

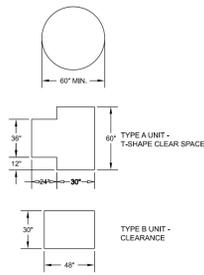
Exhibit A

1514 Q STREET, NW

LEGEND:

	A	GRID LINE
	X XXXX	SECTION TAG
	X XXXX X	INTERIOR ELEVATION
	X XXXX	EXTERIOR ELEVATION
	X XXXX	DETAIL TAG
	EL. 0'-0"	ELEVATION TAG
		ELEVATION TAG
	⊗	WINDOW TAG
	⊗	DOOR TAG
	xx	WALL TYPE
	1	DRAWING TITLE

ADA TURNING SPACE



304.3.1 CIRCULAR SPACE: THE TURNING SPACE SHALL BE A CIRCULAR SPACE WITH A 60-INCH (1525 MM) MINIMUM DIAMETER. THE TURNING SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306.

304.3.2 T-SHAPED SPACE: THE TURNING SPACE SHALL BE A T-SHAPED SPACE WITH A 60-INCH (1525 MM) MINIMUM SQUARE, WITH ARMS AND BASE 36 INCHES (915 MM) MINIMUM IN WIDTH, EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 12 INCHES (305 MM) MINIMUM IN EACH DIRECTION, AND THE BASE SHALL BE CLEAR OF OBSTRUCTIONS 24 INCHES (610 MM) MINIMUM. THE TURNING SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306 ONLY AT THE END OF EITHER THE BASE OR ONE ARM.

ABBREVIATIONS:

AB ANCHOR BOLT	GR GRADE	R RISER
AC AIR CONDITIONING	GTR GUTTER	RAD RADIUS
ACT ACOUSTICAL CEILING TILE	GWB GYPSUM WALL BOARD	RD ROOF DRAIN
ADJ ADJUSTABLE	HB HOSE BIB	REBAR STEEL REINFORCING BAR
AFF ABOVE FINISHED FLOOR	HC HANDICAP	REC RECESSED
BD BOARD	HD HEAD	REFG REFRIGERATOR
BIT BITUMINOUS	HDR HEADER	REINF REINFORCED
BKG BLOCKING	HDW HARDWARE	REQ REQUIRED
BLDG BUILDING	HGR HANGER	REV REVERSE
BM BEAM	HOR HORIZONTAL	RFG ROOFING
BOF BOTTOM OF FOOTING	HT HEIGHT	RH RIGHT HAND
BR BRICK	HTG HEATING	RM ROOM
BRG BEARING	HVAC HEATING VENTILATING AND AIR CONDITIONING	RO ROUGH OPENING
C COURSE	HW HOT WATER	RTG RATING
CAB CABINET	HWD HARDWOOD	SCHDSCHEDULE
CFM CUBIC FEET PER MINUTE	ID INSIDE DIAMETER	SECT SECTION
CI CAST IRON	INS INSULATION	SF SQUARE FOOT
CLG CEILING	INT INTERIOR	SHT SHEET
CMU CONC MASONRY UNIT	JB JAMB	SIM SIMILAR
COL COLUMN	JST JOIST	SM# SMOOT LUMBER
CONC CONCRETE	KIT KITCHEN	COMPANY DESIGNATION
CONTCONTINUOUS	LAM LAMINATED	SPEC SPECIFICATION
CPT CARPET	LAV LAVATORY	SPKR SPRINKLER
CT CERAMIC TILE	LBS POUNDS	SQ SQUARE
CTR CENTER	LH LEFT HAND	S&R SHELF AND ROD
DBL DOUBLE	LT LIGHT	STD STANDARD
DEM DEMOLISH/DEMOLITION	MAS MASONRY	STL STEEL
DN DOWN	MAX MAXIMUM	STR STRUCTURE
DR DOOR	MECH MECHANICAL	SUSP SUSPENDED
DS DOWNSPOUT	MEMB MEMBRANE	SYS SYSTEM
DWG DRAWING	MFR MANUFACTURER	T TREAD
EA EACH	MIN MINIMUM	T&G TONGUE AND GROOVE
EL ELEVATION	MISC MISCELLANEOUS	TEL TELEPHONE
ENCL ENCLOSURE	MLDGMOLDING	TEMPTEMPERED
EQ EQUAL	MO MASONRY OPENING	THK THICK
EQPT EQUIPMENT	MTD MOUNTED	TOF TOP OF FOOTING
EX EXISTING	MTL METAL	TOW TOP OF WALL
EXP EXPANSION	NO# NUMBER	TV TELEVISION
EXT EXTERIOR	NTS NOT TO SCALE	TYP TYPICAL
FBRGL FIBERGLASS	OC ON CENTER	UON UNLESS OTHERWISE NOTED
FD FLOOR DRAIN	OD OUTSIDE DIAMETER	VB VAPOR BARRIER
FDN FOUNDATION	OPG OPENING	VCT VINYL COMPOSITION TILE
FF FOIL FACE	OPP OPPOSITE	VERT VERTICAL
FIN FINISH	PC PRECAST CONCRETE	VT VINYL TILE
FL FLOOR	PL PLATE	W/ WITH
FLG FLASHING	PLAM PLASTIC LAMINATE	WD WOOD
FOM FACE OF MASONRY	PLAS PLASTER	WIN WINDOW
FS FULL SIZE	PNL PANEL	W/O WITHOUT
FT FOOT OR FEET	PNT PAINT	WP WATERPROOFING
FTG FOOTING	PR PAIR	WR WATER RESISTANT
FUR FURRING	PSF POUNDS PER SQ FOOT	WSCT WAINSCOT
GA GAUGE	PSI POUNDS PER SQ INCH	WT WEIGHT
GAL GALVANIZED	PVC POLYVINYL CHLORIDE	WWF WELDED WIRE FABRIC
GC GENERAL CONTRACTOR	PLY PLYWOOD	
GL GLASS		

GENERAL NOTES:

CONTRACTOR SHALL VERIFY AND FAMILIARIZE HIMSELF WITH ALL FIELD CONDITIONS PRIOR TO SUBMITTING PROPOSALS AND COMMENCING CONSTRUCTION. FIELD CONDITIONS NOT AGREEING WITH CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER & DESIGNER PRIOR TO BEGINNING WORK. ALL ADDITIONAL WORK NEEDED TO COMPLETE THE PROPOSED PROJECT WHICH IS NOT INDICATED ON DRAWINGS SHALL RECEIVE PRIOR AUTHORIZATION FROM THE HOMEOWNER.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL WORK NECESSARY FOR A COMPLETE INSTALLATION WHETHER SUCH WORK IS INDICATED ON DRAWINGS OR SPECIFICATIONS.

ALL MANUFACTURED / PREFABRICATED ITEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE WRITTEN MANUFACTURES SPECIFICATIONS.

JOB SITE SHALL BE KEPT IN A CLEAN AND ORDERLY FASHION AT THE END OF EACH DAYS WORK. ALL WARRANTIES, GUARANTIES AND MANUFACTURERS INSTRUCTIONS SHALL BE PRESENTED TO THE HOMEOWNER IN A COMPLETE AND ORDERLY MANNER AT THE CONCLUSION OF CONSTRUCTION. ALL WORK PERFORMED SHALL BE EXECUTED TO GREATER THAN STANDARD BUILDING QUALITY AND SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES.

THE DESIGNER SHALL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, OR FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CLIENT OR HIS CONTRACTORS, SUBCONTRACTORS OR ANYONE PERFORMING WORK, TO CARRY OUT THE WORK IN ACCORDANCE WITH THE APPLICABLE RESIDENTIAL CODES, REGULATIONS, AND CONTRACT DOCUMENTS.

BY A LICENSED GENERAL CONTRACTOR ENTERING INTO AGREEMENT WITH THE HOMEOWNER/PROPERTY OWNER, HE AGREES TO KEEP CURRENT ALL INSURANCES, WORKER'S COMPENSATION AS REQUIRED, AND AGREES TO INDEMNIFY/HOLD HARMLESS THE HOMEOWNER/ PROPERTY OWNER FROM ANY ACCIDENTS OCCURRING FROM THE SCOPE OF WORK REQUIRED TO COMPLETE THE PROPOSED PROJECT.

CONTRACTORS SHALL BE RESPONSIBLE FOR REMOVING & DISPOSING OF DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM WORK AT THE JOB SITE. CONTRACTOR SHALL PROVIDE PROTECTION BETWEEN THE NEW CONSTRUCTION AND THE EXISTING BUILDING AND TAKE ADEQUATE MEASURES TO KEEP DUST TO A MINIMUM. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL CLEAN THE ENTIRE PREMISES AND TURN OVER ALL KEYS USED DURING CONSTRUCTION, OLD AND NEW. SEE NOTE ABOVE.

ALL EXISTING CONDITIONS SHOULD BE FIELD VERIFIED INCLUDING DIMENSIONS AND STRUCTURE. SOME VARIATIONS COULD EXIST AND IT IS THE RESPONSIBILITY OF OTHERS TO CONFIRM THE INFORMATION HEREIN.

APPLICABLE BUILDING CODES

This project conforms to all applicable building codes and zoning regulations for the District of Columbia. All codes subject to the District of Columbia Construction Codes 2013 Supplement Amendments and all revisions	
BUILDING IRC 2012:	INTERNATIONAL RESIDENTIAL CODE - 2012, DCMR 12A
MECHANICAL IMC 2012:	INTERNATIONAL MECHANICAL CODE - 2012, DCMR 12E
PLUMBING IPC 2012:	INTERNATIONAL PLUMBING CODE - 2012 DCMR 12F
ELECTRICAL:	2005 NEC/NFPA 70 - NATIONAL ELECTRICAL CODE, DCMR12C
FIRE IFC 2012:	INTERNATIONAL FIRE CODE - 2012, DCMR 12H
ENERGY IECC 2012:	INTERNATIONAL ENERGY CONSERVATION CODE - 2012 DCMR12I
FUEL IFGC 2012:	INTERNATIONAL FUEL GAS CODE - 2012, DCMR 12D
EXISTING BLDG IEBC 2012:	INTERNATIONAL EXISTING BLDG CODE - 2012, DCMR 12J
PROPERTY IPMC 2012:	INTERNATIONAL PROPERTY MAINTANCE CODE - 2012, DCMR 12G
AMENDMENTS:	DCMR12 BUILDING CODE REGULATIONS, 2009
ZONING:	DCMR TITLE 11 - ZONING REGULATIONS
ADA:	ICC/ANSI A117.1-2003: ACCESSIBLE AND USABLE BUILDINGS A FACILITIES

BUILDING CLASSIFICATIONS

USE GROUP (IBC 2012 - 310)	R-2
TYPE OF CONSTRUCTION (IBC 2012 - 602)	TYPE VA

PROJECT NARRATIVE:

CHANGE OF USE FROM SINGLE FAMILY HOME TO 4 UNIT APARTMENT BUILDING. INCLUDING MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL. BUILDING TO BE FULLY SPRINKLED

DRAWING LIST:

CS	COVER PAGE
CS-1	EVS
CS-2	BUILDING DATA
AD0101	EXISTING/DEMO FLOOR PLANS DEMO PERMIT OBTAINED
AD0201	EXISTING/DEMO EXTERIOR ELEVATIONS DEMO PERMIT OBTAINED
A0100	SITE PLANS
A0101	FLOOR PLANS
A0102	FLOOR PLANS
A0201	ELEVATIONS
A0202	ELEVATIONS
A0203	ELEVATIONS
A0301	GENERAL BUILDING SECTION
A0501	BUILDING DETAILS
S0.0	STRUCTURAL NOTES
S1.1	FRAMING PLANS
S1.2	FRAMING PLANS & DETAILS
E1	ELECTRICAL PLANS
E2	ELECTRICAL PLANS
M1	MECHANICAL PLANS
M2	MECHANICAL PLANS
P1	PLUMBING PLANS
P2	PLUMBING PLANS

KC/DC STUDIOS
ARCHITECTURE - design - construction management

1514 Q STREET, NW
WASHINGTON, DC 20009
LOT: 0027 SQUARE: 0194

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SCALE: AS NOTED

DATE: 02/29/2016

PROJECT NUMBER: 1514 Q

CS

Permit #:

Compliance Approach Used: Prescriptive Trade Off Performance

Project Type: New Building Addition Level 3 Alteration

2012 IECC Section #	Pre-Inspection Section Description	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
302.1, 403.6 MR	Heating and Cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J	N/A				
2012 IECC Section #	Foundation Inspections	Prescriptive Code Value	Plan Value	Identified Dwg Page	Plan Review	Field Insp.
402.1.1 SR	Slab Insulation R-value. Perimeter insulation extending downward from the top of the slab surface	Unheated R-10 Heated R-15		A0301		
402.1.1 SR	Slab Insulation depth.	2 feet		A0301		
402.1.1 SR	Conditioned basement wall insulation R-value. Where internal insulation is used, verification to occur during insulation inspection	Continuous R-10 Cavity: R-13		A0301		
303.2 I	Conditioned basement wall insulation installed per manufacturer instructions.	N/A				
402.2.8 SR	Conditioned basement wall insulation depth of burial or distance from top of wall.	10 ft or to bsmt. floor		N/A		
402.2.10 SR	Unvented crawlspace wall insulation R-value	Continuous: R-10 Cavity: R-13		N/A		
303.2 I	Unvented crawlspace installed per manufacturer's instructions	N/A				
402.2.10 SR	Unvented crawlspace continuous vapor retarder installed over exposed earth, joints overlapped by 6 in. and sealed, extending at least 6 in. up and attached to the wall.	Continuous R-10 Cavity: R-13		N/A		
402.2.10 SR	Unvented crawlspace wall insulation depth of burial or distance from top of wall	To finished grade +24 in. vert. & / or horiz.		N/A		
303.2.1 S	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	N/A		N/A		
403.8 ER	Snow and ice-melting system controls installed.			N/A		

2012 IECC Section #	Framing/ Rough-In Inspection	Prescriptive Code Value	Plan Value	Identified Dwg Page	Plan Review	Field Insp.
402.1.1, 402.3.4 SR	Door U-factor	U-0.35		CS-2		
402.1.1, 402.3.1, 402.3.3 SR	Glazing U-factor (Area weighted average, show proof of average if any u-value is less than 0.35)	U-0.35		CS-2		
402.1.1, 402.3.2, 402.3.3, 402.3.6, SR	Glazing SHGC value (Area weighted average)	SHGC: 0.4		CS-2		

Key: Mandatory for all Compliance Approaches as Relevant to the Scope of Work

2012 IECC Section #	Framing/ Rough-In Inspection	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
303.1.3 I	U-factors of fenestration products are determined in accordance with the NFRC or the default table values.			CS-2		
402.1.1, 402.3.3, 402.3.6 SR	Skylight U-factor	U-0.55 (15 square foot exemption)		N/A		
402.1.1, 402.3.3, 402.3.6 SR	Skylight SHGC	SHGC: 0.30 (0.5 max w/ tradeoff. 15ft² exempt)		N/A		
303.1.3 I	SHGC values were determined in accordance with the NFRC or the default table values.			N/A		
402.1.1 SR	Mass wall exterior insulation R-value.	R-13 Interior R-8 Exterior		A0301		
303.2 I	Mass wall exterior insulation installed per manufacturer's instructions.	N/A		N/A		
402.3.5 SR	Fenestration in thermally isolated sunrooms has a max. U-factor of 0.45. All other sunroom fenestration must meet code requirements.	Not Isolated 0.35 Isolated: 0.45		N/A		
402.3.5 SR	Skylights in thermally isolated sunrooms has a max. U-factor of 0.7. All other sunroom skylights must meet code requirements.	Not Isolated 0.55 Isolated: 0.7		N/A		
402.4.1.2 SR	Additions, alterations, renovations and repair shall be completed in accordance with Table 402.4.1.1.	Not Isolated 0.55 Isolated: 0.7				
402.4.1.1 I	Air and Thermal Barrier installed per Manufacturer's instructions.					
402.4.3 I	Fenestration is listed and labeled as meeting AAMA/ WDMA/CSA 101/I.S. 2/A440 or does not exceed code limits per NFRC 400.	0.3 CFM/ft²				
402.4.4 E	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤ 2.0 CFM leakage at 75 Pa.			E1		
403.2.1 MR	Supply Ducts in attic are insulated to $\geq R-8$. All other ducts in unconditioned spaces or outside the building envelope are $\geq R-6$.	Attic: R-8 Other: R-6		M1		
403.2.2 MR	All joints and seams of air ducts, air-handlers, and filter boxes are sealed.			M1		
403.2.3 MR	Building cavities are not used as ducts or plenums.					
403.3 MR	HVAC piping carrying fluids $> 105^\circ\text{F}$ or fluids $< 55^\circ\text{F}$ are insulated to $\geq R-3$.	HVAC Pipe $\geq R-3$		M1		
403.3.1 MR	Protection of insulation on HVAC piping.			M1		
403.4.2 MR	Hot water pipes are insulated to $\geq R-3$.			M1		
403.5 MR	Auto./ gravity dampers install on all intakes/ exhausts.			M1		

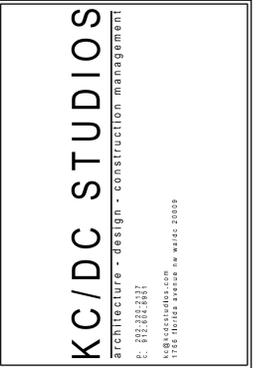
2012 IECC Section #	Insulation Inspections	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Final Review
303.1 I	All installed insulation labeled or installed R-values provided.			A0301		
402.1.1, 402.2.6 SR	Floor Insulation R-value	Wood: R-19 Steel: R-19+6		A0301		
303.2, 402.2.7 SR	Floor insulation installed per mnfr instructions, and substantial contact with underside of floor.			A0301		
402.1.1, 402.2.5, 402.2.6 SR	Wall insulation R-value. If a mass wall with $\frac{1}{2}$ insulation on the wall exterior. ext insulation applies.	Wood: R-20 or R-13+5 Mass: R-13 Int. R-8 Ext. Steel: R19+8		A0301		
402.1.1 SR	Mass wall exterior insulation R-value.	R-13 Interior R-8 Exterior		A0301		
402.2.12 S	Walls of thermally isolated sunrooms have a min. R-13. All other sunrooms must meet code requirements.	Isolated: R13		N/A		
302.2 I	Sunroom walls insulation installed per manufacturer's instructions.			N/A		
402.2.12 S	Ceilings of thermally isolated sunrooms have min. R-24. All other sunroom ceilings must meet code requirements.	Isolated: R-24		N/A		
302.2 I	Sunroom ceiling insulation installed per manufacturer's instructions.			N/A		
2012 IECC Section #	Final Inspections	Prescriptive Code Value	Plan Value	Identified Dwg Page	Plan Review	Field Insp.
402.2.1, 402.2.6 SR	Ceiling insulation R-value	Wood: R-49 Steel: U-0.026		A0301		
303.1.1.1, 303.2 I	Ceiling insulation installed per mnfrs instructions. Blown ins. marked every 300ft²			A0301		
402.2.3 SR	Baffle over air permeable insulation adjacent to soffit and eave vents.			N/A		
402.2.4 SR	Attic access hatch and door insulation $\geq R$ -value of adjacent assembly.	$\geq R$ -value of adjacent assembly		N/A		
402.4.1.2 I	Blower door test @ 50 Pa ≤ 5 Air Changes per Hour. Applies to Level 3, Gut Rehab, New	ACH50 ≤ 5.0		A0101		
402.4.2 I	Wood burning fireplaces have tight fitting flue dampers and outdoor air for combustion.			N/A		
403.2.2 I	Total Duct leakage test ≤ 8 CFM/100 ft² with air-handler installed.	≤ 8 CFM/ 100 ft²		M1		
403.2.2.1 I	Air-handler leakage designed by mnfr. at $\leq 2\%$ of air-flow.			M1		
403.6 I	HVAC equipment type and capacity as per plans.			M1		
403.1.1 MR	Programmable thermostats installed on forced air furnace			M1		
403.1.2 MR	Heat pump thermostat installed on heat pumps.			M1		
403.4.1 MR	Circulating hot water systems have auto. or accessible manual controls.			M1		
404.1 ER	75% lamps in permanent fixtures or 75% permanent fixtures use high eff. lamps			E1		

DCRA Energy Verification Sheet

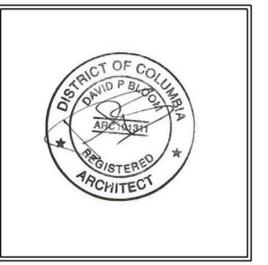
Low-Rise Residential

Version 1.0_2014

This Energy Verification Sheet is based on DOE's Store and Score spreadsheets and was adapted to fit the 2013 DC Energy Conservation Code. This verification sheet does not replace the 2013 DC ECC or 2012 IECC and is included for DCRA to verify significant requirements during permitting and inspection. The project team shall design and install the building to the full energy code whose measures specific to the project may not be included in this sheet. The project team shall also include this document into their drawings and fill it in for low-rise residential projects completing Level 3 Alterations or new construction. Elements that are not applicable to the scope of work shall be marked "N/A" in the "Designer Identified Drawing Page # & "Plan Value" columns. Elements that are applicable shall be marked with the relevant page number where the item is specified in the drawings. Exemptions to items on this sheet shall be indicated so that plan reviewers and inspectors may verify compliance by code section number references and brief description. Projects using the Performance Path need to fill in only the highlighted, mandatory rows. Other Compliance Approaches require filling in all rows. Completion of this page does not absolve project teams from providing other energy verification documentation.



