR WITH FINISH FLOOR OF LUMBER, LUMBER OR PLYWOOD OR FLOORING OF ANY SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS.
B. WOOD JOIST - NOM. 10 IN OR DEP LUMBER STEEL OR COMBINATION LUMBER AND STEEL JOIST, TRUSSES OR STRUCTURAL WOOD MEMBERS WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.
C. GYPSUM BOARD - NOM. 4 FT WIDE BY 5/8 IN THICK AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING IS 11 IN.
- STEEL DUCT - NOM. 10 IN OR SMALLER No. 28 GAUGE (OR HEAVIER) STEEL DUCT OR NOM. 5 IN OR SMALLER No. 30 GAUGE (OR HEAVIER) STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. THE ANNULAR SPACE BETWEEN DUCT AND PERIPHERY OF OPENING SHALL BE MIN 0 IN TO MAX 1 IN. DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY.
- FILL VOID OR CAVITY MATERIALS - CAULK OR SEALANT - MIN 3/4 IN THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR. MIN. 5/8 IN THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING MIN 1/4 IN DIAM DEAD OF CAULK APPLIED AT POINT CONTACT LOCATIONS AT DUCT/FLOOR INTERFACE ON TOP SURFACE OF FLOOR AND AT DUCT/CEILING INTERFACE. FLOOR INTERFACE ON TOP SURFACE OF FLOOR AND AT DUCT/CEILING INTERFACE.
3M COMPSNY-C 15WB+, CP 15 WB+ CAULK OR FB-3000 MT SEALANT, BEARING UL CLASSIFICATION MARK.

SYSTEM No. F-C-7022
F RATING -1 HR



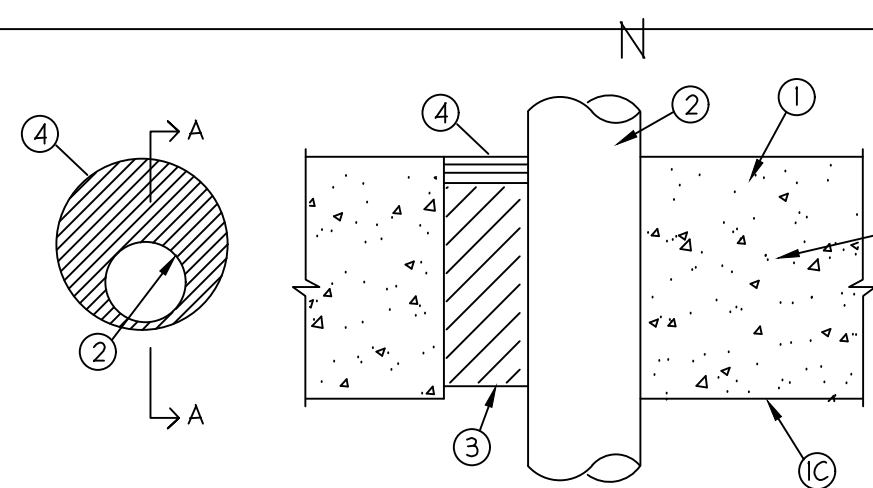
- FLOOR & CLG. TRACKS- CHANNEL SHAPED, 3-5/8" OR 5-5/8" WIDE W/ 1 1/2" FLANGES, FABRICATED FROM No. 18 GSG GALV STEEL ATTACHED TO FLR. AND CLG. W/ FASTENERS SPACED 24" O.C.
- STEEL STUDS- C-SHAPED, FABRICATED FROM MIN No. 18 GSG GALV STEEL, 3-1/2" OR 5-5/8" WIDE W/ 1-1/2" FLANGES & 1/2" RETURNS (STIFFENING FLANGES) IN YIELD STRENGTH 40,000 PSI. SEE ILL. 12 OF REPORT R7760-1, -2 DATED DEC 11 1975.
- STEEL STRAPPING- FLAT STOCK 2" WIDE FABRICATED FROM No. 18 GSG GALV. STEEL LOCATED HORIZONTALLY & ATTACHED TO BOTH SIDES OF THE STUDS AT THE THIRD POINTS USING ONE No. 6-20 BY 1/2" SELF DRILLING STEEL SCREW AT EACH INTERSECTION.
- GYPSUM BOARD -ANY CLASSIFIED GYPSUM BOARD W/ BEVELED, AQUARE OR TAPERED EDGES. THE THICKNESS NUMBER OF LAYERS AND METHOD OF ATTACHMENT OF THE WALL BOARD. 1 HR RATING- 2 LAYERS OF 1/2" THICK GYPSUM BOARD APPLIED HORIZONTALLY OR VERTICALLY. INNER LAYER ATTACHED TO STUDS & TRACKS W/ 1" LONG, 0.142" DIA TYPE 5-12 BUGLE HEAD SCREWS SPACED 12" OC BEGINNING 6" FROM THE EDGE. OUTER LAYER ATTACHED TO THE STUDS AND TRACKS W/ 1-5/8" LONG 0.142" DIA, TYPE 5-12 BUGLE HEAD SCREWS SPACED 12" OC BEGINNING 1" FROM THE EDGE. IN ADDITION THE OUTER LAYER TO ATTACHED TO THE INNER LAYER AT THE JOINTS W/ 1-1/2" LONG 0.10" DIA TYPE G BUGLE HEAD SCREWS SPACED 24" OC. LOCATED BETWEEN STUDS.
- GYPSUM BOARD (CKNX) CATEGORY
- BATT AND BLANKETS- 3 1/2" THICK 2" WIDE, GLASS FIBER BATTS INSERTED BETWEEN EACH STUD TO FILL THE WALL CAVITY. CERTAINTED CORP., OMENS CORNING.
- GYPSUM SHEATHING- ONE LAYER OF NOMINAL 1/2" THICK EXTERIOR SHEATHING, APPLIED VERTICALLY & SECURED TO THE STUDS AND RUNNER TRACKS W/ 1" LONG 0.142" DIA TYPE 5-12 BUGLE HEAD SCREWS SPACED 12" OC ALONG THE STUDS & THE RUNNER TRACKS.
- EXTERIOR FACING (BRICK OR ALUM SIDING)-HORIZONTAL LAP TYPE 9" WIDE FABRICATED FROM 0.019" THICK OR 0.024" THICK PAINTED ALUM. INTERIOR FACE OF 0.019" THICK SIDING LINED WITH 3/8" THICK UNBOND INSULATION MATERIAL ATTACHED TO THE STUDS W/ 7/8" LONG 0.188" DIA STEEL SCREWS SPACED 9" OC ALONG THE STUDS A STARTER STRIP TO BE FASTENED TO FLOOR RUNNER WITH 0.188" DIA SCREWS SPACED 12" OC.
- JOINT TYPE & COMPOUND- VINYL OR CASEIN DRY OR PREMIXED JOINT COMPOUND APPLIED IN 2 COATS TO COATS TO JOINTS AND SCREW HEADS. PERFORATED PAPER TAPE 2" WIDE EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS BEARING THE UL CLASSIFICATION MARK.

2 TYPICAL EXTERIOR WALL DETAIL
DESIGN No. U418
WALL RATING 1-HR.



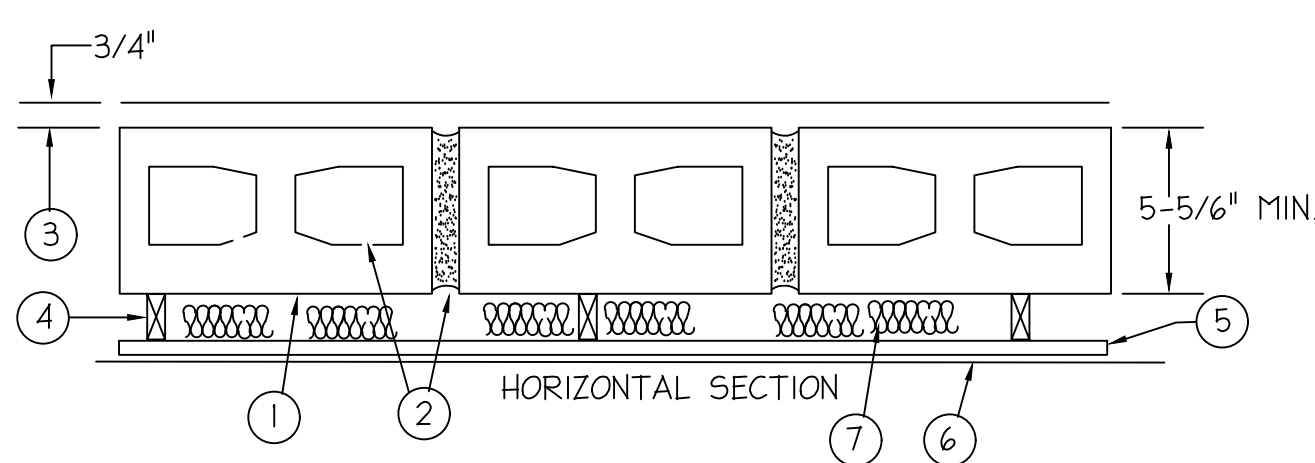
- NAILHEADS - EXPOSED OR COVERED WITH JOINT COMPOUND.
- JOINTS OF EXPOSED BOARDS - EXPOSED JOINTS COVERED WITH JOINT COMPOUND AND PAPER TAPE. JOINT COMPOUND AND PAPER TAPE MAY BE OMITTED WHEN SQUARE EDGE BOARDS ARE USED.
- GYPSUM BOARD - 3/8 IN THICK GYPSUM WALLBOARD, APPLIED IN TWO LAYERS, THE FIRST LAYER OF BOARDS PLACED VERTICALLY AND TEMPORARILY NAILED IN POSITION, THE SECOND LAYER COATED WITH GLUE, APPLIED AGAINST THE FIRST LAYER AND NAILED TO STUDS 6 IN OC AT EDGES OF BOARDS AND 8 IN OC AT INTERMEDIATE STUDS WITH 1-7/8 IN, 6d, CEMENT COATED NAILS. GYPSUM BOARD SHALL BEAR THE UL CLASSIFICATION MARK
CERTAINTED GYPSUM INC -TYPE DDG2
GEORGIA-PACIFIC GYPSUM LLC - TYPE GPFSI