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 LOT: 0027 SQUARE: 0194



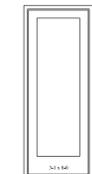
SCALE: AS NOTED
 DATE: 02/29/2016
 PROJECT NUMBER: 1514 Q

CS-1

CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC ^{ch,e}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^f	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13+5 ^h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.35	0.55	0.40	49	20 or 13+5 ^h	8/13	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5 ^h	13/17	30 ^g	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20+5 or 13+10 ^h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20+5 or 13+10 ^h	19/21	38 ^g	15/19	10, 4 ft	15/19

TAG	SIZE	DESCRIPTION
24X80	2'-0" X 6'-8"	FLAT PANEL SOLID CORE MASONITE
30X80	2'-6" X 6'-8"	FLAT PANEL SOLID CORE MASONITE
30X80 FRENCH	2'-6" X 6'-8"	WEATHERSHIELD LOW-E U .30
36X80	3'-0" X 6'-8"	FLAT PANEL SOLID CORE MASONITE
36X80 ENTRY	3'-0" X 6'-8"	EXTERIOR ENTRY DOOR / EXTERIOR ROOF DECK ENTRY
36X80 2 HR	3'-0" X 6'-8"	FLAT PANEL 60 MIN RATED FIRE DOOR
48X80	(2) 2'-0" X 6'-8"	FLAT PANEL SOLID CORE MASONITE
60X80	(2) 2'-6" X 6'-8"	FLAT PANEL SOLID CORE MASONITE
60X80	(2) 2'-6" X 6'-8"	WEATHERSHIELD LOW-E U .30

EXTERIOR DOOR SCHEDULE



36X96 ENTRY
WEATHERSHIELD PREMIUM LINE ENERGY STAR U FACTOR - .30 STANDARD LOW-E

TAG	ELEVATION	DESCRIPTION
A		WEATHERSHIELD PREMIUM LINE ENERGY STAR U FACTOR - .30 STANDARD LOW-E
B		WEATHERSHIELD PREMIUM LINE ENERGY STAR U FACTOR - .30 STANDARD LOW-E
D		WEATHERSHIELD PREMIUM LINE ENERGY STAR U FACTOR - .30 STANDARD LOW-E

BUILDING DATA	EXISTING	PROPOSED
HEIGHT ABOVE GRADE	33'-1 1/2"	45'-3 3/4"
HEIGHT BELOW GRADE	3'-11"	3'-11"
GROSS SQ. FT. PER FLOOR - CALCULATED FROM EXTERIOR WALLS		
CELLAR	748 sq. ft.	1,320 sq. ft.
1st FLOOR	748 sq. ft.	1,320 sq. ft.
2nd FLOOR	748 sq. ft.	1,320 sq. ft.
3rd FLOOR	-	924 sq. ft.
MEZZ.	-	396 sq. ft.
USE GROUP	R-3	R-2
CONSTRUCTION TYPE	TYPE -VA	TYPE -VA
SPRINKLER SYSTEM	NO	YES
FIRE ALARM SYSTEM	NO	YES
FIRE EXTINGUISHERS	YES	YES
SMOKE DETECTION SYSTEM	YES	YES
ADA ACCESSIBILITY	NO	NO
FLOOR AREA (GFA) (INC. CELLAR)	2,244 sq. ft.	5,280 sq. ft.
NUMBER OF STORIES ABOVE GRADE IBC/CHAPTER 5	2	TYPE -VA 3S / 12,000
SOUND TRANSMISSION CLASS	50	50

ZONING DATA	EXISTING	PROPOSED
SQUARE:	0194	0194
LOT:	0027	0027
ZONE:	R-5-B	R-5-B
YEAR BUILT	1885	2015
LOT AREA	2,200 sq. ft.	2,200 sq. ft.
GFA (NIC. CELLAR FLOOR)	1,496 sq. ft.	3,960 sq. ft.
F.A.R.	1.47	1.8
BUILDING AREA	748 sq. ft.	1,320 sq. ft.
LOT OCCUPANCY	34%	60%
NO. STORIES ABOVE GRADE	2 + C	3 + C
BUILDING HEIGHT	33'-1 1/2"	45'-3 3/4"
NO. OF UNITS	1	4
SIDE YARD SET BACK	0	0
REAR YARD SET BACK	35'-8"	25'-7"

INTERIOR CEILING & WALL FINISH REQUIREMENTS FOR GROUP R-2

ITEM	FINISH CLASS
EXIT ENCLOSURES/PASSAGE	C
CORRIDORS	C
ROOMS/ENCLOSED SPACES	C

Thermal Performance Data
Premium Double Hung Windows (8109)

Weather Shield Windows & Doors

Glazing Option	U Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Shading Coefficient	ENERGY STAR ENERGY STAR ENERGY STAR ENERGY STAR				CANADIAN ENERGY PERFORMANCE DATA CANADA ENERGY STAR (2010)						
					US	NC	SC	SE	US	NC	SC	SE			
3/4" Clear Insul	0.47	0.58	0.61	43	Y	Y	Y	Y	2.67	0.36	15	Y	Y	Y	Y
3/4" Insul Low-E	0.34	0.31	0.53	53	Y	Y	Y	Y	1.93	0.36	15	Y	Y	Y	Y
3/4" Zo-e-shield 5	0.34	0.21	0.48	54	Y	Y	Y	Y	1.93	0.36	15	Y	Y	Y	Y
3/4" Zo-e-shield 5 w/ Argon	0.30	0.21	0.48	57	Y	Y	Y	Y	1.70	0.36	15	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme	0.29	0.19	0.43	43	Y	Y	Y	Y	1.65	0.36	15	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme w/ Argon	0.27	0.19	0.43	46	Y	Y	Y	Y	1.53	0.36	17	Y	Y	Y	Y
3/4" Zo-e-shield 6	0.36	0.21	0.47	50	Y	Y	Y	Y	2.04	0.36	7	Y	Y	Y	Y
3/4" Zo-e-shield 6 w/ Argon	0.32	0.21	0.47	54	Y	Y	Y	Y	1.82	0.36	12	Y	Y	Y	Y
1" Zo-e-shield 7 (Triple Glazed)	0.28	0.18	0.37	61	Y	Y	Y	Y	1.59	0.36	15	Y	Y	Y	Y
1" Zo-e-shield 7 w/ Argon (Triple Glazed)	0.24	0.18	0.37	64	Y	Y	Y	Y	1.36	0.36	20	Y	Y	Y	Y

US Qualification Criteria: Northern U-Factor <=0.30 SHGC Any; North-Central U-Factor <=0.31 SHGC >=0.35; South-Central U-Factor <=0.32 SHGC >=0.40; Southern U-Factor <=0.35 SHGC >=0.30

Thermal Performance Data
Premium Slider (8401)

Weather Shield Windows & Doors

Glazing Option	U Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Shading Coefficient	ENERGY STAR ENERGY STAR ENERGY STAR ENERGY STAR				CANADIAN ENERGY PERFORMANCE DATA CANADA ENERGY STAR (2010)						
					US	NC	SC	SE	US	NC	SC	SE			
3/4" Clear Insul	0.48	0.59	0.61	44	Y	Y	Y	Y	2.61	0.46	17	Y	Y	Y	Y
3/4" Insul Low-E	0.33	0.31	0.53	55	Y	Y	Y	Y	1.87	0.46	17	Y	Y	Y	Y
3/4" Zo-e-shield 5	0.30	0.21	0.48	54	Y	Y	Y	Y	1.70	0.46	20	Y	Y	Y	Y
3/4" Zo-e-shield 5 w/ Argon	0.30	0.21	0.48	57	Y	Y	Y	Y	1.48	0.46	11	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme	0.28	0.19	0.43	44	Y	Y	Y	Y	1.59	0.46	16	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme w/ Argon	0.26	0.19	0.43	48	Y	Y	Y	Y	1.48	0.46	18	Y	Y	Y	Y
3/4" Zo-e-shield 6	0.34	0.21	0.47	53	Y	Y	Y	Y	1.93	0.46	10	Y	Y	Y	Y
3/4" Zo-e-shield 6 w/ Argon	0.30	0.21	0.47	57	Y	Y	Y	Y	1.70	0.46	15	Y	Y	Y	Y
3/4" Clear Insul	0.48	0.52	0.54	44	Y	Y	Y	Y	2.61	0.46	13	Y	Y	Y	Y
3/4" Insul Low-E	0.33	0.28	0.47	55	Y	Y	Y	Y	1.87	0.46	15	Y	Y	Y	Y
3/4" Zo-e-shield 5	0.30	0.28	0.47	59	Y	Y	Y	Y	1.70	0.46	19	Y	Y	Y	Y
3/4" Zo-e-shield 5 w/ Argon	0.33	0.19	0.42	54	Y	Y	Y	Y	1.87	0.46	10	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme	0.28	0.18	0.38	44	Y	Y	Y	Y	1.59	0.46	15	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme w/ Argon	0.26	0.17	0.38	48	Y	Y	Y	Y	1.48	0.46	17	Y	Y	Y	Y
3/4" Zo-e-shield 6	0.36	0.19	0.42	53	Y	Y	Y	Y	2.04	0.46	8	Y	Y	Y	Y
3/4" Zo-e-shield 6 w/ Argon	0.32	0.19	0.42	57	Y	Y	Y	Y	1.82	0.46	11	Y	Y	Y	Y
3/4" Clear Insul	0.48	0.46	0.48	44	Y	Y	Y	Y	2.61	0.46	5	Y	Y	Y	Y
3/4" Insul Low-E	0.33	0.25	0.42	55	Y	Y	Y	Y	1.87	0.46	13	Y	Y	Y	Y
3/4" Zo-e-shield 5	0.30	0.25	0.42	59	Y	Y	Y	Y	1.70	0.46	17	Y	Y	Y	Y
3/4" Zo-e-shield 5 w/ Argon	0.33	0.17	0.37	54	Y	Y	Y	Y	1.87	0.46	5	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme	0.30	0.17	0.37	57	Y	Y	Y	Y	1.70	0.46	12	Y	Y	Y	Y
3/4" Zo-e-shield 5 Extreme w/ Argon	0.28	0.16	0.34	44	Y	Y	Y	Y	1.59	0.46	14	Y	Y	Y	Y
3/4" Zo-e-shield 6	0.36	0.17	0.37	53	Y	Y	Y	Y	2.04	0.46	5	Y	Y	Y	Y
3/4" Zo-e-shield 6 w/ Argon	0.32	0.17	0.37	57	Y	Y	Y	Y	1.82	0.46	10	Y	Y	Y	Y

US Qualification Criteria: Northern U-Factor <=0.30 SHGC Any; North-Central U-Factor <=0.31 SHGC >=0.35; South-Central U-Factor <=0.32 SHGC >=0.40; Southern U-Factor <=0.35 SHGC >=0.27

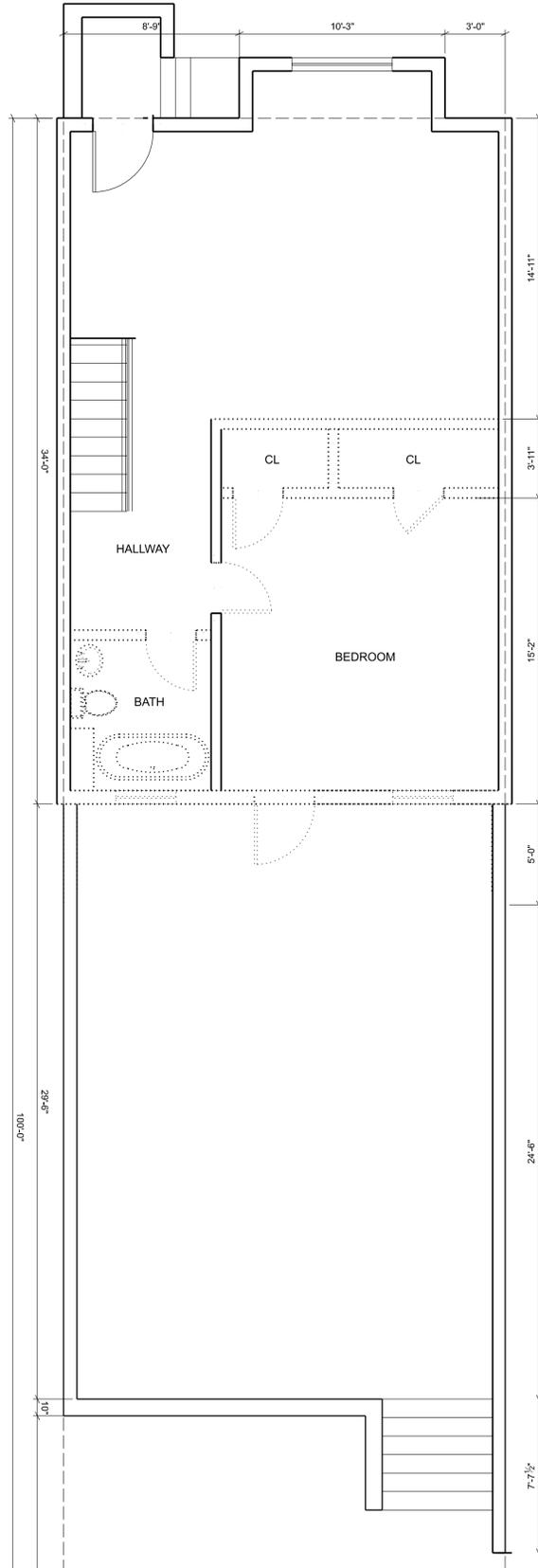
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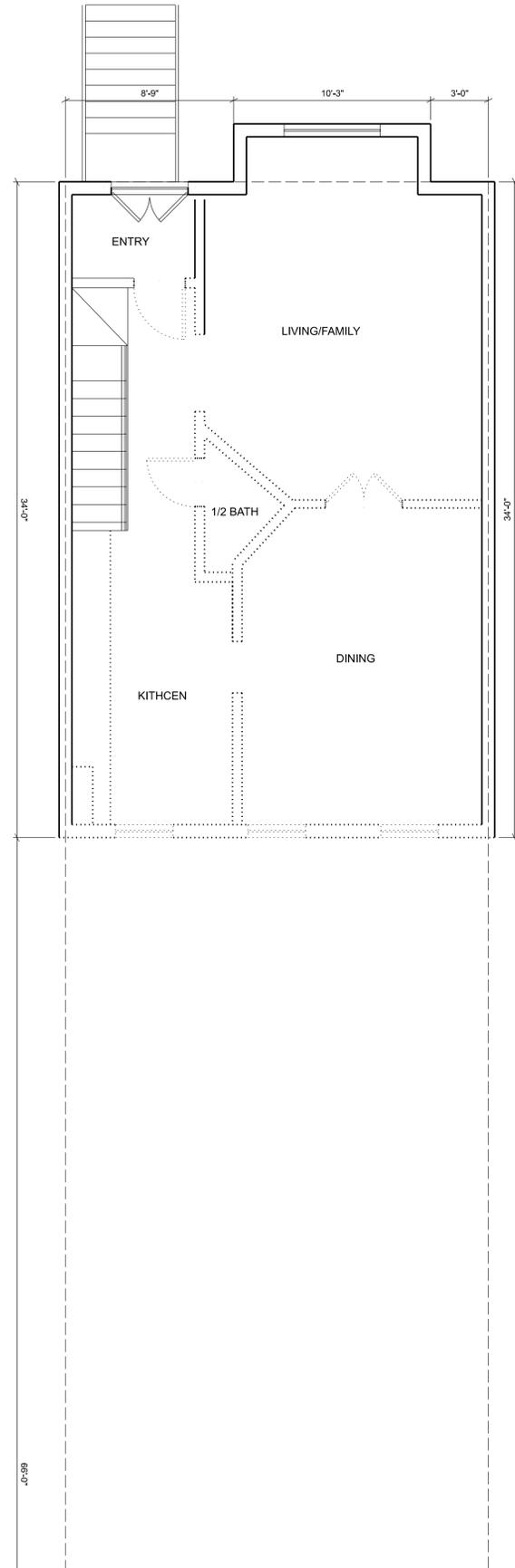


SCALE: AS NOTED
DATE: 02/29/2016
PROJECT NUMBER: 1514 Q

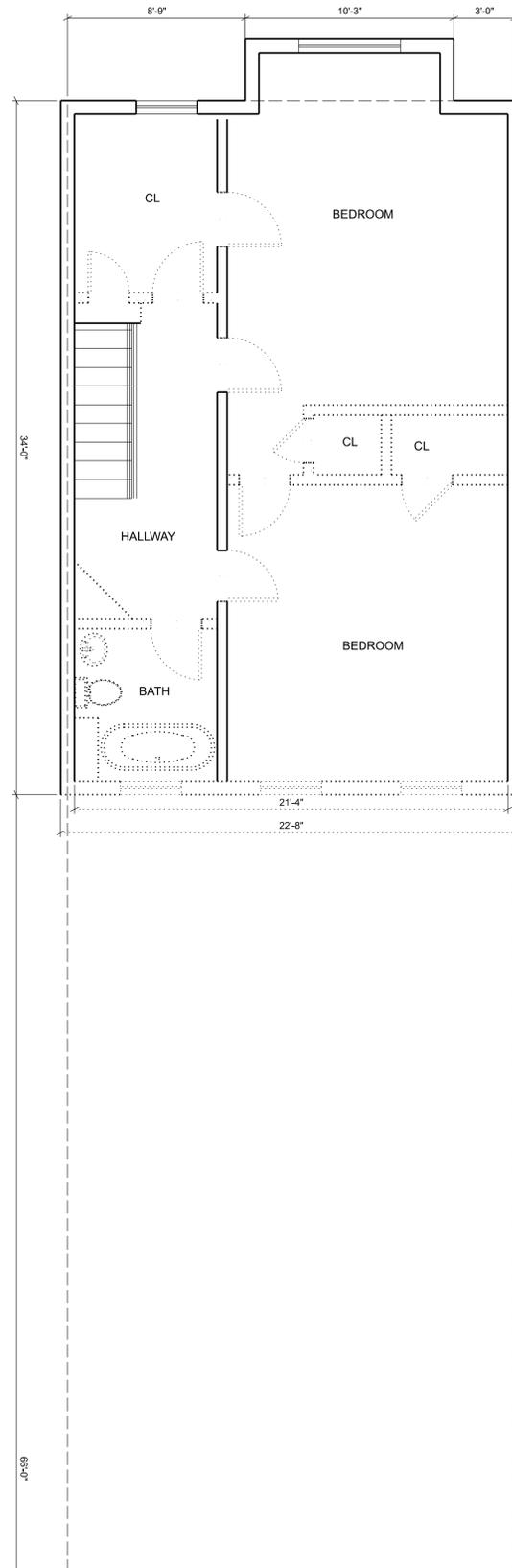
CS-2



1 CELLAR FLOOR PLAN - DEMO
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



2 1ST FLOOR PLAN - DEMO
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



3 2ND FLOOR PLAN - DEMO
SCALE: 1/4" = 1'-0" 24X36 LAYOUT

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SCALE: AS NOTED

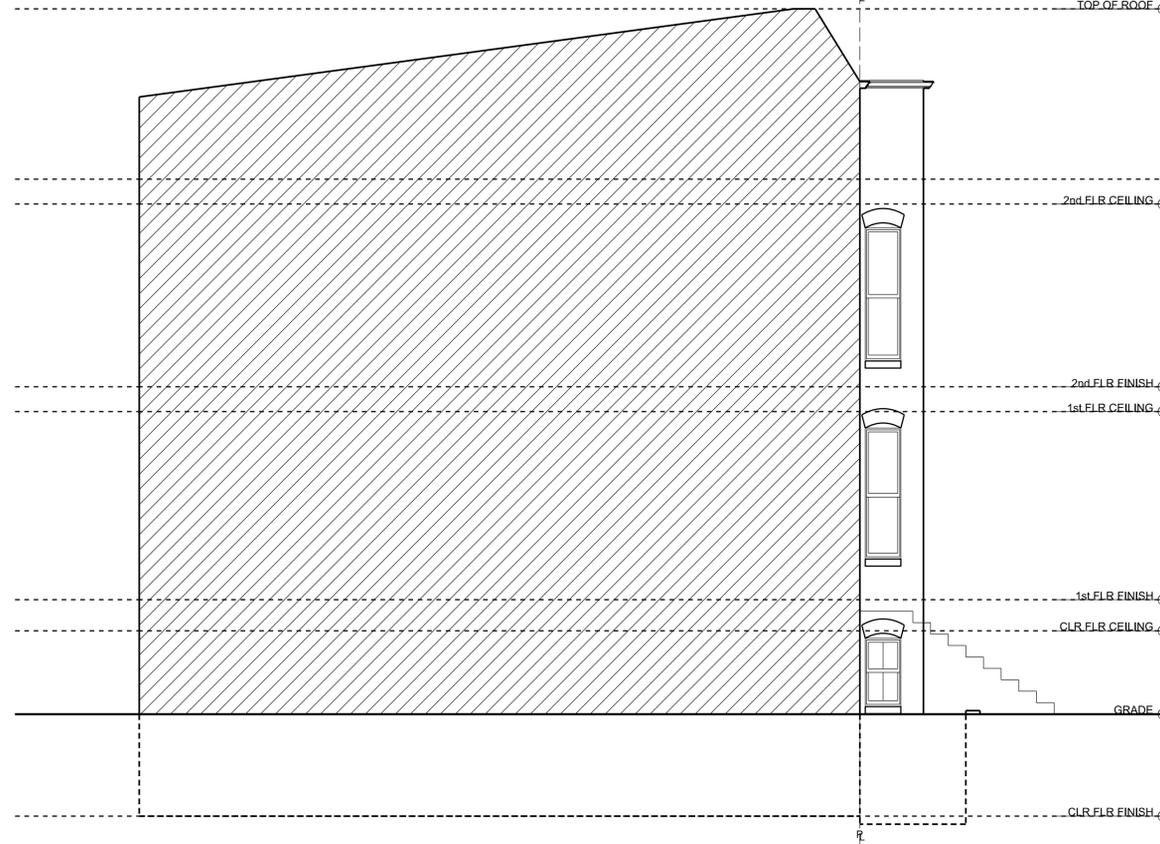
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PROJECT NUMBER: 1514 Q

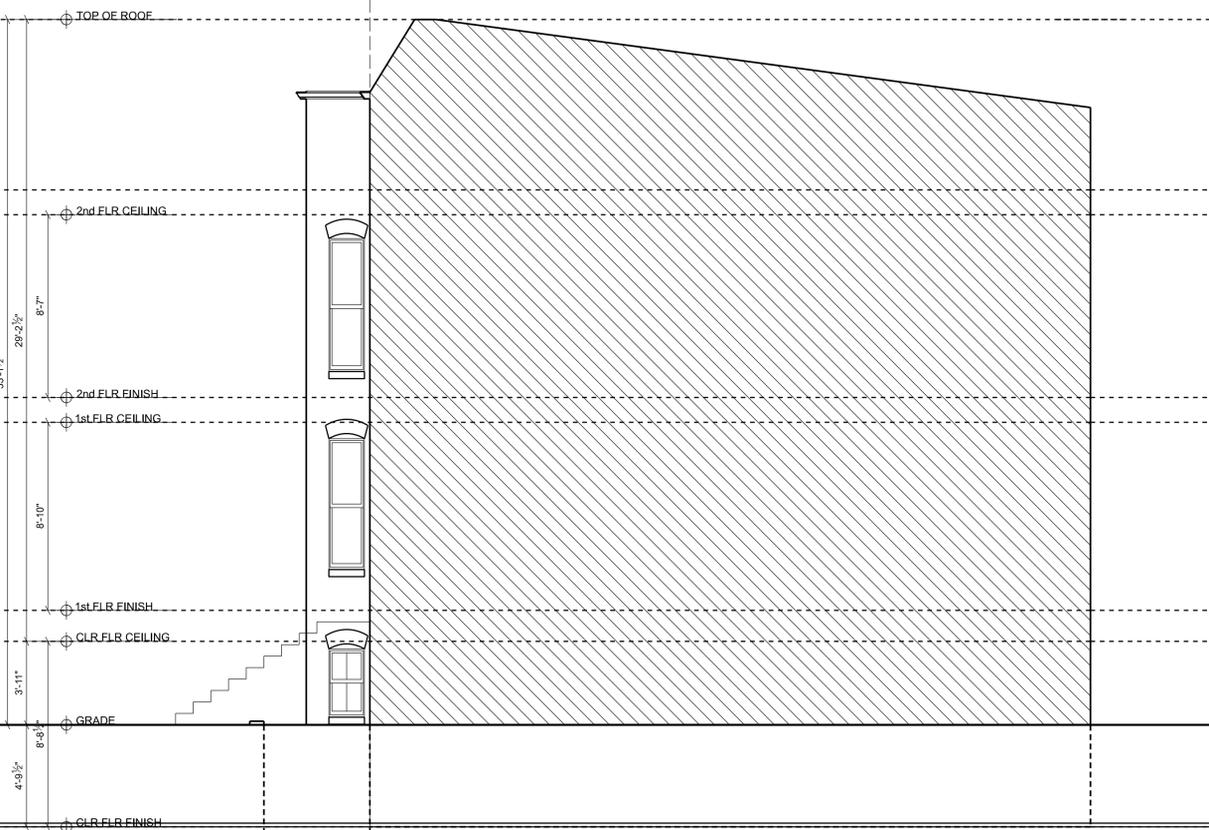
AD0101



1 NORTH FACADE - EXISTING
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



2 EAST FACADE - EXISTING
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



3 WEST FACADE - EXISTING
SCALE: 1/4" = 1'-0" 24X36 LAYOUT

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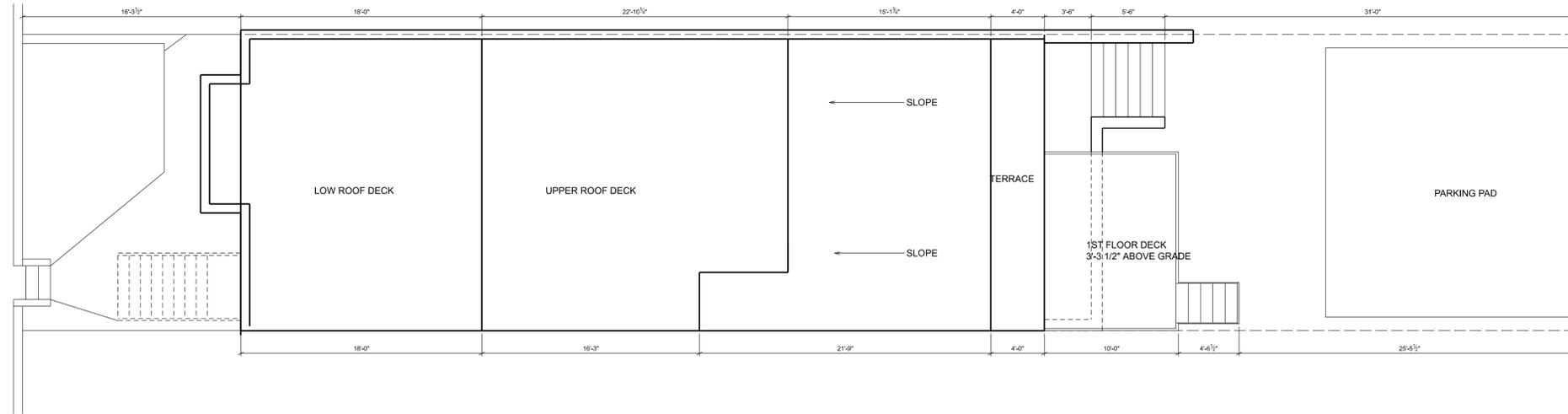


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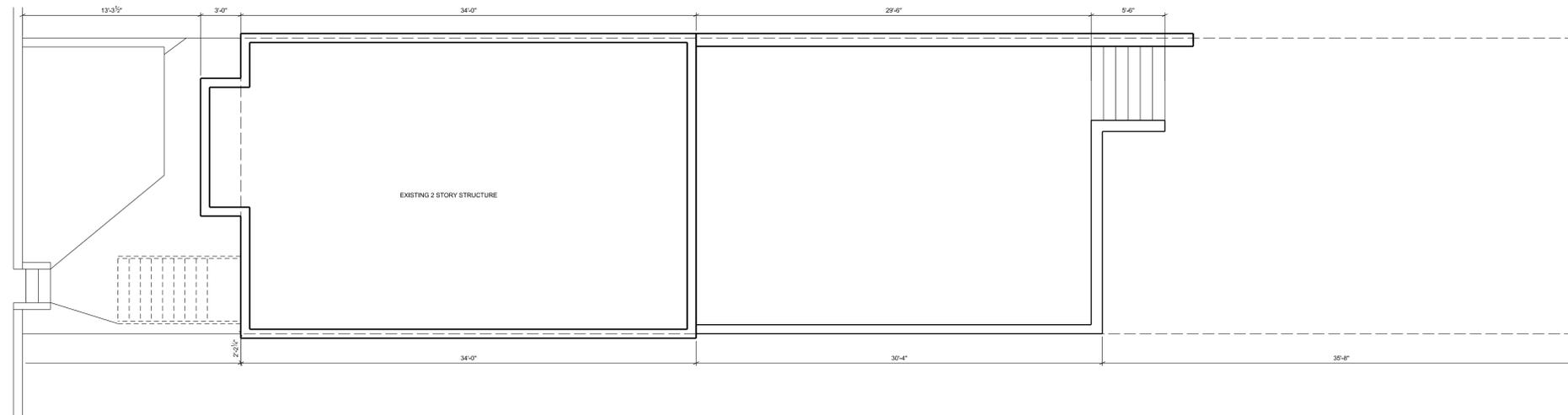
DATE: 02/29/2016

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AD0201



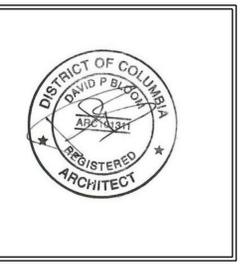
1 PROPOSED SITE PLAN
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



2 EXISTING SITE PLAN
EXISTING SITE PLAN

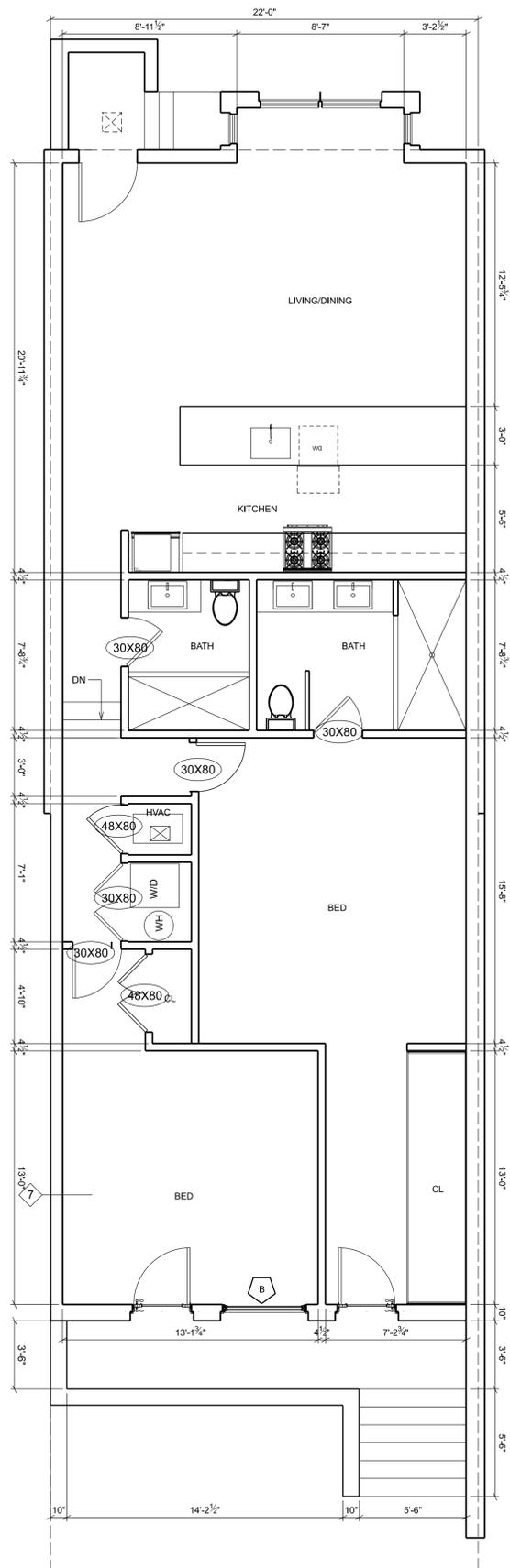
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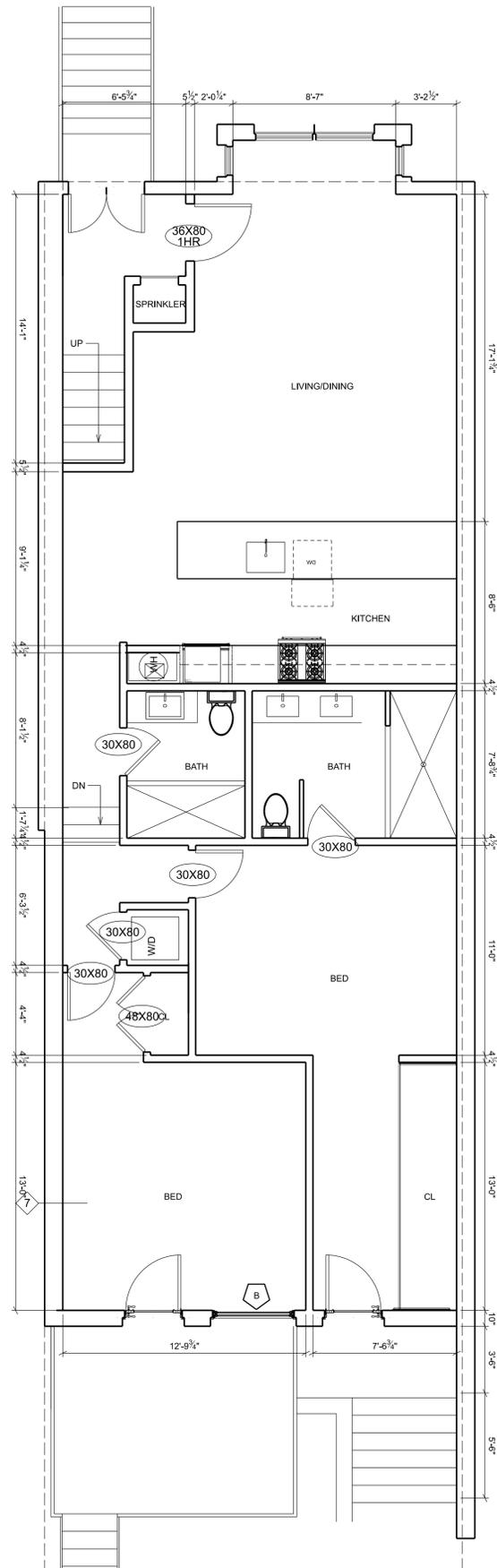


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 PROJECT NUMBER: 1514 Q

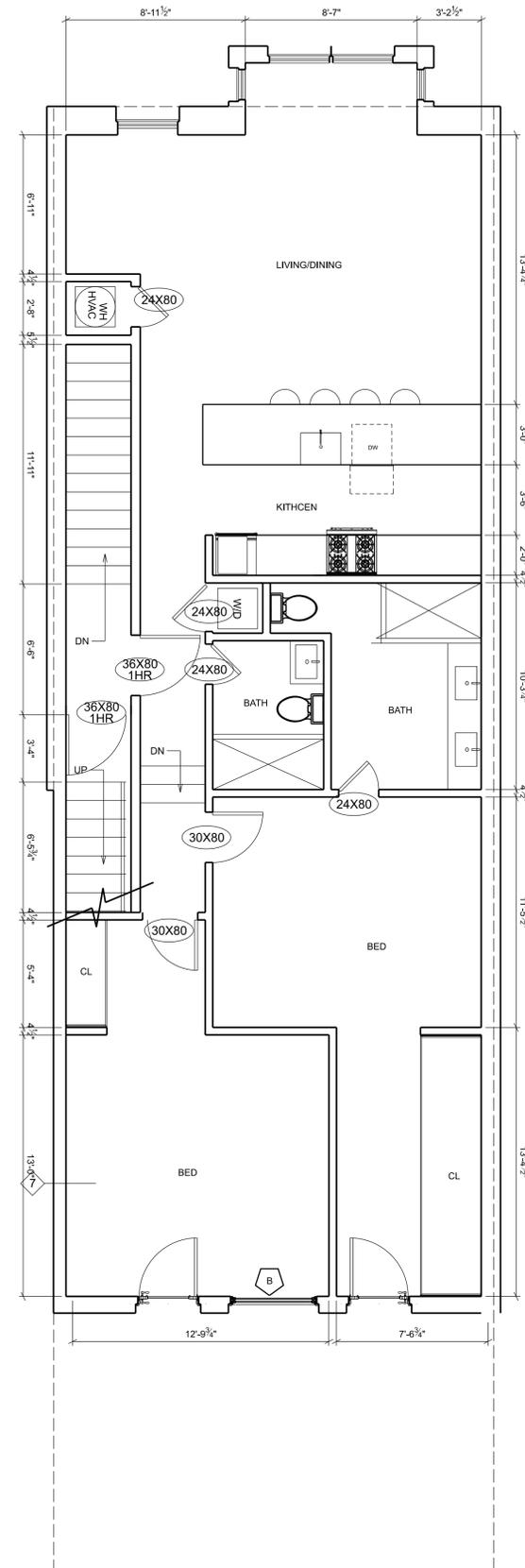
A0100



1 CELLAR FLOOR PLAN
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



2 1ST FLOOR PLAN
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



3 2ND FLOOR PLAN
SCALE: 1/4" = 1'-0" 24X36 LAYOUT

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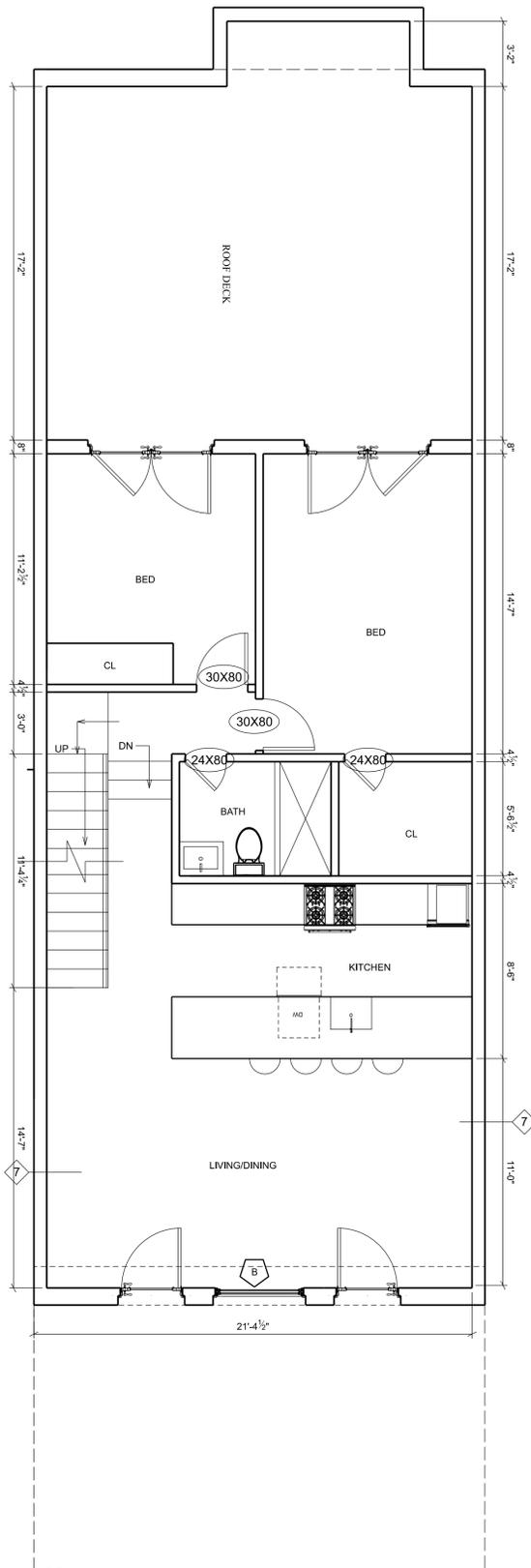


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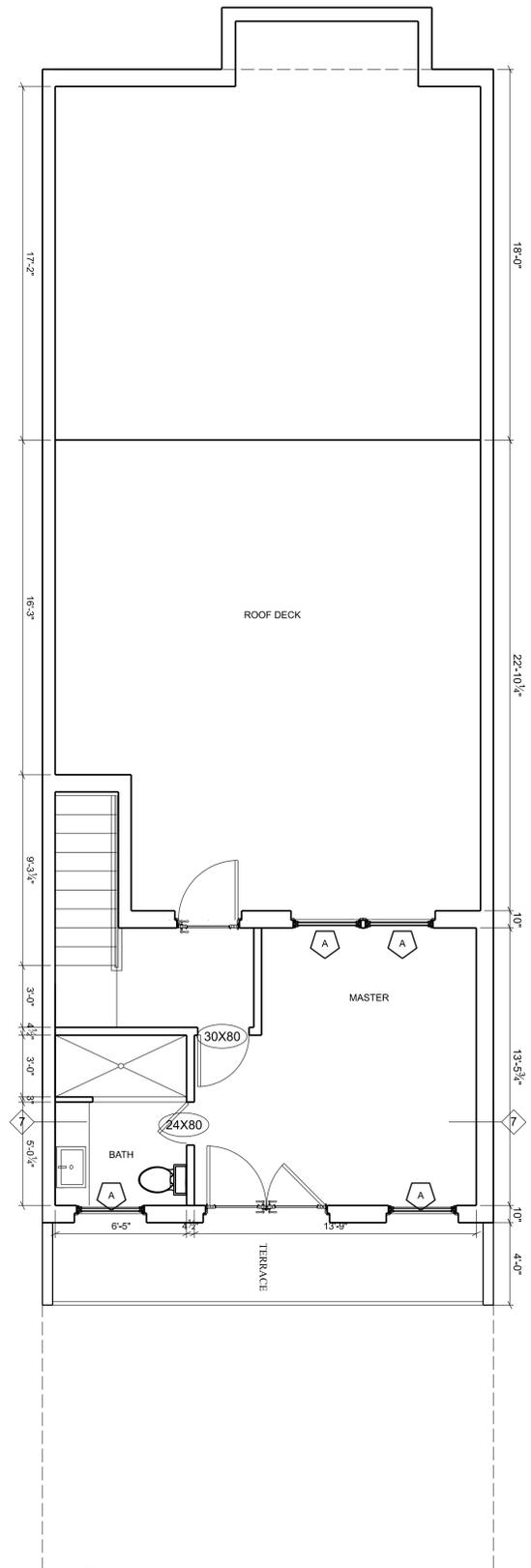
DATE: 02/29/2016

PROJECT NUMBER: 1514 Q

A0101



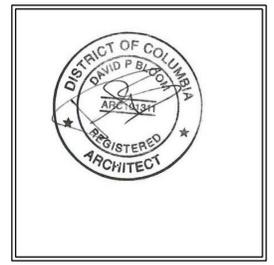
1 3rd FLOOR
SCALE: 1/4" = 1'-0" 24X36 LAYOUT



2 MEZZANINE LEVEL
SCALE: 1/4" = 1'-0" 24X36 LAYOUT

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SCALE: AS NOTED
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A0102



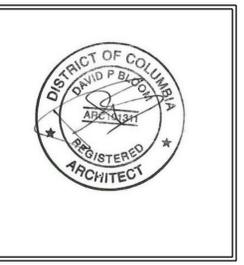
1 NORTH FACADE
 SCALE: 3/4" = 1'-0" 24X36 LAYOUT



2 CELLAR FACADE
 SCALE: 3/4" = 1'-0" 24X36 LAYOUT

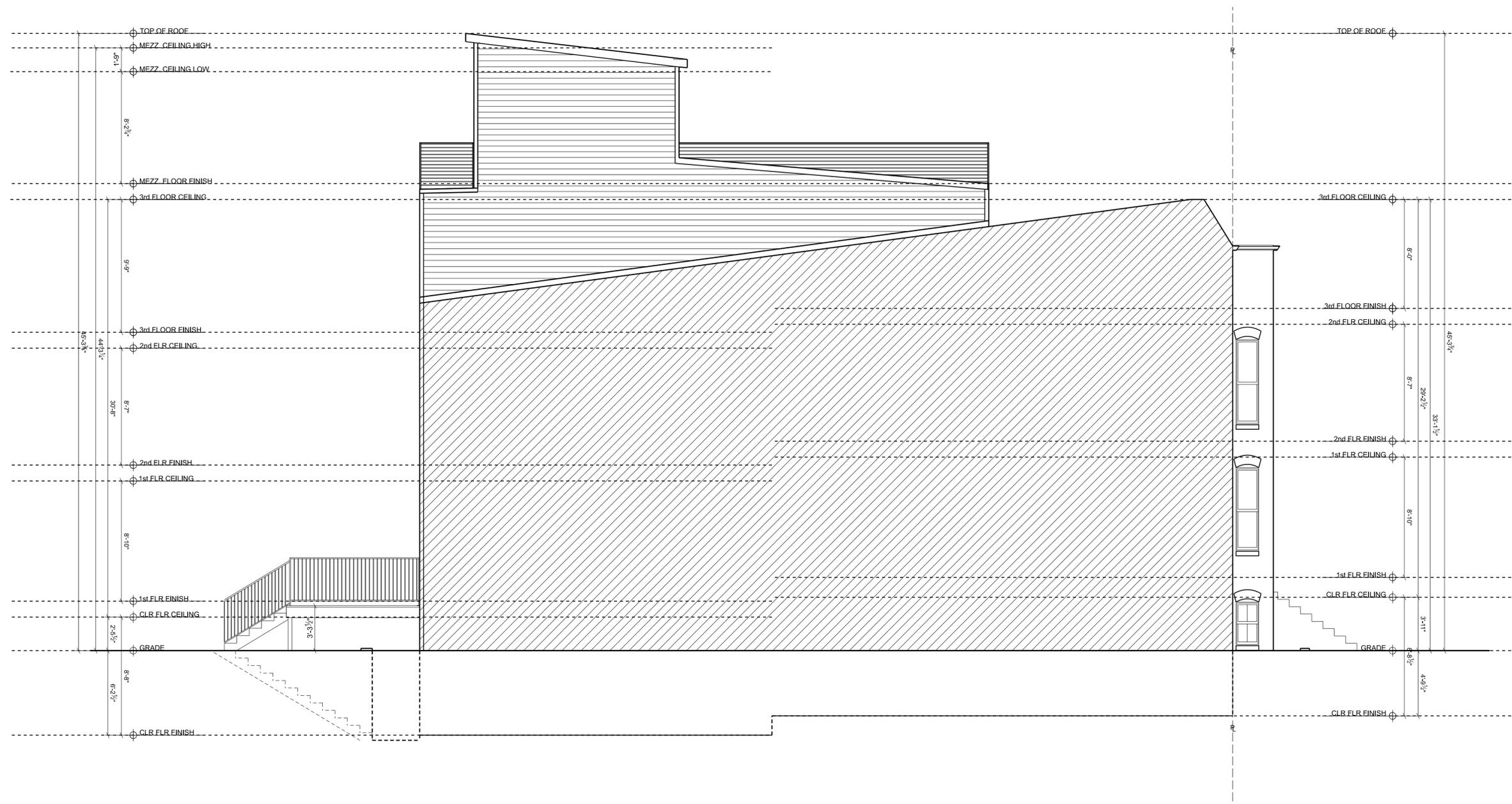
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 PROJECT NUMBER: 1514 Q