4 TYPICAL WALL PARTITION DETAIL
DESIGN No. U306
WALL RATING 1-HR.
NEW & EXISTING CONDITIONS



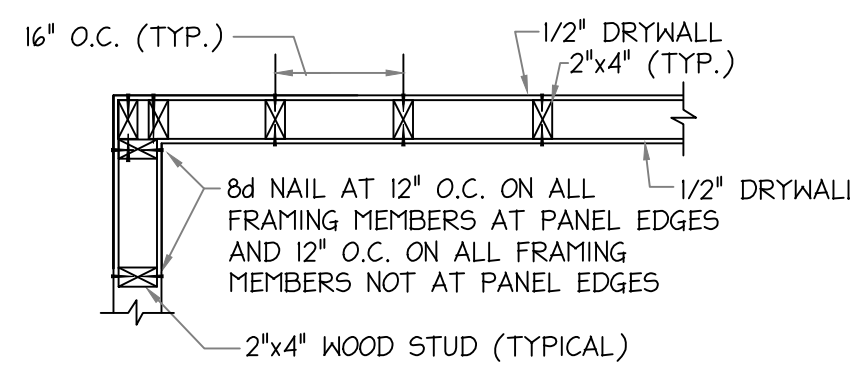
- PRE-RATED CONCRETE FLOOR OR BLOCK WALLS - MIN. 4-1/2" THICKNESS
- STEEL PIPE- NOM. 8" DIAM. (OR SMALLER) SCH. 40 (OR HEAVIER) STEEL PIPE, THE ANNULAR SPACE SHALL BE MIN. 0" (POINT CONTACT) TO MAX. 3-3/8".
- PACKING MATERIAL - MIN. 4" THICKNESS OF MINERAL WOOL (MIN. 4.0 PCF) INSULATION, FIRMLY PACKED INTO OPENING AS A PERMANENT FORM.
- FRYE-SHIELD - MIN. 1/2" THICKNESS OF SEALANT APPLIED WITHIN ANNULUS FLUSH WITH TOP OF FLOOR SURFACE OR WITH BOTH SIDES OF THE WALL ASSEMBLY.

SYSTEM No. CAJ-1113
F RATING -3 HR
T RATING -1/4 HR
3 HR FIRE RATED THROUGH PENETRATION FIRESTOP FOR SINGLE METAL PIPE THROUGH CONCRETE FLOORS OR WALL USING FRYE-SHIELD.

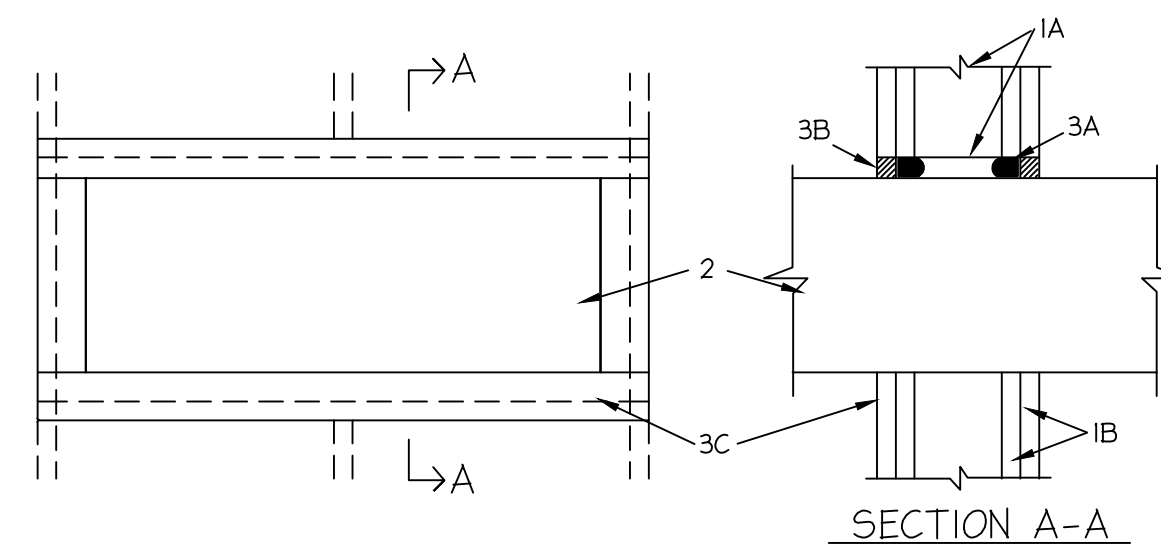


- CONCRETE BLOCKS - NOMINAL 6x8x16 HOLLOW OR SOLID. VARIOUS DESIGNS CLASSIFICATION (2HR).
APPLY 2 COATS OF PAINT SEALER PER C402.4.1.2.3.
ALLOWABLE COMPRESSIVE STRESS OF 57% OF MAX ALLOWABLE COMPRESSIVE
- MORTAR- BLOCK LAID IN FULL BED OF MORTAR, NOM. 3/8" THICK OF NOT LESS THAN 2-1/4 AND NOT MORE THAN 3-1/2 PARTS OF CLEAN SHARP SAND TO 1 PART PORTLAND CEMENT (PROPORTIONED BY VOLUME) AND NOT MORE THAN 50% HYDRATED LIME (BY CEMENT VOLUME).
VERTICAL JOINTS STAGGERED
- PORTLAND CEMENT STUCCO OR GYPSUM PLASTER - ADD 1/2 HR TO CLASSIFICATION IF USED. ATTACHED TO CONCRETE BLOCKS (ITEM 1).
- 2x4 STUDS AT 24" O.C.
- SOUND PROOFING CLIP/DRYWALL FURRING CHANNEL.
- 1 LAYER SPEEDLOAD GREEN GLUE OVER TWO LAYERS OF 5/8" DRYWALL.
- FIBERGLASS INSULATION.
- PROVIDE A MINIMUM OF 50 TSC WALL ASSEMBLY PERFORMANCE.
BY SOUNDPROOFING CO., GREEN GLUE WALL ASSEMBLY.