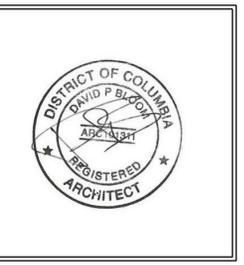
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1 EAST ELEVATION
 SCALE: 1/4" = 1'-0" 24X36 LAYOUT

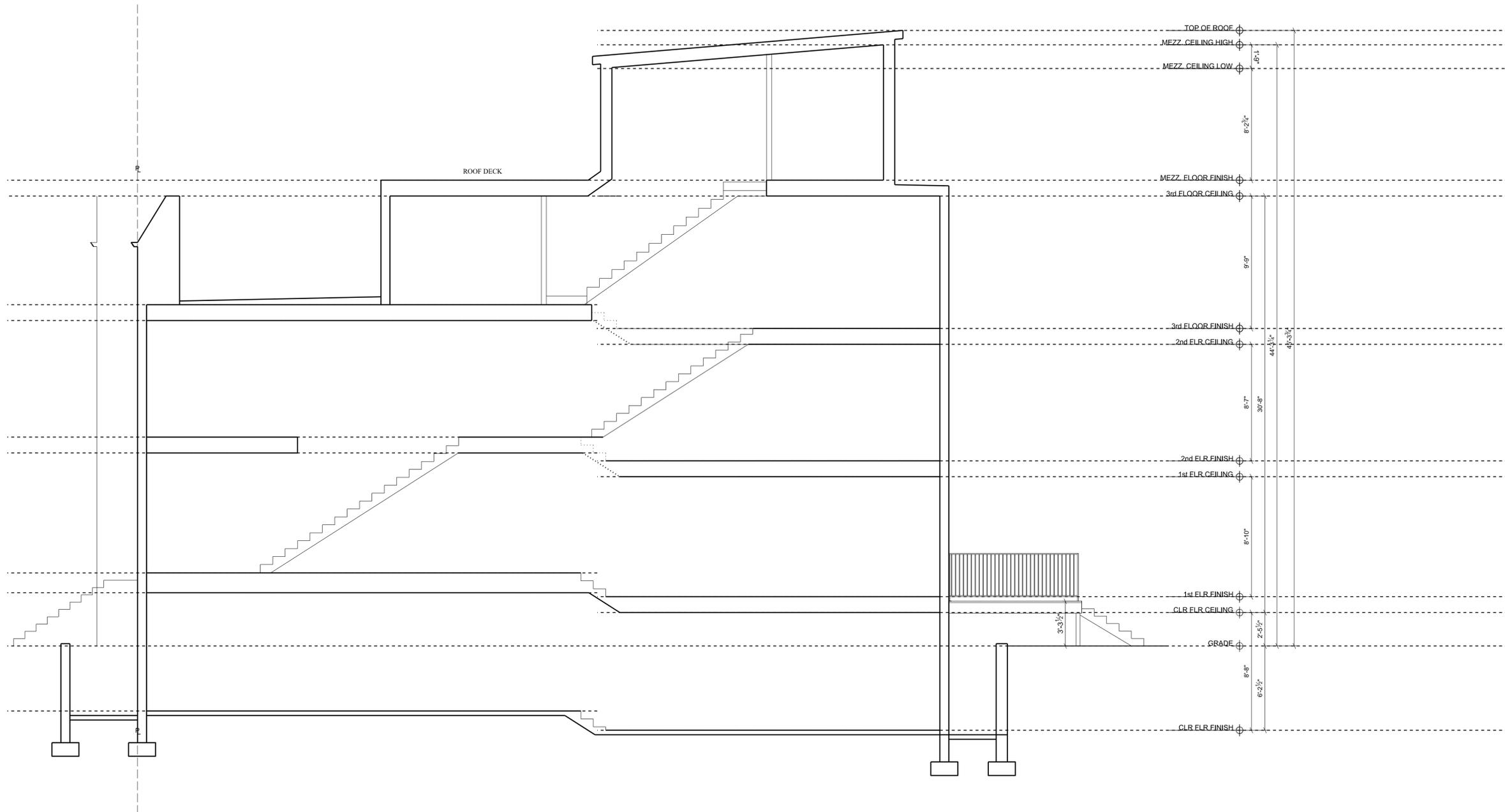
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SCALE: AS NOTED
 DATE: 02/29/2016
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A0203



1 TYPICAL BUILDING SECTION
 SCALE: 1/4" = 1'-0" 24X36 LAYOUT

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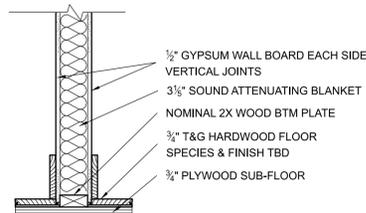
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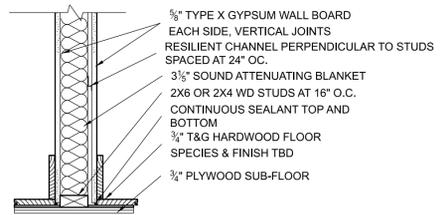


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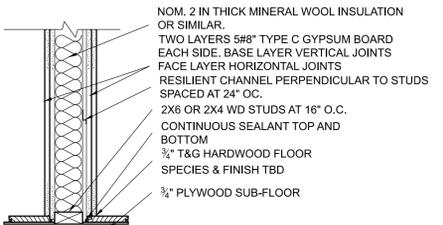
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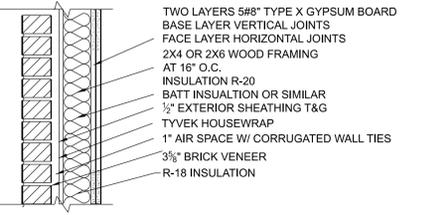
1 NON RATED INTERIOR PARTITION
ANSI/UL 263 DESIGN #U317
STC RATING - 44



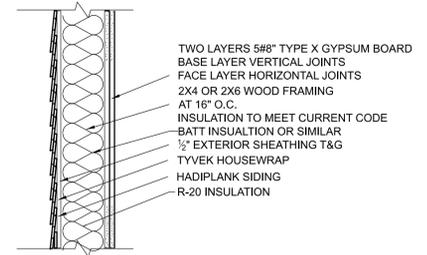
2 1 HR RATED INTERIOR PARTITION
ANSI/UL 263 DESIGN #327
STC RATING: 50



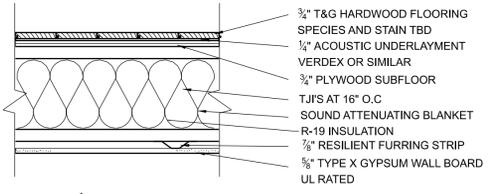
3 2 HR RATED INTERIOR PARTITION
ANSI/UL 263 DESIGN #U334
STC RATING: 62



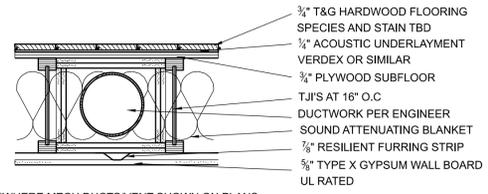
4 2 HR RATED WALL - MASONRY VENEER
ANSI/UL 263 DESIGN #U302
STC RATING: 64



7 1 HR FIRE RATED WALL - CLABBORD SIDING
ANSI/UL 263 DESIGN # 418
STC RATING: 55

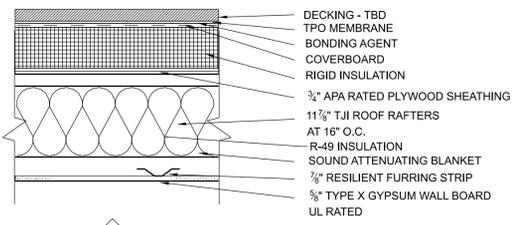


8 1 HR RATED FLOOR ASSEMBLY
ANSI/UL 263 DESIGN # UL-L570
STC RATING: 60+



*WHERE MECH DUCTS/VENT SHOWN ON PLANS BETWEEN JOISTS, PROVIDE GWB SURROUND ON 5 SIDES OF SPACE CONTAINING DUCT IN THICKNESS & LAYER(S) EQUAL TO SCHEDULED ASSEMBLY LAYERS

9 DUCT IN RATED CEILING
ANSI/UL 263 DESIGN # UL-L570
STC RATING: 60+



10 1 HR RATED ROOF ASSEMBLY
ANSI/UL 263 DESIGN # UL-L570
STC RATING: 60+

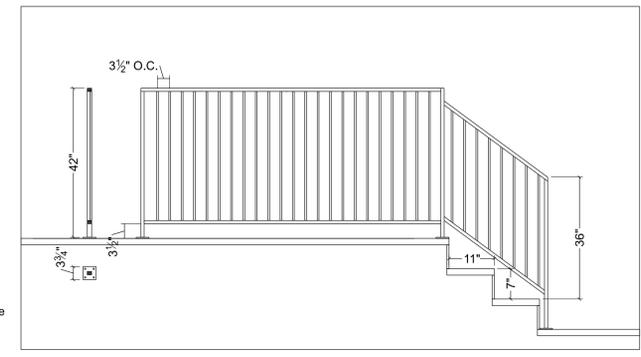
1012.2 Height.
Handrail height, measured above stair tread nosings, or finish surface of ramp slope shall be uniform, not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

1013.2 Height.
Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.

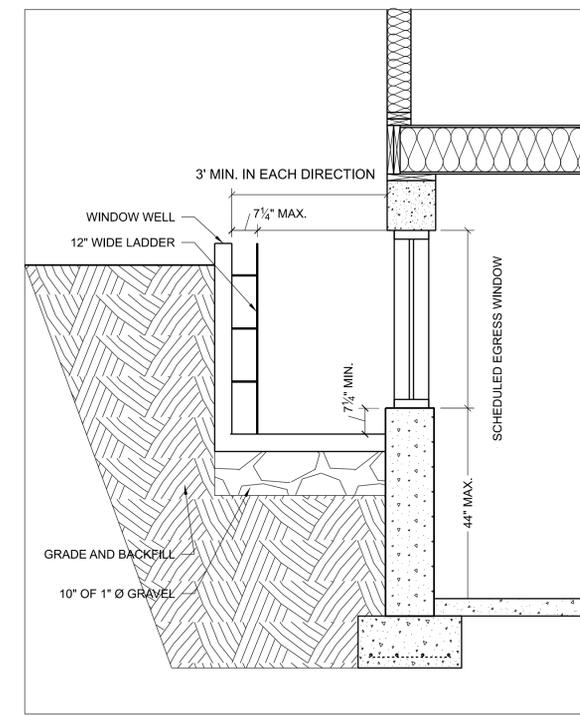
1013.3 Opening limitations.
Open guards shall have balusters or ornamental patterns such that a 4-inch-diameter (102 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm). From a height of 34 inches (864 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, a sphere 8 inches (203 mm) in diameter shall not pass.

1607.7.1 Handrails and guards.
Handrail assemblies and guards shall be designed to resist a load of 50 pif (0.73 kN/m) applied in any direction at the top and to transfer this load through the supports to the structure.

1607.7.1.1 Concentrated load.
Handrail assemblies and guards shall be able to resist a single concentrated load of 200 pounds (0.89 kN), applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building. This load need not be assumed to act concurrently with the loads specified in the preceding paragraph.



3 GUARD/HAND RAIL TREAD/RISER DETAIL
SCALE: NTS



2 EGRESS WINDOW DETAIL
SCALE: NTS

1026.2 Minimum size.
Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m²). Exception: The minimum net clear opening for emergency escape and rescue grade-floor openings shall be 5 square feet (0.46 m²).

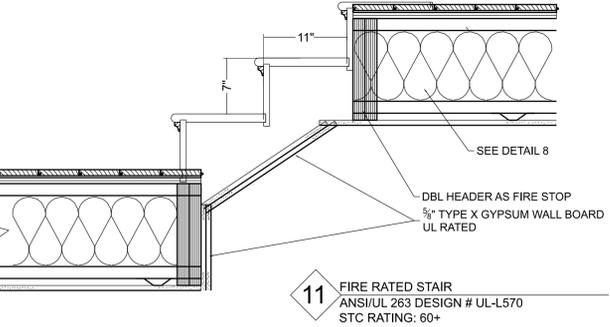
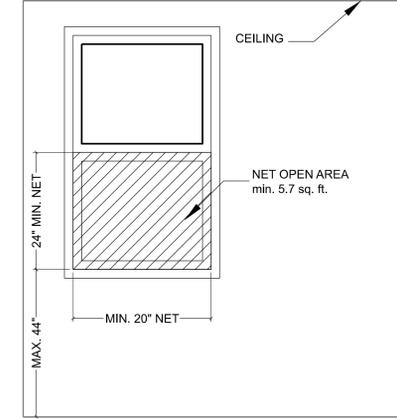
1026.2.1 Minimum dimensions.
The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

1026.3 Maximum height from floor.
Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

1026.5 Window wells.
An emergency escape and rescue opening with a finished sill height below the adjacent ground level shall be provided with a window well in accordance with Sections 1026.5.1 and 1026.5.2.

1026.5.1 Minimum size.
The minimum horizontal area of the window well shall be 9 square feet (0.84 m²), with a minimum dimension of 36 inches (914 mm). The area of the window well shall allow the emergency escape and rescue opening to be fully opened.

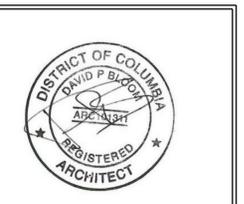
1026.5.2 Ladders or steps.
Window wells with a vertical depth of more than 44 inches (1118 mm) shall be equipped with an approved permanently affixed ladder or steps. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center (o.c.) vertically for the full height of the window well. The ladder or steps shall not encroach into the required dimensions of the window well by more than 6 inches (152 mm). The ladder or steps shall not be obstructed by the emergency escape and rescue opening. Ladders or steps required by this section are exempt from the stairway requirements of Section 1009.



11 FIRE RATED STAIR
ANSI/UL 263 DESIGN # UL-L570
STC RATING: 60+

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SCALE: AS NOTED
DATE: 02/29/2016
PROJECT NUMBER: 1514 Q

A0501

STRUCTURAL NOTES

BUILDING CODES

ALL CONSTRUCTION SHALL COMPLY WITH THE 2012 INTERNATIONAL RESIDENTIAL BUILDING CODE (IRC). UNLESS OTHERWISE NOTED, THE CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PUBLICATIONS PRODUCED BY THE FOLLOWING ASSOCIATIONS, LATEST EDITIONS:

CONCRETE:	AMERICAN CONCRETE INSTITUTE (ACI) CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
MASONRY:	BRICK INSTITUTE OF AMERICA (BIA) AMERICAN SOCIETY OF TESTING AND MATERIAL (ASTM) NATIONAL CONCRETE AND MASONRY ASSOCIATION (NCMA)
STEEL:	AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) AMERICAN SOCIETY OF TESTING AND MATERIAL (ASTM)
WOOD:	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) AMERICAN PLYWOOD ASSOCIATION (APA) AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) ARCHITECTURAL WOODWORK MANUAL (AWM) AMERICAN SOCIETY OF TESTING AND MATERIAL (ASTM)

DESIGN LOADS

GRAVITY LOAD	
ROOF LIVE LOAD	= 30 PSF
ROOF DEAD LOAD	= 17 PSF
FLOOR DEAD LOAD	= 10 PSF
FLOOR LIVE LOAD	= 30 PSF (SLEEPING AREAS)
FLOOR LIVE LOAD	= 40 PSF (LIVING AREAS)
GROUND SNOW LOAD (Pg)	= 30 PSF
EXPOSURE FACTOR (Ce)	= 1.00
THERMAL FACTOR (Ct)	= 1.00
IMPORTANCE FACTOR (I)	= 1.00
WIND	
FLAT ROOF SNOW LOAD (Pf)	= 21 PSF
SNOW DRIFT CALCULATIONS PER ASCE7-05.	
ALLOWABLE DEFLECTION FACTOR FOR	
LIVE LOAD	= L/360
TOTAL LOAD	= L/240
FLOORS & DECKS	= 40 PSF (ALL OTHERS)
LIVE LOAD	= L/480
TOTAL LOAD	= L/360
MEMBERS SUPPORTING MASONRY / BRICK	
LIVE LOAD	= L/600
TOTAL LOAD	= L/600
WIND LOAD	
FASTEST MILE WIND SPEED	= 76 MPH (PER IRC 2012-TABLE R301.2.1.3)
3 SECOND GUST WIND SPEED	= 90 MPH (PER IRC 2012-FIG. R301.2.(4))
EXPOSURE	= B

THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON TIMELY COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY SHORING, BRACING, GUYS, ETC., TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOT PLACE BACKFILL AGAINST BASEMENT WALLS UNTIL THE FLOOR SYSTEM IS COMPLETELY INSTALLED OR THE CONTRACTOR HAS PROVIDED ADEQUATE SHORING AND BRACING. ANY QUESTIONS REGARDING TEMPORARY SHORING REQUIREMENTS SHALL BE FORWARDED TO THE STRUCTURAL ENGINEER FOR REVIEW. MECHANICAL UNITS AND OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION. **THE STRUCTURAL ENGINEER SHALL BE CONTACTED IF DEAD LOADS ARE DEEMED TO BE GREATER THAN THE ASSUMED STANDARD LOADING CONDITION VALUES DEPICTED HEREIN.

CONCRETE

REFER TO FOUNDATION PLAN SET FOR DETAILS

FOUNDATION SILL PLATES

FOUNDATION SILL PLATES TO BE BOLTED TO FOUNDATION WITH 1/2" DIAMETER X 15' LONG HOOKED STEEL BOLTS @ 72" o.c. (MAX), PLACED NO FURTHER THAN 12" FROM EACH CORNER AND EMBEDDED INTO FULLY GRouted CMU CELLS. CELLS AT ANCHORS SHALL BE GROUT FILLED TO 24" MIN. DEPTH BELOW SILL PLATE. ALL FOUNDATION SILL PLATES SHALL BE PRESSURE TREATED 2X'S. SEE DRAWINGS FOR SIZE.

FOUNDATION UNDERPINNING

REFER TO FOUNDATION PLAN SET FOR DETAILS

GENERAL WOOD FRAMING

ALL WALL FRAMING IS 2X4'S 16" O.C. UNLESS OTHERWISE NOTED. ALL DIMENSIONAL LUMBER SHALL BE SPF #2 OR BETTER WITH THE FOLLOWING MINIMUM PROPERTIES:
Fb = 950 PSI, Fv = 75 PSI, E = 1.3X10⁶ PSL.
ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED. PROVIDE 2X4 JACK AND 2X4 KING STUDS AT ALL DOOR AND WINDOW JAMBS, UNLESS OTHERWISE NOTED.
WHERE NEW AND EXISTING STUD WALLS AT ALL NEW BEAM BEARING END POINTS, UNLESS OTHERWISE NOTED.
WHERE NEW AND EXISTING RAFTERS AND JOISTS ARE HUNG FROM NEW BEAMS AND LEDGERS, USE PREFORMED METAL HANGERS (SIMPSON BRAND OR EQUAL).
ALL PRESSURE TREATED 2X LEDGERS SHALL BE ATTACHED WITH 1/2" DIA. LAG BOLTS (1/2" DIA. EPOXY ANCHORS AT MASONRY WALL) @ 16" O.C. STAGGERED SPACING. 4" EMBEDMENT, MIN. UNLESS OTHERWISE NOTED.
CONTRACTOR IS SOLELY RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURE AS REQUIRED DURING CONSTRUCTION.
LAYOUT OF JOIST SPACING IS DIAGRAMMATIC. CONTRACTOR SHALL COORDINATE LOCATION OF FRAMING WITH FIXTURES, RECEPTACLES AND DIFFUSERS TO BE INSTALLED.
WHERE NEW LOAD BEARING AND EXTERIOR STUD WALLS CONNECT TO EXISTING, INSTALL 3/8" DIA. X4' LONG LAG BOLTS @ 24" O.C. VERTICALLY.
FOR VENTING OF CATHEDRAL CEILING AT SKYLIGHTS, NOTCH TOP OF RAFTERS IN-LINE WITH SKYLIGHTS WITH 1"X1" NOTCHES @ 24" O.C. ALONG THE RAFTERS LENGTH.
INSTALL RAFTER TIE DOWN CLIPS OR HURRICANE STRAPS AT EACH RAFTER SECURING THEM TO THE TOP PLATE. INSTALL BRIDGING @ FLOORS AND ROOFS AS PER ALL LOCAL CODES.

STRUCTURAL LUMBER

STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) 2005 EDITION, PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION. ALL STRUCTURAL FRAME MEMBERS SHALL BE ONE OF THE FOLLOWING MINIMUM VALUES. UNLESS OTHERWISE NOTED:

TYPE OF WOOD	Fb	Ft	Fv	F _{CL}	F _{CL}	E	E _{min}
HEM FIR #2	850	525	150	405	1300	1,300,000	470,000
SPF #1/#2	875	450	135	425	1150	1,400,000	510,000
SPF STUD GRADE	675	350	135	425	725	1,200,000	440,000
SP #2 (2' TO 4' WIDE)	1500	825	175	565	1650	1,600,000	580,000
SP #2 (5' TO 6' WIDE)	1250	725	175	565	1600	1,600,000	580,000
MICROLLAM LVL GRADE=1.9E	2600	-	285	750	2510	1,900,000	-
PARALLAM PSL GRADE=2.0E	2900	-	290	750	2900	2,000,000	-

NOTATIONS

Fb	ALLOWABLE BENDING IN psi
Ft	ALLOWABLE TENSION (parallel to grain) IN psi
Fv	ALLOWABLE SHEAR (parallel to grain) IN psi
Fc	ALLOWABLE COMPRESSION (perpendicular to grain) IN psi
Fc	ALLOWABLE COMPRESSION (parallel to grain) IN psi
E	MODULUS OF ELASTICITY IN psi
E _{min}	MODULUS OF ELASTICITY IN psi

WHERE INDICATED ON THE DRAWINGS ENGINEERED FLOOR 'I' JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER TRUSS JOISTS. PRIOR TO ORDERING THE GENERAL CONTRACTOR SHALL ACQUIRE SHOP DRAWINGS FROM THE FLOOR JOIST MANUFACTURER AND SUBMIT THEM TO THE STRUCTURAL ENGINEER IN A TIMELY MANNER FOR REVIEW PRIOR TO ORDERING. IN THE EVENT THE GENERAL CONTRACTOR FAILS TO SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER THE GENERAL CONTRACTOR AND THE FLOOR JOIST MANUFACTURER SHALL BEAR ALL DESIGN, PERFORMANCE AND LEGAL RESPONSIBILITIES OF THE FLOOR SYSTEM(S) AND HOLD STRUCTURAL ENGINEER HARMLESS.

PROVIDE 3/4" TONGUE AND GROOVE PLYWOOD (APA RATED STRUD-I-FLOOR) GLUED AND NAILED TO THE FLOOR JOISTS TO MEET THE AMERICAN PLYWOOD ASSOCIATION (APA) APPROVED GLUED FLOOR SYSTEM, UNLESS OTHERWISE SPECIFIED.

LUMBER EXPOSED TO THE ELEMENTS AND/OR IN CONTACT WITH MASONRY, INCLUDING BUT NOT LIMITED TO: POSTS, BEAMS, DECKING, DECK, FRAMING LEDGERS, ETC. SHALL BE PRESSURE TREATED PER IRC SECTION R319. ALL FASTENERS SHALL BE PER IRC SECTION R319.3.

REQUIRED POST SIZES FROM POINT LOADS AT GIRDER TRUSS BEAM AND/OR HEADER END LOCATIONS SHALL BE CONTINUOUS, BEARING ONTO BEAMS OR CONTINUOUS TO FOOTINGS AS INDICATED. PROVIDE SQUASH BLOCKS BETWEEN FLOOR FRAMING AS NECESSARY OR REQUIRED.

STRUCTURAL CONNECTORS INDICATED ON THESE DOCUMENTS SHALL BE PROVIDED BY SIMPSON STRONG-TIE COMPANY, INC., PROVIDE JOIST HANGERS AT EACH END OF ALL FLOOR JOISTS, AND/OR BEAMS FLUSH WITH ADJACENT BEAMS, HEADERS. PROVIDE COLUMN CAPS AND POST BASES AT ALL STRUCTURAL LOAD BEARING WOOD BEAMS, INCLUDING EXTERIOR DECKS.

FLUSH BEAMS INDICATED MAY BE DROPPED AT THE GENERAL CONTRACTOR/OWNER'S DISCRETION. VERIFY AND COORDINATE WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR COMPATIBILITY PRIOR TO INSTALLATION.

LAMINATED VENEER LUMBER (LVL) AND PARALLEL STRAND LUMBER (PSL) LEVEL BY WEYERHAEUSER, IF THE SPECIFIED MATERIAL IS SUBSTITUTED WITH ANOTHER PRODUCT IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SUBSTITUTED PRODUCT STRUCTURALLY MEETS OR EXCEEDS THE ORIGINALLY SPECIFIED PRODUCT.

NOTCHES IN THE TOP AND BOTTOM OF DIMENSIONAL LUMBER JOISTS SHALL NOT EXCEED 1/6 OF THE DEPTH OF THE JOIST, AND SHALL NOT BE LOCATED IN THE MIDDLE ONE THIRD (1/3) OF THE SPAN. NOTCHES AT THE JOIST ENDS SHALL NOT EXCEED 1/4 OF THE JOIST DEPTH. HOLES THROUGH THE JOISTS SHALL NOT BE WITHIN 2" OF THE TOP AND BOTTOM OF THE JOIST. THE HOLE DIAMETER SHALL NOT EXCEED 1/3 OF THE JOIST DEPTH.

STRUCTURAL MEMBERS INDICATED ARE REQUIRED MINIMUM SIZES AND MAY BE INCREASED TO ALIGN WITH ADJACENT FRAMING MEMBERS AS NECESSARY OR REQUIRED WITHOUT ADDITIONAL STRUCTURAL ENGINEERING AT THE GENERAL CONTRACTOR/OWNER'S DISCRETION.

ALL INTERIOR WALLS SHALL BE MINIMUM 2X4 (SPF STUD GRADE) @ 16" oc WITH 1/2" THICK GWB (UNBLOCKED) ON MIN. ONE FACE w/ 5d CODLER NAILS @ 4' oc TO STUDS, TOP AND BOTTOM PLATES.
INSTALL CROSS-BRIDGING OR SOLID BLOCKING BETWEEN FLOOR JOISTS @ 8'-0" O.C. MAXIMUM AS REQUIRED BY CODE OR THE FLOOR JOIST MANUFACTURER.

ALL WOOD SHALL BE MINIMUM 8" ABOVE FINISH GRADE, OR SHALL BE PRESSURE TREATED.

SHEATHING

ALL WALL SHEATHING SHALL BE 1/2" CDX PLYWOOD, UNLESS OTHERWISE NOTED. ALL FLOOR SHEATHING SHALL BE 3/4" TONGUE & GROOVE CDX PLYWOOD FOR ALIGNMENT WITH EXISTING IX TYPE FLOOR SHEATHING. ALL ROOF SHEATHING SHALL BE AS FOLLOWS: 1/2" CDX PLYWOOD WHEN RAFTERS ARE SPACES 16" O.C. 5/8" CDX PLYWOOD WHEN RAFTERS ARE SPACED 24" O.C.

NAILING SCHEDULE

REFER IRC 2012, TABLE R602.3(1) FOR FASTENER SCHEDULE

WOOD HEADERS

LOAD BEARING WALLS:
ALL WOOD HEADERS WITHIN STUD WALLS SHALL BE INSTALLED WITH CONTINUOUS PLYWOOD SPACER(S) AS REQUIRED TO MATCH DEPTH OF WALL. GLUE & NAIL SPACER(S) TO HEADERS.
U.N.D. IN DRAWINGS, TYPICAL WOOD HEADERS IN WALL OPENINGS SHALL BE AS FOLLOWS:
SPAN 0'-0" TO 3'-0" - (2) 2X8'S
SPAN 3'-1" TO 4'-0" - (2) 2X10'S
SPAN 4'-1" TO 6'-0" - (2) 2X12'S
NON LOAD BEARING PARTITIONS
U.N.D. IN DRAWINGS, TYPICAL WOOD HEADERS IN PARTITION OPENINGS SHALL BE AS FOLLOWS:
SPAN 0'-0" TO 3'-0" - (2) 2X4'S
SPAN 3'-1" TO 8'-0" - (2) 2X6'S

CONCRETE MASONRY UNIT

REFER TO FOUNDATION PLAN SET FOR DETAILS

MASONRY

REFER TO FOUNDATION PLAN SET FOR DETAILS

BRICK VENEER

BRICK VENEER INSTALLATION TO COMPLY WITH BRICK INDUSTRY ASSOCIATION (B.I.A.) LATEST TECHNICAL REPORT

PLUMBING

REFER TO DRAWINGS FOR THE TYPES AND LOCATION OF NEW PLUMBING FIXTURES REQUIRED FOR THE PROJECT.

THE PLUMBING SUBCONTRACTOR SHALL PROVIDE NEW DOMESTIC WATER SUPPLY, WASTE, AND VENT LINES AS REQUIRED FOR THE INSTALLATION OF NEW PLUMBING FIXTURES. PLUMBING SUBCONTRACTOR SHALL PROVIDE ANY REQUIRED CALCULATIONS AND/OR DRAWINGS REQUIRED BY BUILDING OFFICIALS HAVING JURISDICTION OVER THE PROJECT.

MECHANICAL

HVAC SUBCONTRACTOR SHALL PROVIDE ANY REQUIRED CALCULATIONS AND/OR DRAWINGS REQUIRED BY BUILDING OFFICIALS HAVING JURISDICTION OVER THE PROJECT.

ELECTRICAL

REFER TO DRAWINGS FOR LOCATIONS AND TYPES OF ELECTRICAL, TELEPHONE, AND CABLE OUTLETS REQUIRED FOR THE PROJECT.

ELECTRICAL SUBCONTRACTOR SHALL PROVIDE ANY REQUIRED CALCULATIONS AND/OR DRAWINGS REQUIRED BY BUILDING OFFICIALS HAVING JURISDICTION OVER THE PROJECT. ALL SMOKE ALARMS SHALL BE INSTALLED, INTERCONNECTED AND HARDWIRED PER IRC SECTION R313.

INTERIOR WALL CONSTRUCTION

REFER TO WALL SCHEDULE ON DRAWINGS FOR WALL TYPE COMPONENTS AND INFORMATION. TAPE, COMPOUND AND SAND ALL DRYWALL JOINTS TO A SMOOTH FINISH READY TO RECEIVE PAINT.

WALLS SCHEDULED TO RECEIVE CERAMIC TILE IN WET LOCATIONS (SHOWERS) SHALL BE PROVIDED WITH TILE BACKER BOARD (DURCO) IN LIEU OF STANDARD DRYWALL. WATER RESISTANT DRYWALL (GREENBOARD) SHALL NOT BE ACCEPTABLE FOR TILE BACKING.

PROVIDE WATER RESISTANT DRYWALL (GREENBOARD) AT ALL DAMP LOCATIONS. TAPE, COMPOUND AND SAND ALL DRYWALL JOINTS TO A SMOOTH FINISH READY TO RECEIVE PAINT.
DRYWALL CEILINGS SHALL BE 1/2", GLUED AND SCREWED TO JOISTS/RAFTERS. SHIM AS REQUIRED TO ACHIEVE A LEVEL CEILING. TAPE, COMPOUND AND SAND ALL DRYWALL JOINTS TO A SMOOTH FINISH READY TO RECEIVE PAINT.

IMPORTANT NOTE:
CONTRACTOR TO FIELD VERIFY DIMENSIONS AND DESIGN BEFORE COMMENCEMENT OF WORK.
WALL BRACING NOTE:
WALL BRACING TO BE IN ACCORDANCE WITH SECTION R602.10 OF THE 2012 IRC

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STRUCTURAL ENGINEER
SYSTEMATIC ENGINEERING, LLC
DESIGNER
KC DOUGLAS STUDIO

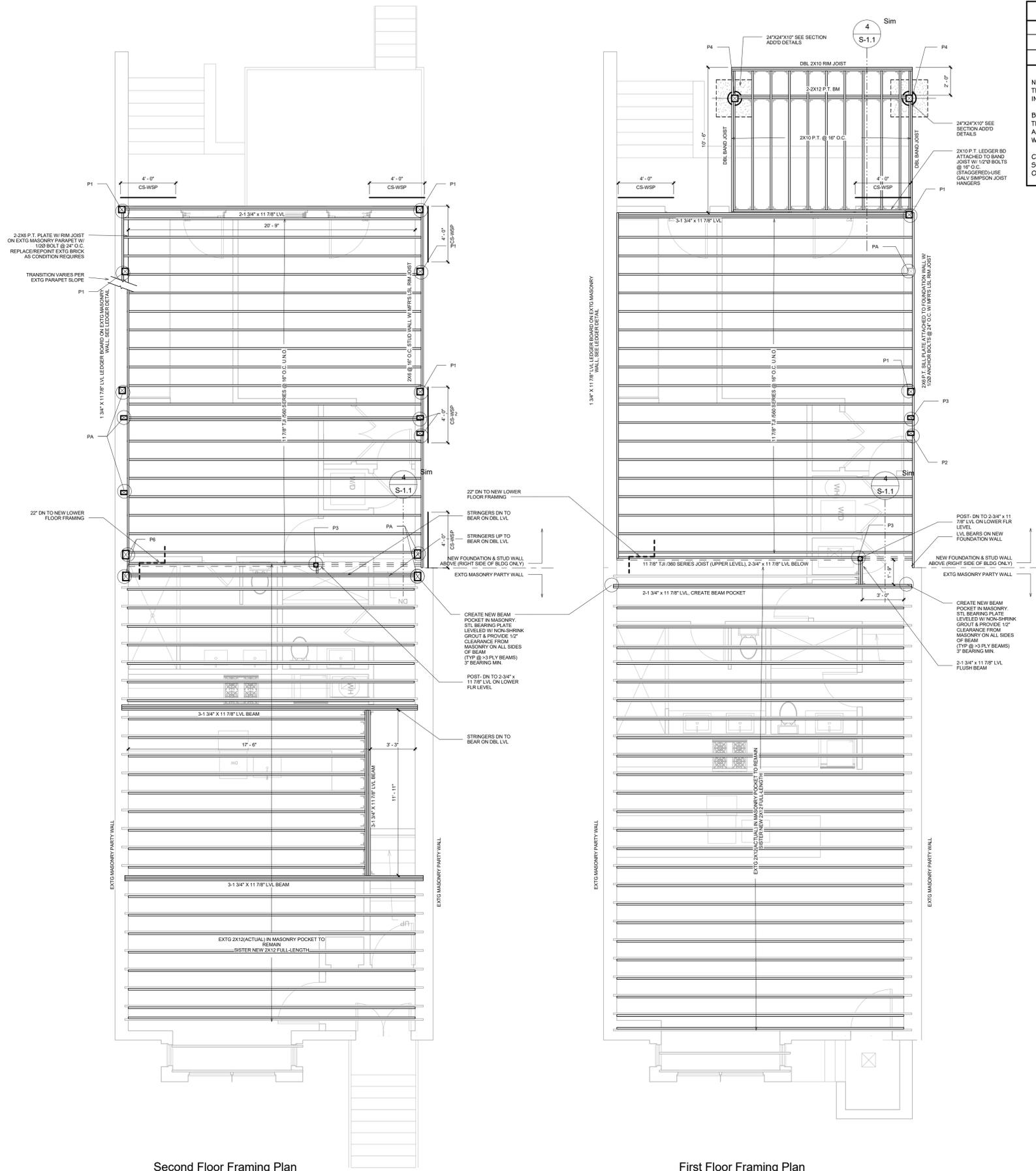
Structural Notes

1514 Q Street, NW
Washington, DC 20009

SQUARE #0194 LOT #027

DATE:	08/19/15
CLIENT:	KCDC STUDIOS 641 S STREET, NW WADCDC 20001
REV. NO:	△
SCALE:	
DWG. NO.:	

SO.0

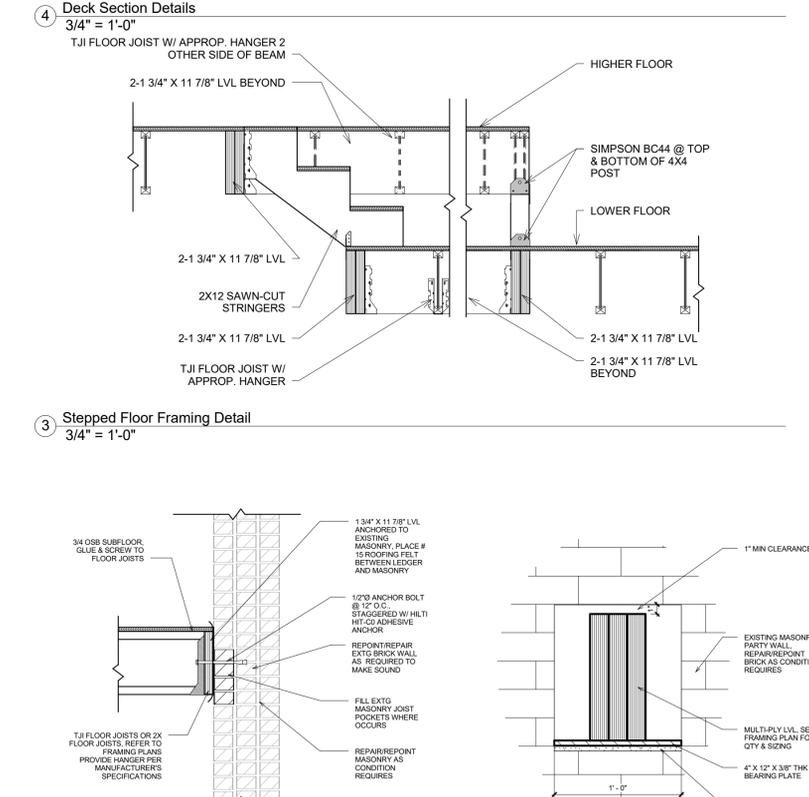
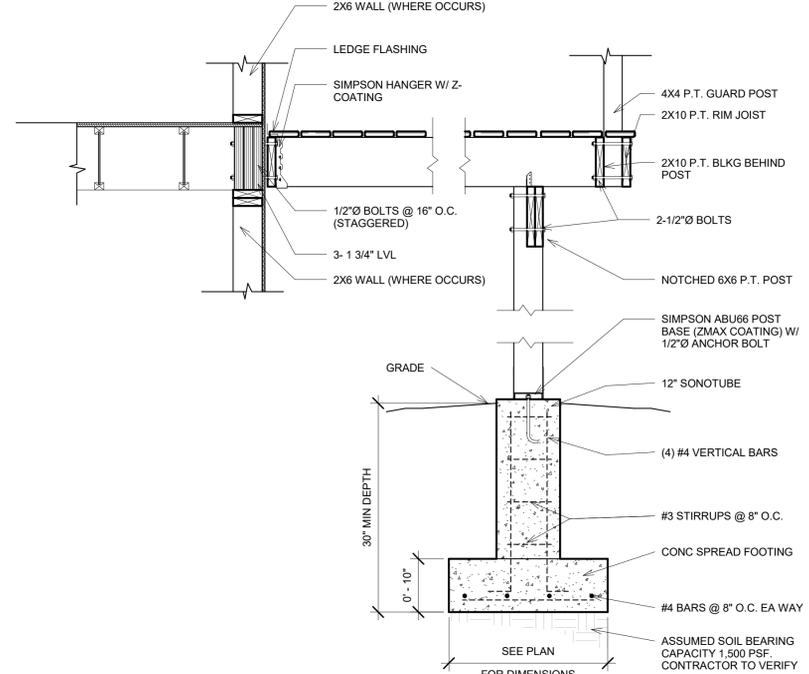


BRACED WALL SCHEDULE			
METHOD	THICKNESS	FASTENERS	
		EDGE	FIELD
CS-WSP	7/16" OSB SHEATHING	8D @ 12" O.C.	8D @ 12" O.C.

NOTES:
 THE BRACING CALCULATIONS HAVE BEEN DONE IN ACCORDANCE WITH PROVISIONS OF R602.10, 2013 INTERNATIONAL RESIDENTIAL CODE.
 BRACED WALL PANELS SHALL HAVE GYPSUM WALL BOARD INSTALLED ON THE SIDE OF THE WALL OPPOSITE THE BRACING MATERIAL. GYPSUM WALL BOARD SHALL BE 1/2" THK & BE FASTENED W/ NAILS OR SCREWS IN ACCORDANCE W/ TABLE R602.3 (1) FOR EXTERIOR SHEATHING OR TABLE R702.3.5 FOR INTERIOR GYPSUM WALL BOARD.
 CONTINUOUS SHEATHING METHODS(CS) REQUIRE STRUCTURAL PANEL SHEATHING TO BE USED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF A BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS AND SHALL MEET THE REQUIREMENTS OF SECTION R602.10.7

POST SCHEDULE	
P1	6X6 PSL POST
P2	4X6 PSL WD POST
P3	4X4 PT WD POST
P4	6X6 PT POST
P5	3-2X6 FRAMING
P6	6X8 PSL POST
PA	POST ABOVE (TERMINATES @ THIS LOCATION)

- FRAMING/ FOUNDATION NOTES:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BASEMENT WINDOW R.O. REQUIREMENTS WITH FOUNDATION WALL OPENINGS.
 - POINT LOADS SHALL BE TRANSFERRED TO FOUNDATION BY MEANS OF APPROPRIATE POST AND BLOCKING.
 - ALL STRUCTURAL DIMENSIONS ARE FOR REFERENCE ONLY. REFER TO ARCHITECTURAL PLAN FOR EXACT LOCATION OF WALLS AND WALL/FLOOR OPENINGS AND THEIR CORRESPONDING BEAMS AND POSTS.
 - ALL HEADERS ON BEARING WALLS SHALL BE 3-2X6 ON 2X6 WALL AND 2-2X8 ON 2X4 WALL UNLESS MENTIONED OTHERWISE.
 - THERE SHALL BE 2 JACK STUDS AND 1 KING STUD AT EACH END OF HEADER UNLESS MENTIONED.
 - ALL MEASURES TO CONFORM TO FIRE-RATING PER CODE TO BE PROVIDED AND DETAILED IN ARCHITECTURAL DRAWINGS.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE CONDITION OF EXISTING FRAMING, MASONRY, AND CONCRETE WORK TO REMAIN AND REPAIR/REPLACE AS NEEDED TO MAKE SOUND.
 - ALL JOIST AND BEAM ATTACHMENTS TO FLUSH BEAM ARE TO USE APPROPRIATE JOIST/LVL HANGERS. CONTRACTOR IS TO REFER TO JOIST/LVL MANUFACTURER'S SPECIFICATIONS.
 - ALL EXPOSED WOOD TO BE PRESSURE-TREATED AND TO HAVE GALVANIZED METAL FASTENERS.