3 TYPICAL EXTERIOR WALL DETAIL
NOT TO SCALE
DESIGN No. U906
BEARING/NO BEARING WALL RATING-2HR.
NEW/EXISTING CONDITIONS



TYPICAL WALL PARTITION DETAIL
NO TO SCALE



SECTION A-A

- WALL ASSEMBLY - THE 1 OR 2 HOUR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U400 OR V400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS- WALL FRAMING SHALL CONSIST OF STEEL CHANNEL STUDS. STEEL STUDS TO BE MIN. 3-5/8 IN WIDE AND SPACED MAX. 24 IN O.C. ADDITIONAL FRAMING MEMBERS SHALL BE USED TO COMPLETELY FRAME AROUND OPENING.

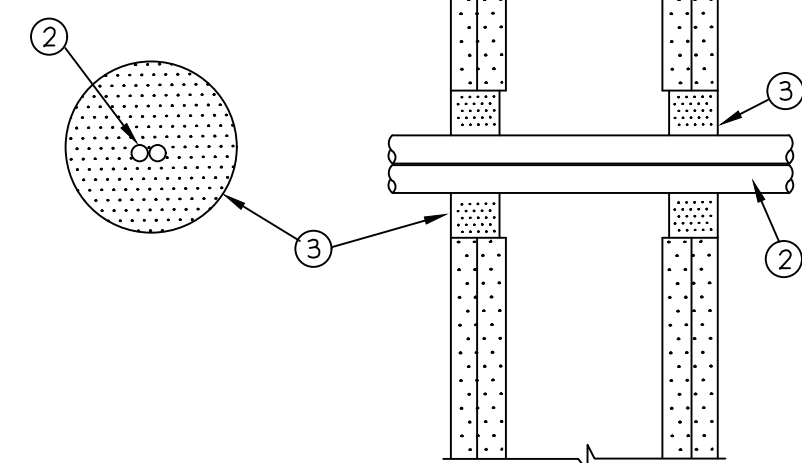
B. GYPSUM BOARD - MIN. 5/8 IN THICK 4 FEET WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE THICKNESS NUMBER OF LAYERS AND ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U400 OR V400 WALL AND PARTITION DESIGN. MAX SIZE OF OPENING IS 1470 SQ IN. WITH A MAX DIMENSION OF 70 IN THE HOURLY F RATED OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL IN WHICH IT IS INSTALLED.
- STEEL DUCT - NOM. 67 IN BY 18 IN No. 24 GAUGE OR HEAVIER GALV STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRE STOP SYSTEM. THE SPACE BETWEEN THE STEEL DUCT AND PERIPHERY OF OPENING SHALL BE MIN 0 IN TO MAX 3-1/2 IN. STEEL DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY.
- FIRE STOP SYSTEM - THE FIRE STOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

A. PACKING MATERIAL - POLYETHYLENE BACKER ROD, MINREAL WOOD BATT INSULATION, FIBERGLASS BATT INSULATION OR FOAM PLASTIC SHEETS FRICTION FITTED INTO ANNULAR SPACE FOR 2 HR FIRE-RATED WALL ASSEMBLIES ONLY. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.

B. FILL VOID OR CAVITY MATERIAL - SEALANT - MIN. 5/8 ON THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN STEEL DUCT AND GYPSUM WALBOARD, A MIN 3/8 IN DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE GYPSUM BOARD/STEEL DUCT INTERFACE ON BOTH SURFACES OF WALL ASSEMBLY.

C. STEEL RETAINING ANGLES- MIN. No. 22 GAUGE GALV STEEL ANGLES SIZED TO LAP STEEL DUCT A MIN. OF 2 IN AND LAP WALL SURFACES A MIN 1-1/2 IN ANGLES ATTACHED TO STEEL DUCT ON BOTH SIDES OF WALL WITH MIN. No. 10 STEEL SHEET METAL SCREWS SPACED A MAX OF 1 IN FROM EACH END OF STEEL DUCT AND SPACED A MAX 6 IN OC.

SYSTEM No. W-1-7138
F RATING-1 AND 2 HR



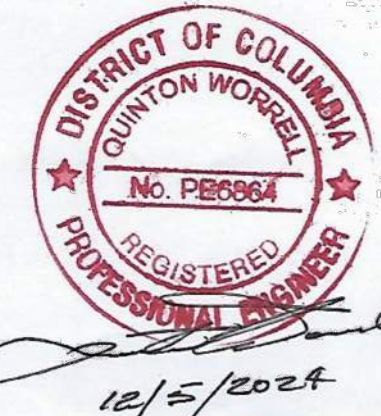
- PRE-RATED GYPSUM WALLBOARD/STUDS WALL ASSEMBLY. MAX. DIAMETER OF OPENING 3-1/2".
- CABLES:
A) MAX. FOUR ALUMINUM CONDUCTOR No. 2/0 AWG (OR SMALLER) ALUMINUM METAL CLAD CABLES. MAX. ONE CABLE WITHIN FIRE STOP SYSTEM. ANNULAR SPACES SHALL BE MIN. 1/4" TO MAX. 1".
B) MAX. FOUR ALUMINUM CONDUCTOR No. 2/0 AWG (OR SMALLER) TYPE SER CABLE WITH PVC INSULATION MAX. TWO CABLES BUNDLED TOGETHER WITHIN FIRESTOP SYSTEM. ANNULAR SPACES SHALL BE FROM MIN. 1/2" TO MAX. 1-1/2".
- TREMSTOP 1A - NOM. 1/2" THICKNESS OF SEALANT APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL,

T RATING = 1/4 HR FOR F-RATING OF 1 HR.
T RATING = 1/2 HR FOR F-RATING OF 2 HR.

SYSTEM No. WL-3131
F RATING -1 & 2 HR
T RATING -1/4 & 1/2 HR
1 OR 2 HR FIRE RATED THROUGH PENETRATION FIRESTOP FOR MULTIPLE CABLES THROUGH GYPSUM WALLS USING TREMSTOP 1A.