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SYSTEMATIC ENGINEERING, LLC
 DESIGNER
KC DOUGLAS STUDIO

Framing Plans
 1514 Q Street, NW
 Washington, DC 20009
 SQUARE #0194 LOT #027

DATE:	02/02/16
CLIENT:	KCDC STUDIOS 641 S STREET, NW WADC 20001
REV. NO.	1
SCALE:	As indicated
DWG. NO.:	

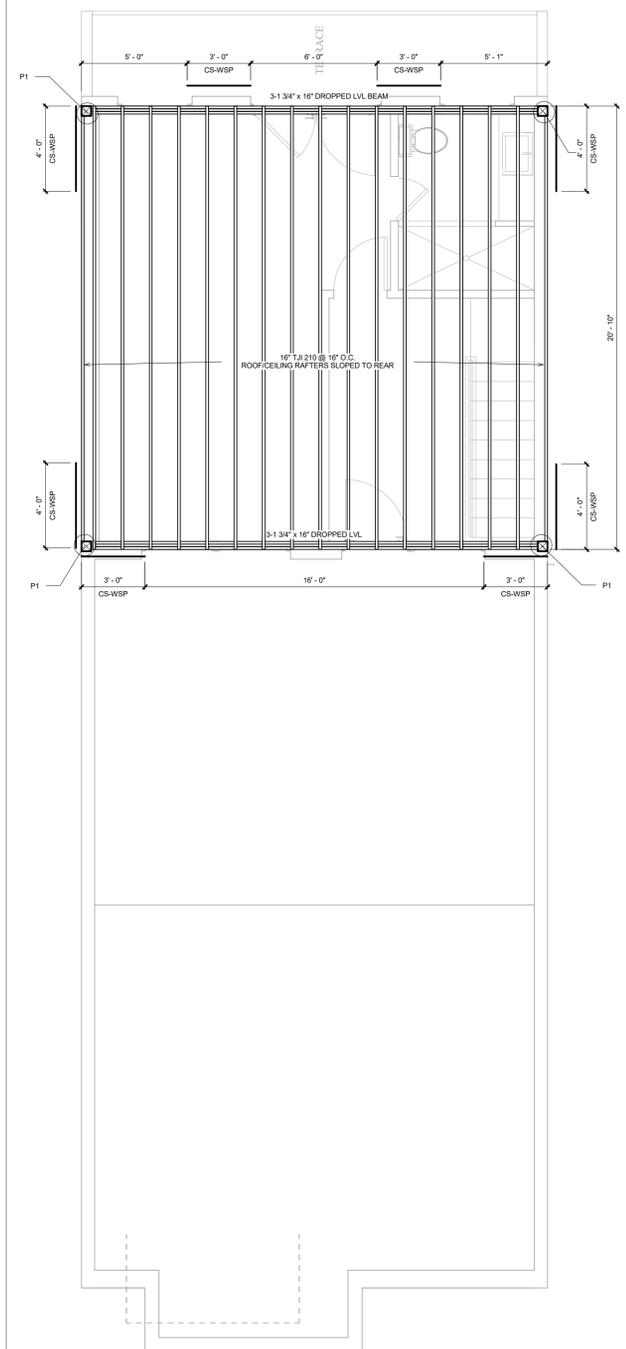
S-1.1

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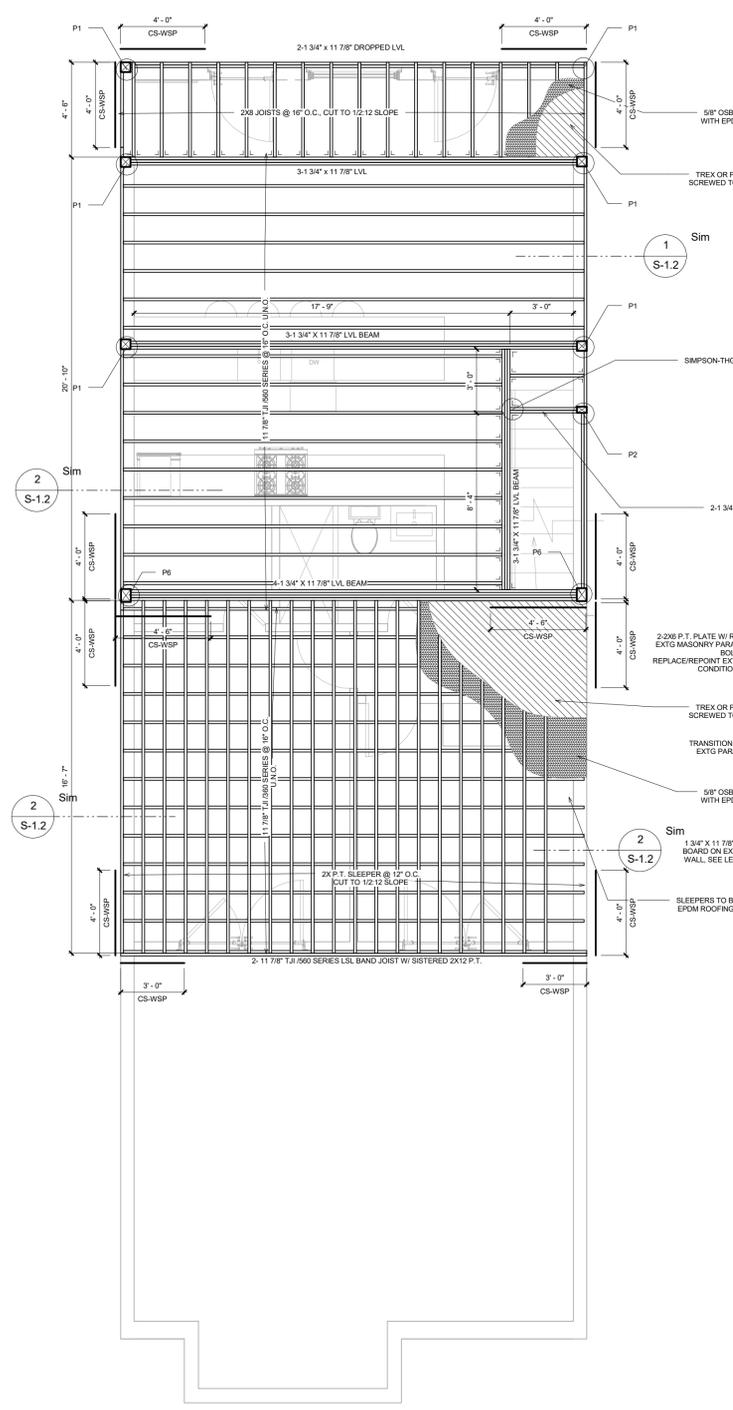
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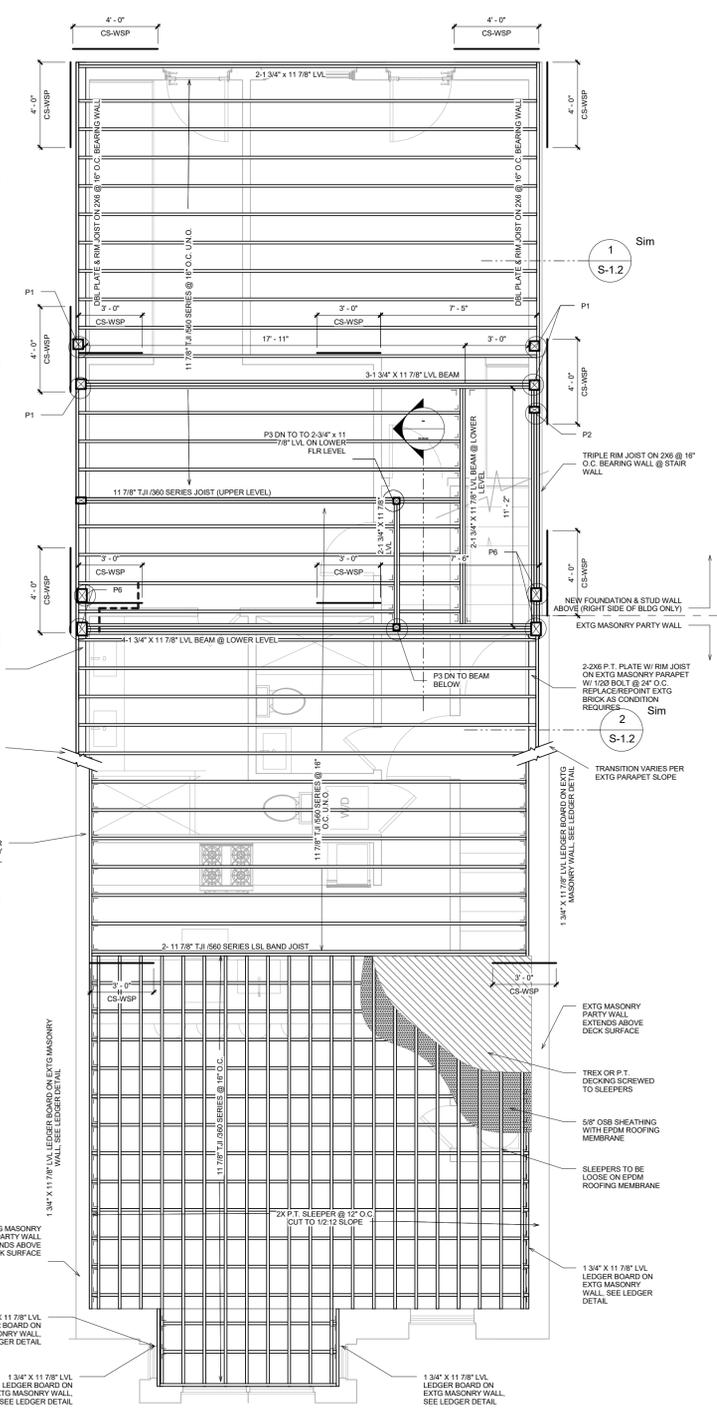
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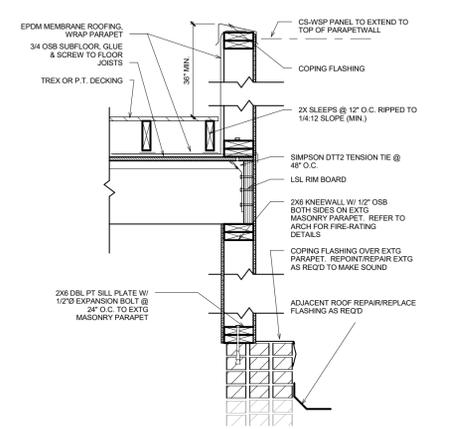
Roof Framing



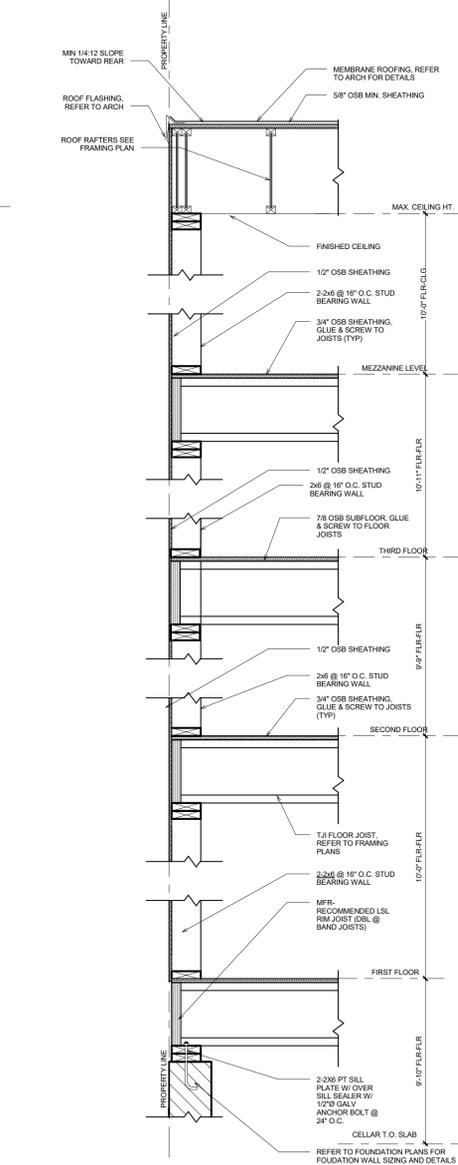
Mezzanine Floor Framing Plan



Third Floor Framing Plan



① Typical New Wall Section
3/4" = 1'-0"



② Extension @ Parapet
3/4" = 1'-0"

Framing Plans & Details
1514 Q Street, NW
Washington, DC 20009
SQUARE #0194 LOT #027

DATE:	02/02/16
CLIENT:	KCDC STUDIOS 641 S STREET, NW WADC 20001
REV. NO:	△
SCALE:	As indicated
DWG. NO.:	

S-1.2

ELECTRICAL NOTES

- A. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL SUCH AS CHANNELS, RODS ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE FASTENED TO BUILDING STEEL, CONCRETE OR MASONRY, BUT NOT PIPING OR DUCT WORK. ALL CONDUITS SHALL BE CONCEALED WHEREVER POSSIBLE. EXPOSED CONDUITS SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS AND SEPARATED AT LEAST 3 INCHES FROM WATER LINES WHEREVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES. ALL CONDUCTORS SHALL BE IN CONDUIT, DUCTS OR OTHER CODE APPROVED RACEWAYS.
- B. ALL LINE AND LOW VOLTAGES POWER AND CONTROL WIRING INCLUDING TEMPERATURE CONTROL, INSTALLATION OF THERMOSTATS, INTERLOCKING, ETC., EXCEPT THAT WHICH IS SPECIFICALLY NOTED AS BEING BY MECHANICAL OR TEMPERATURE CONTROL CONTRACTORS, SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- C. THE ELECTRICAL CONTRACTORS SHALL PROVIDE ALL CUTTING, CHASING OR CHANNELING AND PATCHING REQUIRED FOR ANY WORK UNDER THIS DIVISION. ANY CUTTING SHALL HAVE PRIOR APPROVAL OF ARCHITECT. SLEEVES SHALL EXTEND AT LEAST TWO (2") INCHES ABOVE FINISHED FLOOR AND ALL SLEEVES, OPENINGS, ETC., THROUGH FIRE RATED WALLS AND FLOORS SHALL BE FIRE SEALED WITH CALCIUM SILICATE, SILICONE "RTV" FOAM, 3M" FIRE RATED SEALANTS OR EQUAL BY HILT. AFTER CONDUIT INSTALLATION SO AS TO
- D. THE FOLLOWING EQUIPMENT SHALL BE IDENTIFIED WITH ENGRAVED BAKELITE NAMEPLATES AS TO NAME AND/OR FUNCTION; DISTRIBUTION PANELS, LIGHTING PANEL, MOTOR STARTERS AND DISCONNECT SWITCHES. NAMEPLATES TO BE APPROXIMATELY 1'X2" IN SIZE.
- E. THE LOCATION OF OUTLETS AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE AND THE ARCHITECT SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ADDITIONAL COST.
- F. ELECTRICAL CONTRACTORS SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES, AND TURN THIS INFORMATION OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- G. PROTECT ALL FIXTURES/EQUIPMENT AGAINST DAMAGE FROM LEAKS, ABUSE, ETC., AND PAY COST OF REPAIR OR REPLACEMENT OF FIXTURES OR EQUIPMENT MADE NECESSARY BY FAILURE TO PROVIDE SUITABLE SAFEGUARDS OR PROTECTION.
- H. ELECTRICAL CONTRACTORS SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS. AFTER ALL EQUIPMENT HAS BEEN INSPECTED AND APPROVED, THOROUGHLY CLEAN ALL EQUIPMENT PROVIDED UNDER THIS WORK JUST PRIOR TO COMPLETION OF PROJECT.

ELECTRICAL CALCULATIONS

TYPICAL APT
 L+R = 7 x 1500 = 10,500 VA
 APPLIANCE = 3,000 VA
 DW = 1,500 VA
 DISP = 1,000 VA

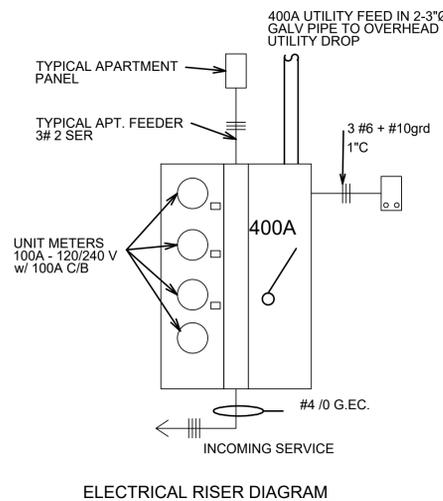
TOTAL = 16,000 W

1ST 10,000 @ 100% = 10,000 VA
 REMAINING @ .35% = 10,500VA
 = 12,100VA

A.C. UNIT = 4500 VA

TOTAL = 16,600 VA
 DEMAND = 26,400 VA /230 V = 72 AMPS

72 AMPS X 4 UNIT TOTAL = 288 AMPS



UNIT 1

MTD: SURFACE MOUNTED													PANEL" TYP UNIT*		
VOLTS: 120/240; 1-PHASE; 3-WIRE													LOCATION: LIVING ROOM		
MAIN: 100 AMPERES													LUGS: STANDARD		
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	A	B	C	A	B	C	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	SMOKE DETECTORS	120	14	20A	1500			1400			20A	12	120	AHU	2
3	KIT/DIN LIGHTING	120	12	20A		1500								SPARE	4
5	KITCHEN RECEP	120	12	20A			1500							SPARE	6
7	BEDROOM L+R	120	12	20A	1500						20A	12	120	SPARE	8
9	BEDROOM L+R	120	12	20A		1500			1500		20A	12	120	DISHWASHER	10
11	BATH L+R	120	12	20A			1500	1000			15A	14	120	FOOD DISPOSER	12
13	BATH L+R	120	12	20A	1500					1000	15A	14	120	GAS DRYER	14
15	L+R	120	12	20A		1500			1000		15A	14	120	GAS WH	16
17	SPARE							1000			15A	14	120	DISPOSAL	18
19														SPARE	20
21	AC	208	8	40A	4500									SPARE	22

UNIT 2

MTD: SURFACE MOUNTED													PANEL" TYP UNIT*		
VOLTS: 120/240; 1-PHASE; 3-WIRE													LOCATION: LIVING ROOM		
MAIN: 100 AMPERES													LUGS: STANDARD		
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	A	B	C	A	B	C	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	SMOKE DETECTORS	120	14	20A	1500			1400			20A	12	120	AHU	2
3	KIT/DIN LIGHTING	120	12	20A		1500								SPARE	4
5	KITCHEN RECEP	120	12	20A			1500							SPARE	6
7	BEDROOM L+R	120	12	20A	1500						20A	12	120	SPARE	8
9	BEDROOM L+R	120	12	20A		1500			1500		20A	12	120	DISHWASHER	10
11	BATH L+R	120	12	20A			1500	1000			15A	14	120	FOOD DISPOSER	12
13	BATH L+R	120	12	20A	1500					1000	15A	14	120	GAS DRYER	14
15	L+R	120	12	20A		1500			1000		15A	14	120	GAS WH	16
17	SPARE							1000			15A	14	120	DISPOSAL	18
19														SPARE	20
21	AC	208	8	40A	4500									SPARE	22

UNIT 3

MTD: SURFACE MOUNTED													PANEL" TYP UNIT*		
VOLTS: 120/240; 1-PHASE; 3-WIRE													LOCATION: LIVING ROOM		
MAIN: 100 AMPERES													LUGS: STANDARD		
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	A	B	C	A	B	C	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	SMOKE DETECTORS	120	14	20A	1500			1400			20A	12	120	AHU	2
3	KIT/DIN LIGHTING	120	12	20A		1500								SPARE	4
5	KITCHEN RECEP	120	12	20A			1500							SPARE	6
7	BEDROOM L+R	120	12	20A	1500						20A	12	120	SPARE	8
9	BEDROOM L+R	120	12	20A		1500			1500		20A	12	120	DISHWASHER	10
11	BATH L+R	120	12	20A			1500	1000			15A	14	120	FOOD DISPOSER	12
13	BATH L+R	120	12	20A	1500					1000	15A	14	120	GAS DRYER	14
15	L+R	120	12	20A		1500			1000		15A	14	120	GAS WH	16
17	SPARE							1000			15A	14	120	DISPOSAL	18
19														SPARE	20
21	AC	208	8	40A	4500									SPARE	22

UNIT 3

MTD: SURFACE MOUNTED													PANEL" TYP UNIT*		
VOLTS: 120/240; 1-PHASE; 3-WIRE													LOCATION: LIVING ROOM		
MAIN: 100 AMPERES													LUGS: STANDARD		
CIRCUIT NUMBER	DESCRIPTION	VOLTS	WIRE SIZE THHN	CIRCUIT BREAKER	A	B	C	A	B	C	CIRCUIT BREAKER	WIRE SIZE THHN	VOLTS	DESCRIPTION	CIRCUIT NUMBER
1	SMOKE DETECTORS	120	14	20A	1500			1400			20A	12	120	AHU	2
3	KIT/DIN LIGHTING	120	12	20A		1500								SPARE	4
5	KITCHEN RECEP	120	12	20A			1500							SPARE	6
7	BEDROOM L+R	120	12	20A	1500						20A	12	120	SPARE	8
9	BEDROOM L+R	120	12	20A		1500			1500		20A	12	120	DISHWASHER	10
11	BATH L+R	120	12	20A			1500	1000			15A	14	120	FOOD DISPOSER	12
13	BATH L+R	120	12	20A	1500					1000	15A	14	120	GAS DRYER	14
15	L+R	120	12	20A		1500			1000		15A	14	120	GAS WH	16
17	SPARE							1000			15A	14	120	DISPOSAL	18
19														SPARE	20
21	AC	208	8	40A	4500									SPARE	22



PROJECT ADDRESS
1514 Q Street, NW
 WASHINGTON, DC 20009
 LOT # 027 SQUARE# 0.94

DESIGNER
KC DOUGLAS STUDIO
 202-320-2137

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REVISIONS

DATE 01/30/2016
 SCALE 3/16"=1'-0"
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 CHECKED

DRAWING TITLE
ELECTRICAL NOTES & DIAGRAMS

SHEET NO.