TABLE R402.1.1 AIR BARRIER AND INSULATION INSTALLATION		
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
General requirements	A continuous airtight air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material. All ceiling, wall, floor and slab insulation shall achieve Grade 1 installation per the RESNET Standards or, alternatively, Grade II for surfaces that remain a layer of continuous, air impermeable insulation > R-5.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or hase wall doors to unconditioned attic space shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of not less than R-3 per inch. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed. Doors adjacent to unconditioned space or ambient conditions shall be made substantially airtight with weather stripping or equivalent gasket.	Continuous exterior insulation shall continue over window and door headers. Skylight and window chases through unconditioned attic space must be insulated to exterior wall values per table R402.1.2.
Rim joints	Rim joints shall include continuous air barrier.	Rim joints shall be insulated per Table R402.1.2.
Floors (including above garage and conditioned floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the members.
Crawl space walls	Exposed earth in (unvented crawl) spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.
Shafts, penetrations	Duct shafts, utility penetrations, and duct shafts opening to exterior or unconditioned space shall be sealed.	Duct shafts or chases next to exterior or unconditioned space shall be insulated.
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be airtight and IC rated.
Plumbing and wiring	Seal any plumbing or wiring that penetrates the building envelope.	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.	
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	
Fireplace	An air barrier shall be installed on fireplace walls.	

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.



SCALE: AS NOTED	CABIESES APARTMENTS - ADDITION 314 DELAFIELD PLACE NW WASHINGTON, DC. 20011	DRAWN BY: F.C.
DATE: 12-03-2024		DWG #
	DETAILS	A-4

EROSION AND SEDIMENT CONTROL - 314 DELAFIELD PL NW, WASHINGTON, DC 20011

Table 2.4 Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ¹		Seeding Depth (inches) ²	Recommended Seeding Dates Plant Hardiness Zone 7a and 7b ³
	lb/ac	lb/1,000 ft ²		
Cool-Season Grasses				
Annual Ryegrass	40	1.0	0.5	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Barley	96	2.2	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Oats	72	1.7	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Wheat	120	2.8	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Cereal Rye	112	2.6	1.0	Feb. 15 to Apr. 30; Aug. 15 to Dec. 15
Warm-Season Grasses				
Foxtail Millet	30	0.7	0.5	May 1 to Aug. 14
Pearl Millet	20	0.5	0.5	May 1 to Aug. 14

Notes:
1. Seeding rates for the warm-season grasses are in pounds of pure live seed (PLS). Actual planting rates must be adjusted 10 percent per seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.
2. Seeding rates listed above are for temporary seedings, when planted alone, when planted as a nurse crop with permanent seed mixes, use 1/3 other seed mix plus the rate for the permanent seed mix.
3. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 50 lb (by weight) of the overall permanent seed mix. Generally, do not use cereal rye as a nurse crop unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.
4. For sandy soils, plant seeds at twice the depth listed above.
5. The planting dates listed are averages and may require adjustment to reflect local conditions.

Table 2.5 Permanent Seeding Summary

Permanent Seeding Summary						
Seed Mixture				Fertilizer Rate (10-20-20)		Lime Rate
No.	Species	Application Rate(lb/ac)	Seeding Dates	Seeding Depths	N P ₂ O ₅ K ₂ O	
					45 lb/ac (1.0 lb/1,000 ft ²)	90 lb/ac (2 lb/1,000 ft ²)
					90 lb/ac (2 lb/1,000 ft ²)	2 tons/ac (90 lb/1,000 ft ²)

Turfgrass Mixtures
Select a seed mixture from Table 2.6, using Table 2.7 (conditions by mix) as a guideline. Some guidelines for common mixes are as follows:

1. Kentucky Bluegrass (full sun mixture). For use in areas that receive intensive maintenance. The recommended certified Kentucky bluegrass cultivars seeding rate is 1.5 to 2.0 pounds per 1,000 square feet. Choose a minimum of three bluegrass cultivars ranging from a minimum of 10% to a maximum of 90% of the mixture by weight.
2. Kentucky Bluegrass/Perennial Rye (full sun mixture). For use in full sun areas where rapid establishment is not necessary and when turf will be subjected to intensive maintenance. The certified perennial ryegrass/certified Kentucky bluegrass seeding rate is 2 pounds mixture per 1,000 square feet. A minimum of three Kentucky bluegrass cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
3. Tall Fescue/Kentucky Bluegrass (full sun mixture). For use in drought prone areas and for areas receiving low to medium maintenance in full sun to medium shade. The recommended mixture includes 85% to 100% certified tall fescue cultivars and 0% to 5% certified Kentucky bluegrass cultivars. The seeding rate is 5 to 8 pounds per 1,000 square feet. One or more cultivars may be blended.
4. Kentucky Bluegrass/Fine Fescue (shade mixture). For use in areas where shade is bluegrass lawns or for establishment in high quality, intensively managed turf areas. The mixture includes 30% to 40% certified Kentucky bluegrass cultivars and 60% to 70% certified fine fescue. The seeding rate is 1/2 to 3 pounds per 1,000 square feet. A minimum of 3 Kentucky bluegrass cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

Note: Select turfgrass varieties from those listed in the most current Maryland-Virginia Turfgrass Variety Recommendation Working Group list (<http://www.pubs.ont.edu/vr>).

Soil grass

Use soil grass to provide quick cover on disturbed areas (2-1 grade or flatter).

1. Class of turf grass seed must comply with the grass varieties listed in Table 2.7. Make seed mixes available to the job foreman and inspector.
2. Machine cut seed at a uniform soil thickness of 1/2 inches, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Individual pieces of seed must be cut to the supplier's width and length. Maximum allowable deviation from standard widths and lengths is 5%. Broken pieces and torn or uneven ends will not be acceptable.
3. Standard size seedings of soil must be spread uniformly with their own weight and retain their size and shape when subjected vertically with a firm grasp on the upper 10% of the seed. Do not harvest or transplant soil when moisture content (excessively dry or wet) may adversely affect its survival.
4. Harvest, deliver, and install seed within a period of 36 hours. Seed not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

Planting Dates

The recommended planting dates for permanent cover can be found in Table 2.8.

From Table 2.7

7. Cereals and Ryegrass (Full sun mixture)	Recommended Fertilizer ¹	Seeding Rate ²	Seeding Depth ³	Plant Hardiness Zone 7a and 7b ⁴	Notes
Kentucky Bluegrass (Full sun mixture)	15	0.34	W-W-M	1-2	C-O
Barley	100	2.3	E-S-P	2-3	A-B
Oats	100	2.3	E-S-P	2-3	A-B
Wheat	100	2.3	E-S-P	2-3	A-B
Cereal Rye	100	2.3	E-S-P	2-3	A-B
Perennial Ryegrass (Full sun mixture)	20	0.48	E-S-P	2-3	A-B

Table 2.8 Recommended Planting Dates for Permanent Cover

Type or Plant Material	Planting Dates
Seeds - Cool-Season Grasses (includes mixes with forbs and/or legumes)	Feb. 15 to Apr. 30 Aug. 15 to Oct. 31 Nov. 1 to Nov. 30 ¹
Seeds - Warm-Season/Cool-Season Grass Mixes (includes mixes with forbs and/or legumes)	Feb. 15 to Apr. 30 ¹ May 1 to May 31 ¹
Sod - Cool-Season	Feb. 15 to Apr. 30 May 1 to Sep. 30 ¹ Oct. 1 to Dec. 15 ¹

- Notes:
1. When seeding toward the end of the listed planting dates, or when conditions are expected to be less than optimal, select an appropriate nurse crop from Table 2.4 Temporary Seeding for Site Stabilization and plant together with the permanent seeding mix.
 2. When planted during the growing season, most of these materials must be purchased and kept in a dormant condition until planting.
 3. Recommend adding a nurse crop, as noted above, if planting during this period.
 4. Warm-season grasses need a soil temperature of at least 50 degrees F in order to germinate. If soil temperatures are colder than 50 degrees, or moisture is not adequate, the seeds will remain dormant until conditions are favorable. In general, planting during the latter portion of this period allows more time for weed emergence and weed control prior to planting. When selecting a planting date, consider the need for weed control vs. the likelihood of having sufficient moisture for later plantings, especially on dry slopes.
 5. Additional planting dates which supplemental watering may be needed to ensure plant establishment.
 6. Frequent tilling and tilling of wet soils may result in destruction of materials and/or soil compaction. If plants have not sufficiently rooted in place, sod usually needs 4 to 6 weeks to become sufficiently rooted.

Minimum Soil Criteria

Minimum soil conditions required for permanent vegetative establishment include the following:

1. Soil pH must be between 6.0 and 7.0.
2. Soluble salts must be less than 500 parts per million (ppm).
3. The soil must contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. As an exception, it is acceptable to plant legumes or sericea lespedeza in sandy soil (< 30% silt plus clay).
4. Soil must contain 1.5% minimum organic matter by weight.
5. Soil must contain sufficient pore space to permit adequate root penetration.
6. If these conditions cannot be met by soils on site, topsoil must be added as required in Section 2.6 Topsoiling.

Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites with disturbed areas over 5 acres. Soil analysis may be performed by the University of the District of Columbia or a certified commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing, and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from DCEE. Deliver all fertilizers to the site fully labeled per applicable laws and bear the name, trade name or trademark, and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime can be substituted) containing at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone must be ground 10 mesh fineness that at least 50% will pass through a #100 mesh sieve and 98% to 100% will pass through a #20 mesh sieve.

2.6.5 Construction Specifications

Site Preparation

1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
4. Distribute lime and fertilizer evenly and incorporate them into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons per acre (200 to 400 pounds per 1,000 square feet) prior to the placement of topsoil.

Seeded Preparation

1. Temporary Seeding:
 - (a) Seeded preparation must consist of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, do not roll or drag smooth but leave in the roughened condition. Track seeded areas (greater than 3:1) leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - (b) Apply fertilizer and lime as prescribed on the plans.
 - (c) Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

2. Permanent Seeding - Maintain areas previously graded in accordance with the drawings in a true and even grade, then scarified or otherwise loosened to a depth of 3 to 5 inches to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots for preventing topsoil from sliding down a slope.

Apply soil amendments as per soil test or as indicated on the plans.
Mix soil amendments into the top 3 to 5 inches of topsoil by disking or other suitable means. Re-roll areas to smooth the surface, remove large objects like stones and branches, and re-roll the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Track steep slopes (steeper than 3:1) by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 to 3 inches of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

3. Methods of Seeding - Apply seed uniformly with hydroseeder (slurry includes seed, fertilizer and mulch), broadcast or drop seeder, or a culipacker seeder.

- (a) Hydroseeding:
 - i) Fertilizer is being applied at the time of seeding, the application rates are total of the following: nitrogen, maximum of 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 - ii) Lime - Use only ground agricultural limestone, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons per acre are applied by hydroseeding at any one time. Do not burn or hydrate lime when hydroseeding.
 - iii) Seed and fertilizer must be mixed on site and seeding must be done immediately and without interruption.
 - iv) Filler mulch may be incorporated into the hydroseeding mixture. Consult Section 2.7 Mulching for standards and specifications.