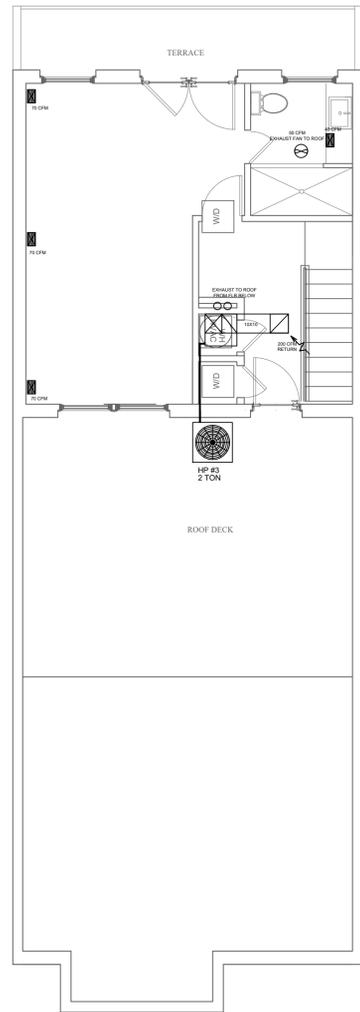
E2

MECHANICAL NOTES

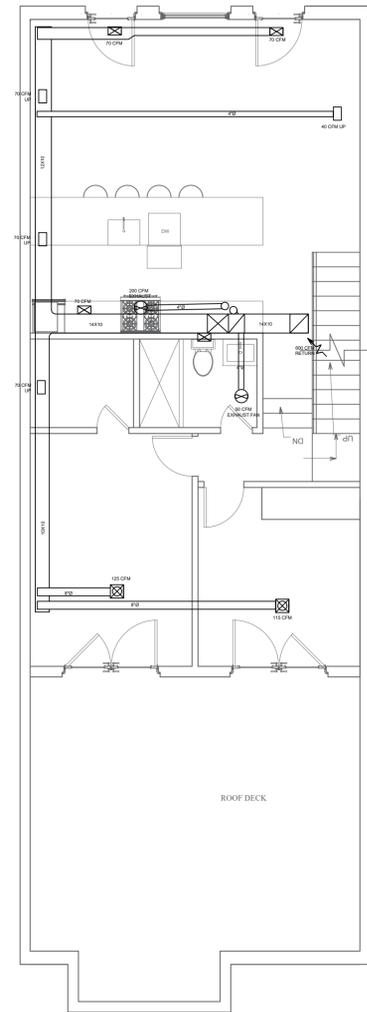
- ALL FLEXIBLE SUPPLY AIR DUCTS ARE OF 6" DIAMETER.
- ALL FLEXIBLE EXHAUST PIPES ARE OF 4" DIAMETER.
- FIRST FLOOR IS SUPPLIED BY THE CEILING MOUNTED SA REGISTERS FROM THE DUCTS RUNNING THROUGH FIRST FLOOR CEILING.
- SECOND FLOOR IS SUPPLIED BY THE FLOOR MOUNTED SA REGISTERS FROM THE DUCTS RUNNING THROUGH THE FIRST FLOOR CEILING.
- THIRD FLOOR IS SUPPLIED BY THE CEILING MOUNTED SA REGISTERS FROM THE DUCTS RUNNING THROUGH ATTIC.
- INSTALL A/C UNIT ON 4" CONCRETE PAD. EXTEND PAD 2" (MIN.) ALL AROUND OUT OF UNIT FOOT PRINT.
- EXHAUST AIR CAP WITH 4" DIA CONNECTION & INBUILT DAMPER. WALL CAP SHALL BE ALUMINIUM CONSTRUCTION AND SHALL BE INSTALLED IN AIR/WATER TIGHT MANNER ON THE WALL.
- ALL THE DUCT SIZES SHOWN ON THIS DRAWING INDICATES MINIMUM REQUIRED.
- RETURN AIR DUCT DOWN TO AHU: PROVIDE TRANSITION IN VERTICAL TO CONNECT RETURN AIR DUCT TO UNIT OPENING. PROVIDE FLEXIBLE CONNECTION IN VERTICAL.
- SUPPLY AIR DUCT DOWN TO AHU: PROVIDE TRANSITION IN VERTICAL TO CONNECT SUPPLY AIR DUCT TO UNIT OPENING. PROVIDE FLEXIBLE CONNECTION IN VERTICAL.
- ELECTRIC FAN FOR BATHROOM EXHAUST: CEILING MOUNTED CABINET TYPE FAN WITH INTEGRAL EXHAUST GRILLE FOR 50 CFM.

CONTRACTOR NOTES

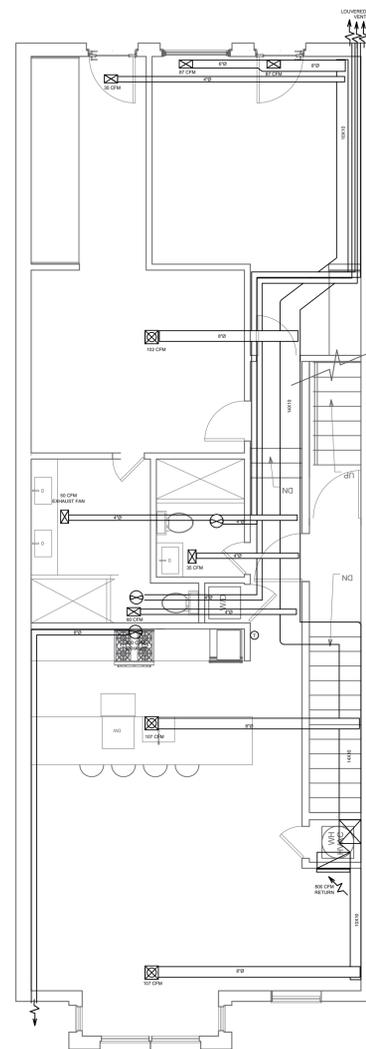
1. THE CONTRACT DOCUMENTS ARE SCHEMATIC AND ARE INTENDED TO CONVEY A FUNCTIONAL GENERAL LOCATION OF THE HVAC SYSTEM EQUIPMENT.
2. CONTRACTOR SHALL EXAMINE THE CONSTRUCTION DOCUMENTS AND SHALL BECOME FAMILIAR WITH ALL THE REQUIREMENTS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT OF ANY KIND FAULT IN THE CONSTRUCTION DOCUMENTS SO THAT THE MATTER MAY BE RESOLVED PRIOR TO SUBMISSION OF BIDS.
3. BY SUBMISSION OF BID THE CONTRACTOR SHALL AGREE ACCEPTANCE OF THE CONTACT DOCUMENTS AS AN ENOUGH INFORMATION OF THE SCOPE OF WORK, AND EXTRA CLAIMS BASED ON INSUFFICIENT INFORMATION WILL NOT BE CONSIDERED.
4. ALL WORK ON THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS FOR PROPER EQUIPMENT INSTALLATION PRIOR TO PURCHASING EQUIPMENT.
6. CONTRACTOR SHALL VERIFY ALL VOLTAGE AND POWER REQUIREMENTS AND COORDINATE WITH ELECTRICAL CONTRACTOR AS REQUIRED.
7. ALL DIMENSIONS ON DUCTWORK INDICATED ON THIS DRAWING SHALL BE IN INCHES, (INSIDE CLEAR) UNLESS OTHERWISE NOTED.
8. THE WORD 'PROVIDE' MEANS TO FURNISH AND INSTALL.
9. MECHANICAL WORK SHALL BE PERFORMED BY LICENSED CONTRACTOR TO PRODUCE COMPLETE OPERATING SYSTEM.
10. MECHANICAL CONTRACTOR SHALL COORDINATE ALL PHASE OF WORK WITH OTHER TRADES.
11. RUNNING THE DUCT WORK IN BETWEEN JOIST AND IN JOIST SHALL CLOSELY COORDINATED ON THE FIELD. CONTRACTOR TO ARRANGE ALL SA, HWH FLUE, KITCHEN EXHAUST HOOD AND TOILET EXHAUST DUCT IN CONSEALED PLACE AT CEILING OR WALL.
12. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES RELATED TO THE INSTALLATION OF HIS WORK.
13. INSTALLATION SHALL BE PERMIT ACCESSIBILITY FOR SERVICES AND/OR REPLACEMENT OF EQUIPMENT PROVIDED, ALSO AS PER THE MANUFACTURER RECOMMENDATIONS.
14. ALL DUCTWORK SHALL BE FABRICATED FROM FIELD TAKEN DIMENSIONS AND NOT FROM DRAWING, CHECK SPACE AVAILABILITY PRIOR TO DUCT FABRICATION.
15. GENERAL NOTES APPLIED TO ALL DRAWINGS OF THIS PROJECT, FOR SCHEDULE OF EQUIPMENT SEE DWG M-1
16. ALL DUCTWORK SHALL BE SUPPORTED FROM ADJACENT STRUCTURE AS INDUSTRIAL
17. USE FLEXIBLE CONNECTOR FOR SUPPLY AND RETURN AIR DUCT FOR CONNECTION TO
18. ALL EXTERIOR PENETRATIONS SHALL BE COORDINATED W/ ARCH. DWG FOR ELEVATION.
19. ALL DUCT WORK MATERIAL SHALL BE GALVANIZED AND FABRICATION SHALL BE PER "SMACNA" STANDARD.



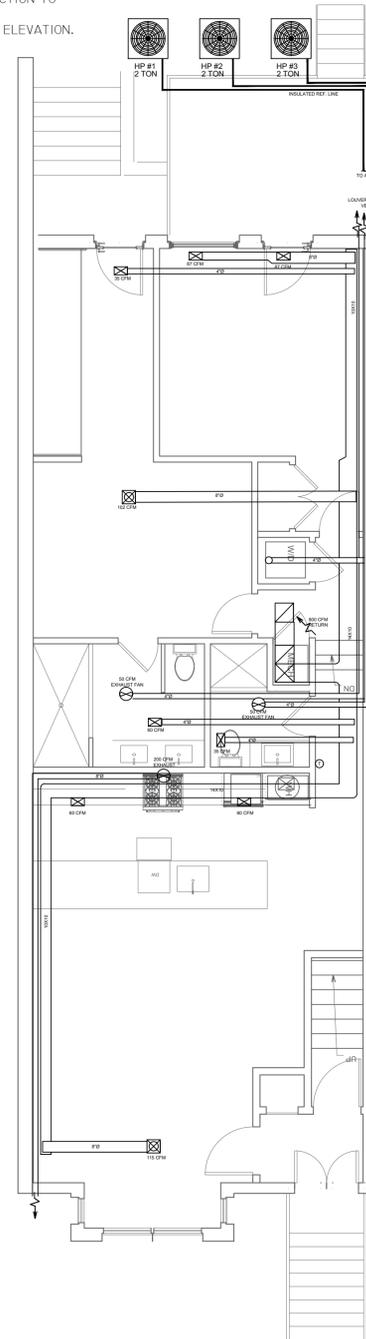
Mezzanine
Unit #4



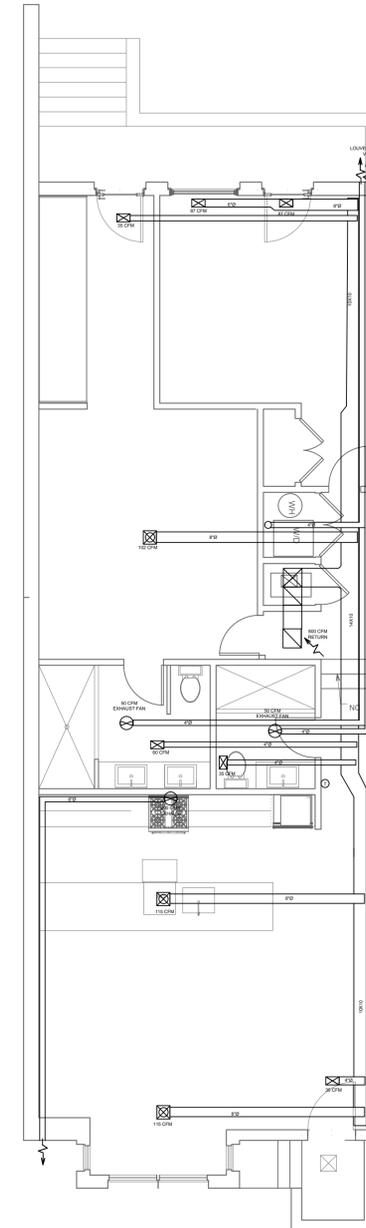
3rd Floor
Unit #4



2nd Floor
Unit #3



1st Floor
Unit #2



Cellar
Unit #1



PROJECT ADDRESS
1514 Q Street, NW
WASHINGTON, DC 20009
LOT # 027 SQUARE# 0194

DESIGNER
KC DOUGLAS STUDIO
202-320-2137

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REVISIONS

NO.	DATE	DESCRIPTION

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DRAWING TITLE
**MECHANICAL
PLANS,
NOTES &
DIAGRAMS**

SHEET NO.

MI



PROJECT ADDRESS
1514 Q Street, NW
 WASHINGTON, DC 20009
 LOT # 027 SQUARE# 0194

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MECHANICAL NOTES & DIAGRAMS

SHEET NO.

M2

SPLIT SYSTEM HEAT PUMP SCHEDULE																							
INDOOR SECTION												OUTDOOR SECTION											
TAG	TON	BLOWER DATA					COOLING COIL				E. HEAT KW	BASIS OF DESIGN		UNIT NO.	COMPRESSOR			CONDENSER FAN		MCA	HEATING CAPACITY BTUHR @ 24°F OA	BASIS OF DESIGN	REMARK
		CFM	ESP IN.	HP	VOLT/PHASE 208 / 1		EAT °F DB/WB	LAT °F DB/WB	MBH TOTAL	MBH SENS.		MAKE MODEL	MODEL		VOLT/PHASE	LRA EA	RLA EA	VOLT/PHASE	FLA				
AHU 1	2.0	1225	0.5	1/2	4.1	15A	72	22	36.6	25.6	10	CARRIER	2SHBC524C	1	208-230-1	58.3	11.1	208-230-1	0.6	14.5	26,354	MANUAL J	SEE CALCULATIONS
AHU 2	2.0	1225	0.5	1/2	4.1	15A	72	22	36.6	25.6	10	CARRIER	2SHBC524C	1	208-230-1	58.3	11.1	208-230-1	0.6	14.5	26,354	MANUAL J	SEE CALCULATIONS
AHU 3	2.0	1225	0.5	1/2	4.1	15A	72	22	36.6	25.6	10	CARRIER	2SHBC524C	1	208-230-1	58.3	11.1	208-230-1	0.6	14.5	26,354	MANUAL J	SEE CALCULATIONS
AHU 3	2.0	1225	0.5	1/2	4.1	15A	72	22	36.6	25.6	10	CARRIER	2SHBC524C	1	208-230-1	58.3	11.1	208-230-1	0.6	14.5	26,354	MANUAL J	SEE CALCULATIONS

NOTES:

- UNIT SHALL BE FREE STANDING ON 4" THICK CONCERT PAD EXTENDED 4" ALL AROUND FOR OUTSIDE UNIT HP-1.
- ONE POINT ELECTRICAL CONNECTION
- COOLING COIL CASED WITH DRAIN PAN.
- OUTDOOR AND INDOOR UNIT SHALL BE MATCHING FROM ONE MANUFACTURER.
- PROVIDE PROGRAMMABLE 2 SPEED THERMOSTAT

MECHANICAL NOTES, SCHEDULE AND RISER DIAGRAM

SYMBOLS & ABBREVIATIONS

	FLOOR MOUNTED SUPPLY REGISTER
	WALL MOUNTED RETURN GRILLE/REGISTER
	DUCT MOUNTED SUPPLY REGISTER
	THERMOSTAT
	SA DUCT UP
	RA DUCT UP
	SA DUCT DOWN
	RA DUCT DOWN
SR XX	SUPPLY REGISTER SHOWING CFM
RG XX	RETURN GRILLE SHOWING CFM
LAT	LEAVING AIR TEMP
EAT	ENTERING AIR TEMP
EF	EXHAUST FAN
HWH	HOT WATER HEATER
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
RA	RETURN AIR
V	VOLT
CLG.	CEILING
PH	PHASE
TEMP	TEMPERATURE
KW	KILO WATTS
BTUH	BRITISH THERMAL UNIT PER HOUR
CONN	CONNECTION
FLEX	FLEXIBLE
DN.	DOWN
RPM	REVOLUTION PER MINUTE
HP	HORSE POWER
ESP	EXTERNAL STATIC PRESSURE
WG	WATER GAUGE
CFM	CUBIC FEET PER MINUTE
DWG	DRAWING
CONT	CONTINUOUS

GENERAL NOTES: (MECHANICAL)

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- CONTRACTOR SHALL EXAMINE THE CONSTRUCTION DOCUMENTS AND SHALL BECOME FAMILIAR WITH ALL THE REQUIREMENTS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT OF ANY KIND FAULT IN THE CONSTRUCTION DOCUMENTS SO THAT THE MATTER MAY BE RESOLVED PRIOR TO SUBMISSION OF BIDS.
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- ALL DUCTWORK SHALL BE FABRICATED FROM FIELD TAKEN DIMENSIONS AND NOT FROM DRAWING. CHECK SPACE AVAILABILITY PRIOR TO DUCT FABRICATION.
- GENERAL NOTES APPLIED TO ALL DRAWINGS OF THIS PROJECT. FOR SCHEDULE OF EQUIPMENT SEE DWG M-1
- ALL DUCTWORK SHALL BE SUPPORTED FROM ADJACENT STRUCTURE AS INDUSTRIAL
- USE FLEXIBLE CONNECTOR FOR SUPPLY AND RETURN AIR DUCT FOR CONNECTION TO
- ALL EXTERIOR PENETRATIONS SHALL BE COORDINATED W/ ARCH. DWG FOR ELEVATION.
- ALL DUCT WORK MATERIAL SHALL BE GALVANIZED AND FABRICATION SHALL BE PER "SMACNA" STANDARD.

AIR DEVICE SCHEDULE

TAG#	CFM	FACE SIZE	NECK SIZE	DUCT SIZE	BASES OF DESIGN DATA
SG-1	100	12X6	12X6	12X6	TITUS MODEL 300FS, 3/4" SPACING
SG-2	75	6X6	6X6	6X6	TITUS MODEL 300FS, 3/4" SPACING
SG-3	50	6X6	6X6	6X6	TITUS MODEL 300FS, 3/4" SPACING
RG-1	600	18X12	18X12	18X12	TITUS MODEL 350FL
RG-2	500	12X12	12X12	12X12	TITUS MODEL 350FL

NOTES:

- SUPPLY REGISTER (SR) AND RETURN GRILLE (RG) SHALL BE WALL AND DUCT MOUNTED TYPE.
- SR SHALL BE WITH OPPOSED BLADE DAMPER.
- USE STANDARD DUCT TRANSITION TO CONNECT SR AND RG AS REQUIRED.

TOILET EXHAUST FAN

TAG#	EXHAUST CFM	FAN			ELECTRICAL DATA
		WATTS	RPM	E.S.P (WG)	
EF-1	50-75	48	1500	0.40 -0.35	115 V, 1Ø, 60 HZ

NOTES:

- FAN SHALL BE CEILING MOUNTED CENTRIFUGAL TYPE. CABINET FAN.
- FAN SHALL HAVE EXHAUST GRILLE
- PROVIDE WALL CAP (MODEL WCSP 5/6)
- FAN SHALL BE UL LISTED
- DESIGNE BASED ON GREEN HECK MODEL SP-6
- FAN SHALL BE CONTROLLED BY SWITCH.

ELECTRIC WATER HEATER SCHEDULE

TAG#	STORAGE CAPCITY	EW-1
	50 GALLONS	
	ELECTRIC ELEM.	15 KW
	POWER SUPPLY	208V-1PH-60 HZ
	RECOVERY @100°F	60 GALLON PER HOUR
	SHIPPING WT.	125 LB
	DIMENSION	55" H, 21"Ø
	MODEL	A.O.SMITH DSE-50

PLUMBING NOTES

A. APPLICABLE CODES

1. CLEARANCE BETWEEN THE FIXTURES ARE PROVIDED ACCORDING TO THE PROVISIONS OF IPC SECTION 405 (INSTALLATION OF FIXTURES) CLAUSE 405.3.1

2. SIZE, LOCATION, INSTALLATION AND MAINTENANCE OF DRAINAGE PIPE CLEANOUTS SHALL BE ACCORDING TO THE PROVISIONS OF IPC SECTION 708 (CLEANOUTS).

B. GENERAL

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL CODES, ORDINANCES AND STANDARDS OF THE LOCAL JURISDICTION. IN CASE OF A CONFLICT BETWEEN DRAWINGS OR SPECIFICATIONS AND THE REQUIREMENTS OF THE LOCAL JURISDICTION, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

2. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS, LEAKS, LACK OF PROPER SYSTEM PERFORMANCE OR NON-OPERATION FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE.

3. ALL WORK SHALL BE COORDINATED WITH ALL TRADES, PRIOR TO INSTALLATION.

3. IN GENERAL, DRAWINGS FOR THE WORK ARE DIAGRAMMATIC AND SHOW THE LOCATION, TYPE AND SIZE OF PIPING, EQUIPMENT, AND ACCESSORY EQUIPMENT. THE CONTRACTOR SHALL FURNISH ALL ITEMS NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE WORK, WHETHER CALLED FOR OR NOT. THE CONTRACTOR SHALL VERIFY ALL NECESSARY DIMENSIONS BEFORE INSTALLING ANY OF THE WORK AND SHALL CHECK HIS LAYOUTS TO ALLOW CLEARANCE REQUIRED FOR OTHER WORK. THE SCOPE OF WORK CONSISTS GENERALLY OF PROVIDING AND INSTALLING COMPLETE PLUMBING SYSTEMS AND FINAL TESTING OF ALL SYSTEMS AND EQUIPMENT AS REQUIRED.

C. PRODUCTS

1. PLUMBING FIXTURES SHALL BE SELECTED BY THE OWNER.
2. ALL WATER PIPING BEFORE MAIN BUILDING SHUTOFF SHALL BE TYPE "L" COPPER PIPE WITH 125 PSI WROUGHT COPPER 95/5 SOLDER SWEAT FITTINGS.
3. ALL SANITARY AND VENT PIPING ABOVE GRADE SHALL BE CPVC SCHEDULE 80
4. ALL COLD AND HOT WATER PIPING SHALL BE INSULATED AND ALL PIPING SHALL BE INSTALLED ON THE INSIDE OF THE BUILDING INSULATION ENVELOPE. PIPING INSULATION SHALL BE 3-1/2 LB. DENSITY, JOHNS-MANVILLE "FLAME" SAFE AP-5.
5. ALL VALVES SHALL BE 125 PSI, BRASS, RISING STEM, GATE VALVE

6. DOMESTIC WATER SHALL BE COPPER, TYPE L WITH WROUGHT COPPER FITTINGS AND 95/5 SOLDER
7. INSULATION: COVER ALL DOMESTIC WATER PIPING WITH 1/2" FIBERGLASS INSULATION SECURED WITH ALL PURPOSE JACKET.
8. HANGERS: SHALL BE ADJUSTABLE CLEVIS HANGERS, PROPERLY SIZED AND SPACED FOR PIPING, INCLUDING INSULATION.
9. VALVES: FOR DOMESTIC WATER, SHALL BE CRANE 1334.
10. INSTALL DIELECTRIC CONNECTION BETWEEN DISSIMILAR METALS, PIPE TO PIPE, PIPE TO EQUIPMENT, PIPE TO SUPPORT.
11. WATER HEATER SHALL HAVE PROVISION FOR EXPANSION TANK DUE TO THE BACKFLOW PREVENTOR.
12. WATER SUPPLY PIPES TO BE CPVC PLASTIC PIPE TO THE STANDARDS OF ASTM D 2846; ASTM F 441; ASTM F 442; CSA B 137.6
13. DRAIN PIPES TO BE PVC PLASTIC PIPE TO THE STANDARDS OF ASTM D 2665; ASTM D 2949; ASTM 1488; CSA B 181.2

D. EXECUTION

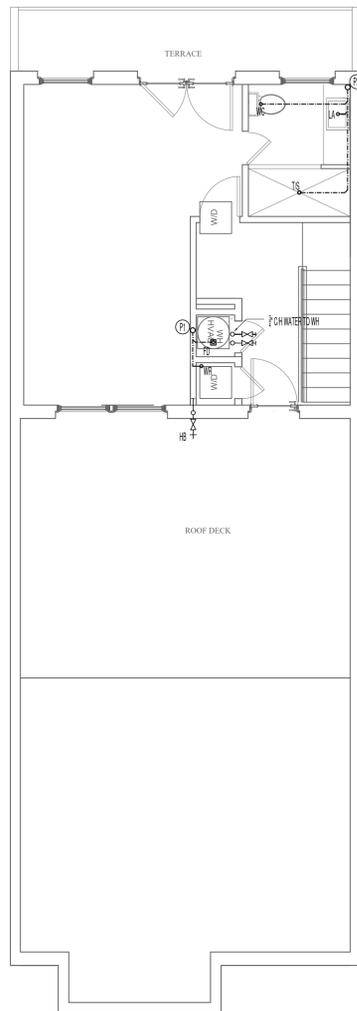
1. INSTALL FIXTURES LEVEL, PLUMB AND PARALLEL TO WALLS. ALL EXPOSED METAL PARTS SHALL BE CHROME PLATED AND SHOW NO TOOL MARKS. GROUT BETWEEN WALL HUNG FIXTURES AND WALL. PROVIDE ACCESS PANELS TO ALL CONCEALED SUPPLY STOPS AND TRAP.
2. FIXTURES DESIGNATED FOR USE BY PHYSICALLY HANDICAPPED PEOPLE SHALL BE IN ACCORDANCE WITH ANSI A 117.1.