- (b) Dry Seeding - This includes use of conventional drop or broadcast spreaders.

- (c) Incorporate seed spread into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Table 2.4 and 2.7. The seeded area must then be rolled with a weighted roller to provide good seed to soil contact.

- (d) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- (e) Drill or Culipacker Seeding: Mechanized seeders that apply and cover seed with soil.

- (f) Culipacking seeders are required to bury the seed in such a fashion as to provide at least 1/2 inches of soil covering. Seeded must be firm after planting.

- (g) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- (h) Soil Installation - During periods of excessively high temperature in areas having dry soil, the subsoil must be lightly irrigated immediately prior to laying the sod.

The first row of sod must be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints must be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids, which would cause air drying of the roots.

Wherever possible, lay sod with the long edges parallel to the contour and with staggering across. Roll and tamp, pad, or otherwise secure sod to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.

Immediately water sod following rolling or tamping until the underside of the new sod pad and surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any area of sod within eight hours.

5. Incremental Stabilization - Cut Slopes

Dress, prepare, seed, and mulch all soil slopes as the work progresses. Excavate and stabilize slopes in equal increments not to exceed 15 feet.

The construction sequence is as follows (refer to Figure 2.1):

- (a) Excavate and stabilize all temporary weirs, side ditches, or berms that will be used to convey runoff from the excavation.
- (b) Perform phase 1 excavation, dress, and stabilize.
- (c) Perform phase 2 excavation, dress, and stabilize. Overseed previously seeded areas as necessary.
- (d) Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation could complicate the operation out of the seeding season will necessitate the application of temporary stabilization.

2.6.6 Maintenance

Grass Maintenance

1. Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.
2. Once the vegetation is established, the site must have 95% ground cover to be considered adequately stabilized.
3. If the stand provides less than 40% ground coverage, reestablish following original time, fertilizer, seedbed preparation and seeding recommendations.
4. If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary.
5. Maintenance fertilizer rates for permanent seedings are shown in Table 2.9.

Table 2.9 Maintenance Fertilization for Permanent Seeding

Plant Species	Type	Seeding Rate	Time	Mowing
Tall fescue mixture (up to 75% or more of total)	10-10-10	500	11.5	Yearly or as needed
Barley	10-10-10	400	9.2	Fall
Brachiaria	0-20-0	400	9.2	Fall
Fairy uniform stand of tall fescue or brachiaria	5-10-10	500	11.5	Fall
Weeping veyers	5-10-10	500	11.5	Fall
Red & cherries	20-10-10	250	5.8	Yearly
Red & cherries	20-10-10	250	5.8	Yearly

Soil Maintenance

1. In the absence of adequate rainfall, perform watering daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches. Water during the heat of the day to prevent wilting.

2. After the first week, soil watering is required as necessary to maintain adequate moisture content.

3. Do not attempt the first mowing of soil until the soil is firmly rooted. Do not remove more than a third of the grass leaf by the initial cutting or subsequent cuttings. Maintain grass height between 2 to 3 inches unless otherwise specified.

2.6.7 Topsoiling

2.6.1 Definition

Placement of topsoil over prepared subsoil prior to establishing permanent vegetation.

2.6.2 Purpose

To provide a suitable soil medium for vegetative growth.

2.6.3 Conditions Where Practice Applies

This practice is recommended for areas with 2:1 or flatter slopes where one or more of the following apply:

1. The texture, pH, or nutrient balance of the exposed subsoil/parent material is not adequate to produce vegetative growth.
2. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
3. The original soil to be vegetated contains less than 10 plant growth.
4. The soil is so acidic that treatment with limestone is not feasible.
5. Areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. These areas must have the appropriate stabilization shown on the plans.

2.6.4 Design Criteria

Topsoil salvaged from the existing site may be used if it meets the standards in these specifications. Place topsoil and apply soil amendments as specified in Section 2.10 Vegetative Stabilization. Soil to be used as topsoil must meet the following specifications:

1. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by DCEE. Regardless, topsoil must not be a mixture of contrasting textured gravels and must contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 inch in diameter.
2. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, other poisonous plants, or others as specified in Section 2.10 Vegetative Stabilization. Topsoil must also be free from invasive plants or plant parts.
3. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons per acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Distribute lime uniformly over designated areas and work into the soil in conjunction with tillage operations as described in the next step.

- (a) Hydroseeding:
 - i) Fertilizer is being applied at the time of seeding, the application rates are total of the following: nitrogen, maximum of 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 - ii) Lime - Use only ground agricultural limestone, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons per acre are applied by hydroseeding at any one time. Do not burn or hydrate lime when hydroseeding.
 - iii) Seed and fertilizer must be mixed on site and seeding must be done immediately and without interruption.
 - iv) Filler mulch may be incorporated into the hydroseeding mixture. Consult Section 2.7 Mulching for standards and specifications.

- (b) Dry Seeding - This includes use of conventional drop or broadcast spreaders.

- (c) Incorporate seed spread into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Table 2.4 and 2.7. The seeded area must then be rolled with a weighted roller to provide good seed to soil contact.

- (d) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- (e) Drill or Culipacker Seeding: Mechanized seeders that apply and cover seed with soil.

- (f) Culipacking seeders are required to bury the seed in such a fashion as to provide at least 1/2 inches of soil covering. Seeded must be firm after planting.