E. CUTTING, NOTCHING AND BORING IN WOOD MEMBERS

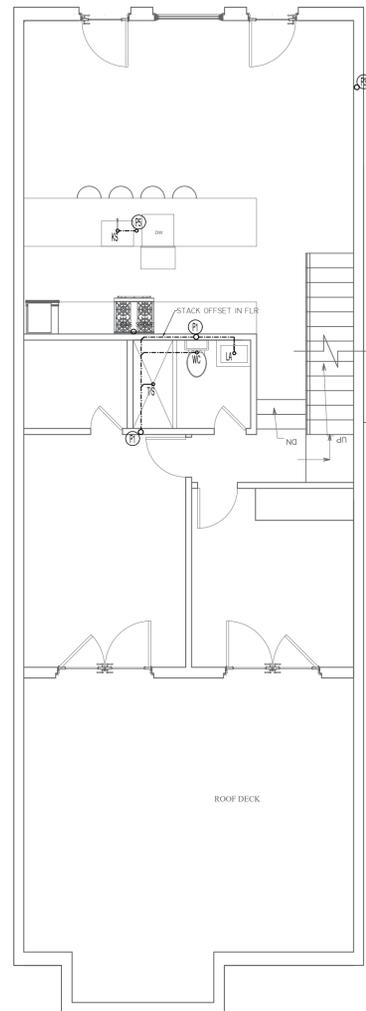
1. JOIST NOTCHING: NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2 INCHES (51 MM) OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST. NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN.

2. STUD CUTTING AND NOTCHING: IN EXTERIOR WALL AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. CUTTING OR NOTCHING OF STUDS TO A DEPTH NOT GREATER THAN 40 PERCENT OF THE WIDTH OF THE STUD IS PERMITTED IN NONBEARING PARTITIONS SUPPORTING NO LOADS OTHER THAN THE WEIGHT OF THE PARTITION.

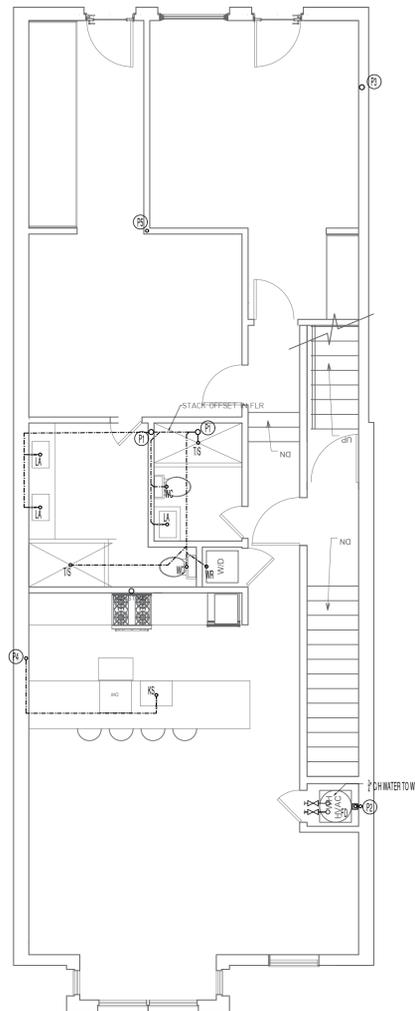
3. BORED HOLES: A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. BORED HOLES NOT GREATER THAN 60 PERCENT OF THE WIDTH OF THE STUD IS PERMITTED IN NONBEARING PARTITIONS OR IN ANY WALL WHERE EACH BORED STUD IS DOUBLED, PROVIDED NOT MORE THAN TWO SUCH SUCCESSIVE DOUBLED STUDS ARE SO BORED. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 0.625 INCH (15.9 MM) TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.



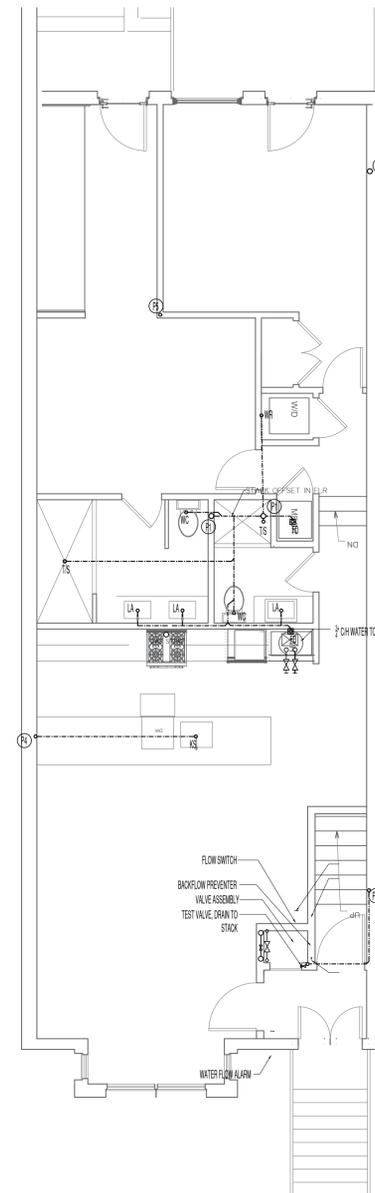
Mezzanine
Unit #4



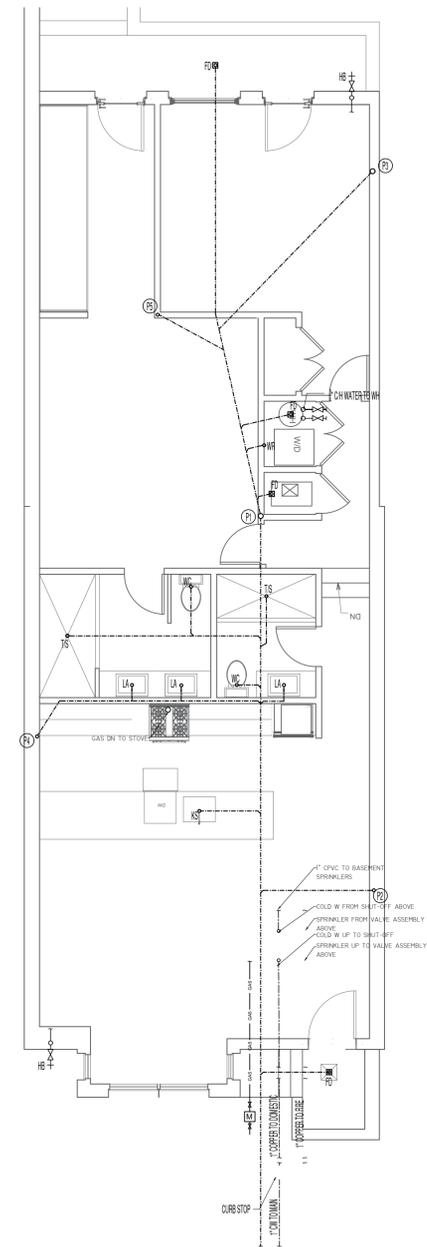
3rd Floor
Unit #4



2nd Floor
Unit #3



1st Floor
Unit #2



Cellar
Unit #1



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DRAWING TITLE
**PLUMBING
PLANS &
NOTES**

SHEET NO.

Sanitary Fixtures Schedule

SYMBOL	DESCRIPTION	WATER PIPES		DWV PIPES	
		COLD WATER	HOT WATER	MATERIAL	STANDARD
WC	Water Closet	1/2"	1/2"	3"	2"
LA	Lavatory	1/2"	1/2"	2"	1 1/2"
T/S	Bath Tub/Shower	1/2"	1/2"	2"	1 1/2"
KS	Kitchen Sink	1/2"	1/2"	2"	1 1/2"
DW	Dish Washer	1/2"	1/2"	2"	1 1/2"
WA	Washer	1/2"	1/2"	2"	1 1/2"
WH	Water Heater	1/2"	1/2"	2"	1 1/2"
FD	Floor Drain	--	--	2" / 3"	1 1/2"
WH	Stack Clean-out	--	--		
HB	Hose Bibb	1/2"	1/2"		

Water Supply Fixtures Count

Fixture Type	WSFU
Bathroom group	10.8
Kitchen Sink w/ Dishwasher & Disposal	2.8
Clothes Washer	1.4
Total	15

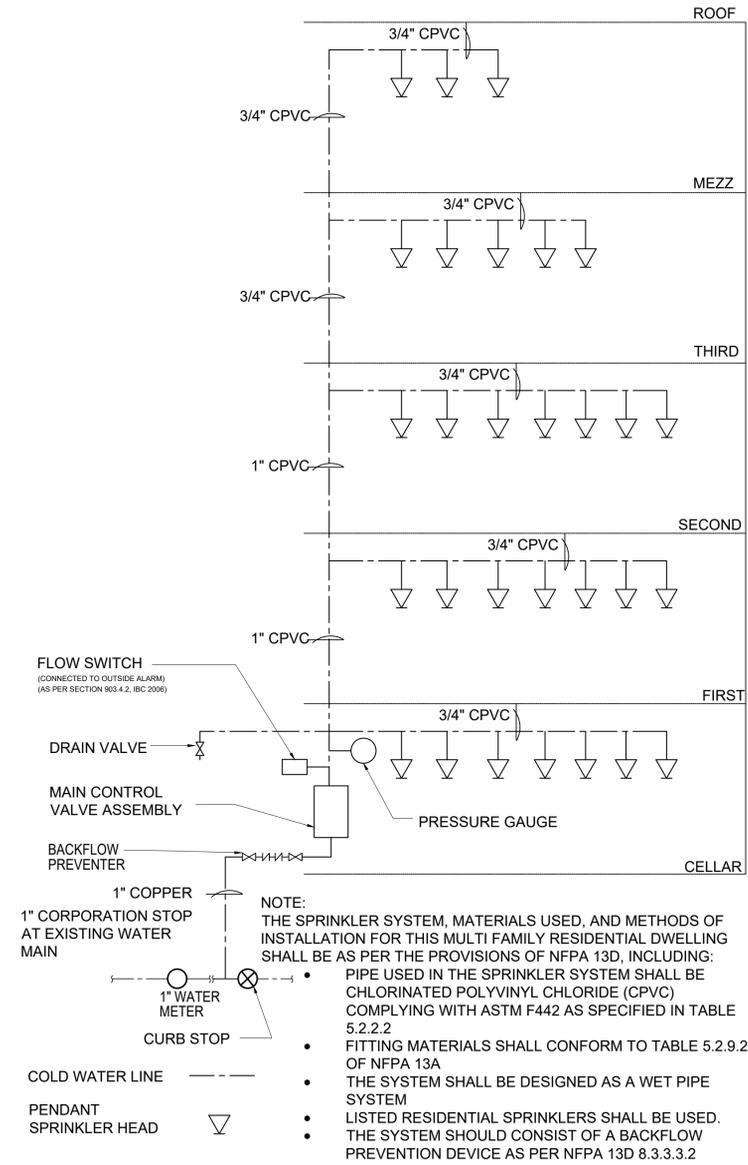
For WSFU 15, the supply system demand is 17.5 gpm. Maximum developed length is 100 ft, and the required static pressure at the most remote fixture in the building is 8 psi.

Drainage Fixtures Count

Fixture Type	DFU
Bathroom group	18
Kitchen Sink w/ Dishwasher & Disposal	2
Floor Drain	2
Clothes Washer	2
Total	24

Provide 4" Ø sewer @ 1/8" per foot slope

FIXTURE PLUMBING SPECIFICATIONS



SPRINKLER RISER DIAGRAM

DCMR 12F TABLE 604.4
MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS

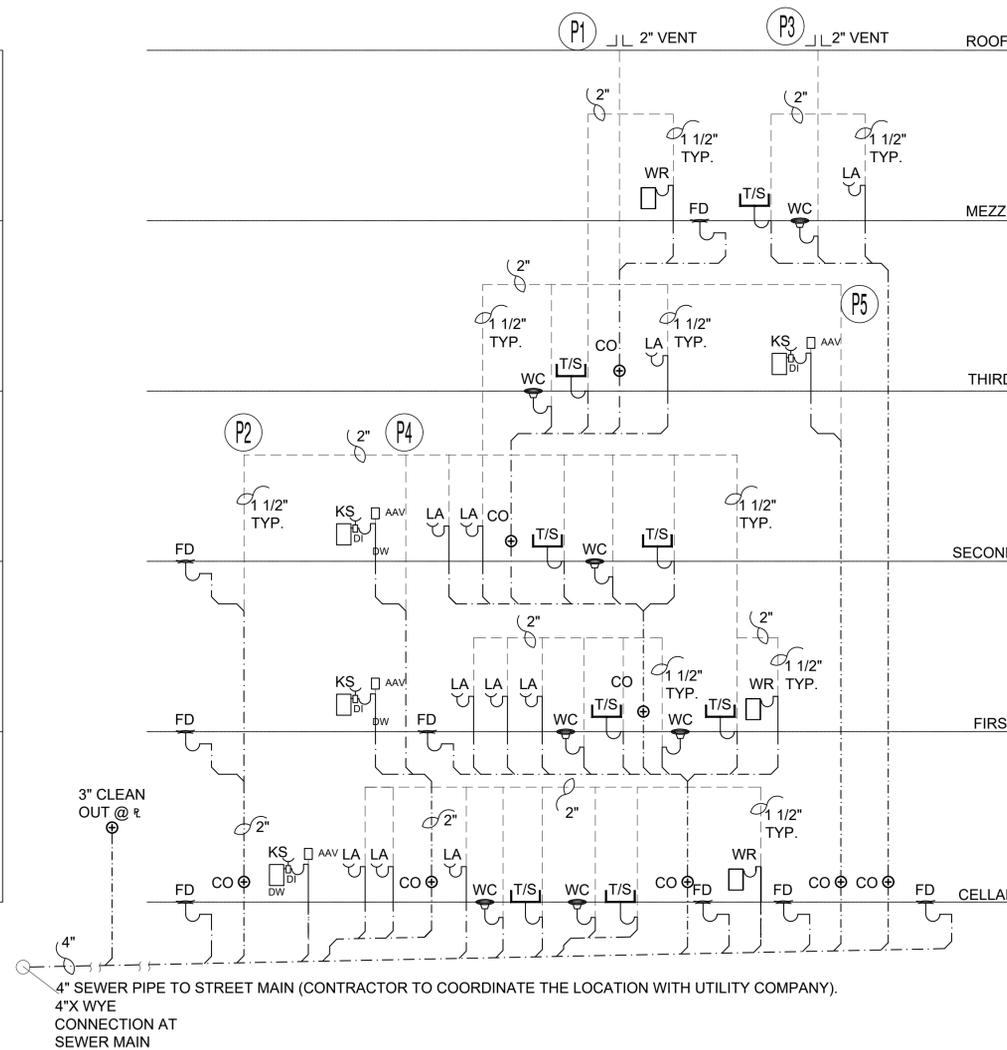
PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY*
Lavatory and bar sink faucet, private	1.5 gpm at 60psi and WaterSense labeled
Lavatory, public, (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Bar sink faucet in other than dwelling units or hotel and hospital private rooms	2.2 gpm at 60 psi
Shower head	2.0 gpm at 80psi and WaterSense labeled
Sink faucet, kitchen	2.2 gpm at 60 psi
Urinal, flushing or non-water	0.5 gallon per flushing cycle and WaterSense labeled, or non-water urinals
Water closet, public and remote	1.6 gallons per flushing cycle
Water closet (tank type)	1.28 gallons per flushing cycle and WaterSense labeled
Water closet, private flushometer type, or public and non-remote (flushometer)	1.28 gallons per flushing cycle

*ALL NEW PLUMBING FIXTURE TO CONFORM TO THE ABOVE TABLE PER DCMR 12F

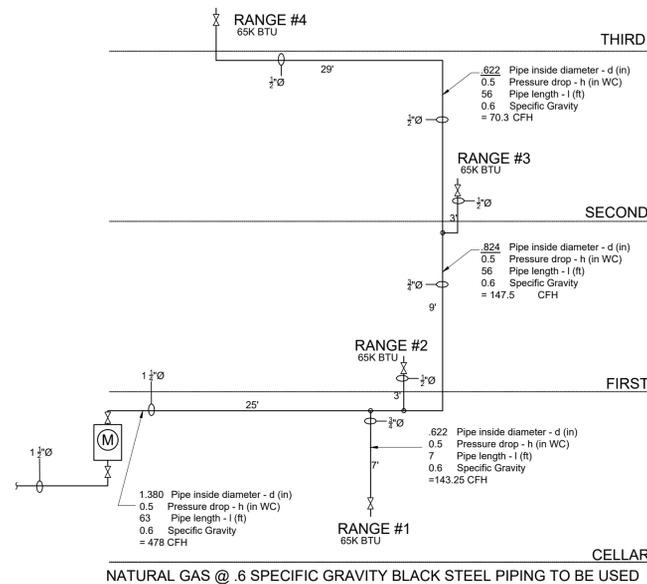
PLUMBING FIXTURE GPM CHART

Pipe Size (in) Nominal	Pipe Length (ft) Inside diameter	Capacity of Pipe (MBH = CFH)					
		10	20	40	80	150	300
1/2	0.622	120	85	60	42	31	22
3/4	0.824	272	192	136	96	70	50
1	1.049	547	387	273	193	141	100
1 1/4	1.380	1200	849	600	424	310	219
1 1/2	1.610	1860	1316	930	658	480	340
2	2.067	3759	2658	1880	1330	971	686
2 1/2	2.469	6169	4362	3084	2189	1593	1126
3	3.088	11225	7938	5613	3969	2898	2049
4	4.026	23479	16602	11740	8301	6062	4287
5	5.047	42945	30367	21473	15183	11088	7841
6	6.065	69671	49265	34636	24632	17989	12720
8	7.981	141832	100290	70916	50145	36821	26895

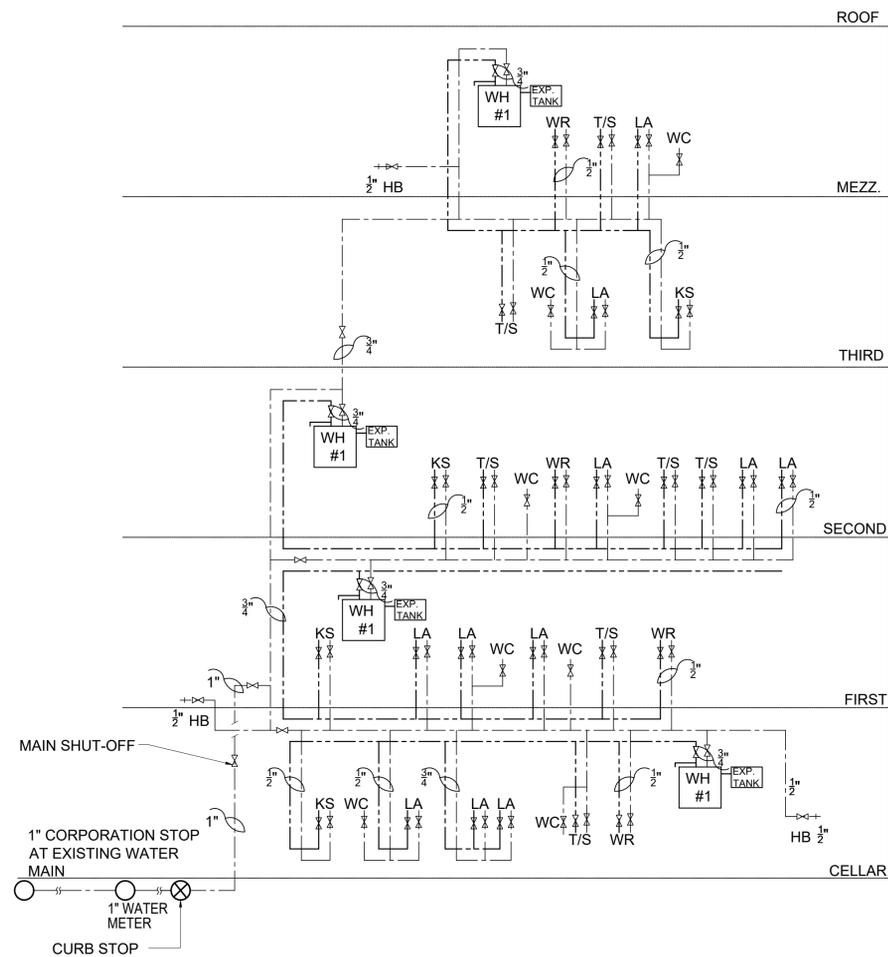
GAS PIPE SIZING CHART



SANITARY RISER DIAGRAM



GAS RISER DIAGRAM



COLD/HOT WATER RISER DIAGRAM



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REVISIONS

NO.	DATE	DESCRIPTION

DRAWING TITLE
PLUMBING PLANS & NOTES

SHEET NO.