- (g) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- (h) Soil Installation - During periods of excessively high temperature in areas having dry soil, the subsoil must be lightly irrigated immediately prior to laying the sod.

The first row of sod must be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints must be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids, which would cause air drying of the roots.

Wherever possible, lay sod with the long edges parallel to the contour and with staggering across. Roll and tamp, pad, or otherwise secure sod to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.

Immediately water sod following rolling or tamping until the underside of the new sod pad and surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any area of sod within eight hours.

5. Incremental Stabilization - Cut Slopes

Dress, prepare, seed, and mulch all soil slopes as the work progresses. Excavate and stabilize slopes in equal increments not to exceed 15 feet.

The construction sequence is as follows (refer to Figure 2.1):

- (a) Excavate and stabilize all temporary weirs, side ditches, or berms that will be used to convey runoff from the excavation.
- (b) Perform phase 1 excavation, dress, and stabilize.
- (c) Perform phase 2 excavation, dress, and stabilize. Overseed previously seeded areas as necessary.
- (d) Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.

2.6.6 Maintenance

After precipitation events, confirm that topsoil and subsoil are properly bonded and no sloughing has occurred.

2.7 Mulching

The contractor must conduct operations and maintain the project site so as to minimize the creation and dispersion of dust.

2.7.1 Definition

The application of a protective layer of mulch or other suitable material to the soil surface.

2.7.2 Purpose

To protect the soil surface from the forces of raindrop impact and overland flow. Mulch helps to conserve moisture, reduce runoff and erosion, control weeds, prevent soil crusting, and promote the establishment of desired vegetation. Mulch is frequently used to accent landscape plantings.

2.7.3 Conditions where Practice Applies

Mulching can be used at any time where protection of the soil surface is desired. The primary purpose of mulching is to protect newly seeded disturbed areas. However, it can also be used for stand-alone protection of the soil surface under adverse weather conditions when seed germination could be jeopardized. Mulch may also be used together with plantings of trees, shrubs, or certain ground cover that do not provide adequate soil stabilization by themselves.

Use mulching in conjunction with temporary seeding operation as specified in Section 2.10 Vegetative Stabilization.

2.7.4 Design Criteria

A surface mulch is the most effective, practical means of controlling runoff and erosion on disturbed land prior to vegetation establishment. Mulch reduces soil moisture loss by evaporation, prevents crusting and scaling of the soil surface, moderates soil temperatures, provides a suitable microclimate for seed germination, and may increase the infiltration rate of the soil.

Organic mulches such as straw, wood chips, and shredded bark have been found to be the most effective. Do not use materials that may be sources of competing weed and grass seeds. Be aware that decomposition of some wood products can be significant sources of soil nitrogen, making it necessary to modify fertilization rates and/or fertilizer with the mulch.

Various types of netting materials are available to anchor organic mulches. Chemical soil stabilizers or soil binders are less effective than other types of mulches when used alone. These products are primarily useful for tacking wood fiber mulches.

Choose materials for mulching based on soil conditions, season, type of vegetation, and size of the area. A properly applied and tacked mulch is always beneficial. It is especially important when conditions for germination are not optimum, such as midsummer and early winter, and on difficult areas such as cut slopes and slopes with southern exposures.

Mulch Materials

1. Straw must be unrooted small grain straw. Mulch materials must be relatively free of weeds and must be free of noxious weeds such as johnsongrass, Johnsongrass, and quackgrass. Spread mulch uniformly by hand or mechanically. Straw can be windblown and must be anchored down by an acceptable method.

2. Wood chips are particularly well suited for utility and road rights-of-way, as well as areas that will not be closely mowed or around ornamental plantings. Wood chips do not require tacking. Because they decompose slowly, they must be treated with 12 pounds of nitrogen per ton to prevent nutrient deficiency in plants. Mulch can be inexpensive if chips are obtained from trees cleared on the site.

3. Wood fiber consists of specially prepared wood cellulose processed into a uniform fibrous physical state. It is used in hydroseeding operations as a part of a slurry. It creates the best seed-soil contact when applied over top of (as a separate operation) newly seeded areas. These fibers do not require tacking, although tacking agents or binders are sometimes used in conjunction with the application of fiber mulch. The following conditions apply to wood fiber:

(a) Wood fiber is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformity spread.

(b) Wood fiber, including dye, must contain no germination or growth inhibiting factors.

(c) Wood fiber materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer, and other additives to form a homogeneous slurry.

The mulch material must form a blotter-like ground cover on application, having moisture absorption and percolation properties, must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

(d) Wood fiber material must not contain elements or compounds at concentration levels that will be phytotoxic.

(e) Wood fiber must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter of approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6% maximum, and water holding capacity of 90% minimum.

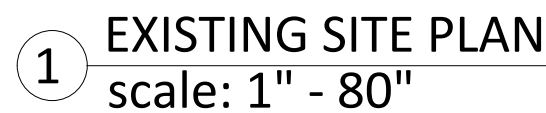
2.7.5 Construction Specifications

1. Prior to mulching, install any needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, channels, and sediment traps and basins.

2. Apply seed and soil amendments at the required rate to bring the soil into compliance with the requirements set forth in Section 2.10 Vegetative Stabilization.

3. Apply mulch at required rates. Depending on site conditions, mechanically applied mulches may be applied in a one-step process where all components may be hydraulically injected in single tank loads. Consult with the manufacturer for further details.

- (a) Straw - Apply straw mulch over all seeded areas at the rate of 2 tons per acre, or 2 bales per 1,000 square feet, to a uniform loose depth of 1



TOTAL DISTURBED AREA - 740 SF

