BUILDING INFO

ADDRESS	3221 VOLTA PI NW, WASHINGTON, DC 20007		
REAL PROPERTY ID (SSL)	1272 0841		
USE GROUPE	R-3 (RESIDENTIAL, SINGLE FAMILY HOME)		
PROPERTY TYPE	RESIDENTIAL-SINGLE FAMILY ROW		
LAND AREA	1764 SF		
COUNTY	DISTRICT OF COLUMBIA		
ZONE DISTRICT	RESIDENTIAL ZONE- R-20		
CROSS BUILDING AREA	EXISTING, SF	NEW, SF	EXISTING + NEW, SF
BASEMENT	476.4	64	540.4
LEVEL 1	708.5	0	708.8
LEVEL 1 PATIO	96.4	133	133
LEVEL 2	708.5	0	708.5
LEVEL 3	481 (UNOCCUPIED ATTIC)	481 (TO BE OCCUPIED ROOM)	481
TOTAL EXCAVIATION		468 CF BASEMENT, 190 CF PATIO FOUNDATION	

FINISHES

1. GYPSUM WALLBOARD - INSULATION
   a. ALL GYPSUM WALLBOARD SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT BUILDING CODE
   b. GYPSUM WALL BOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSTALLATION IS PROVIDED.
   c. GYPSUM BOARD BACK-UP FOR TILE IN BATHROOMS, BEHIND KITCHEN COUNTERS, WALL AND CEILINGS IN BATHROOMS SHALL BE CEMENT BOARD (USG-DUROCK OR EQUAL).
   d. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING MEMBERS, EXCEPT THOSE EDGES AND ENDS WHICH ARE PERPENDICULAR TO THE FRAMING MEMBERS. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE RESISTIVE CONSTRUCTION OR DIAPHRAGM ACTION IS NOT REQUIRED.
   e. THE SIZE AND SPACING OF FASTENERS SHALL COMPLY WITH THE CURRENT INTERNATIONAL RESIDENTIAL CODE (IRC). FASTENERS SHALL BE SPACED NOT LESS THAN 3/8" FROM EDGES AND ENDS OF GYPSUM WALLBOARD. FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSEMBLY PERPENDICULAR TO SUPPORTS AND AT THE WALL LINE MAY BE OMITTED EXCEPT ON SHEAR-RESISTING ELEMENTS, OR FIRE RESISTIVEASSEMBLIES. FASTENERS SHALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTNER HEAD.
   f. PROVIDE MARBLE THRESHOLDS AT THE TOILET ROOM DOORS UNLESS NOTED OTHERWISE.

CERAMIC TILE - INSTALLATION:

   a. FOLLOW INSTALLATION APPLICATION IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

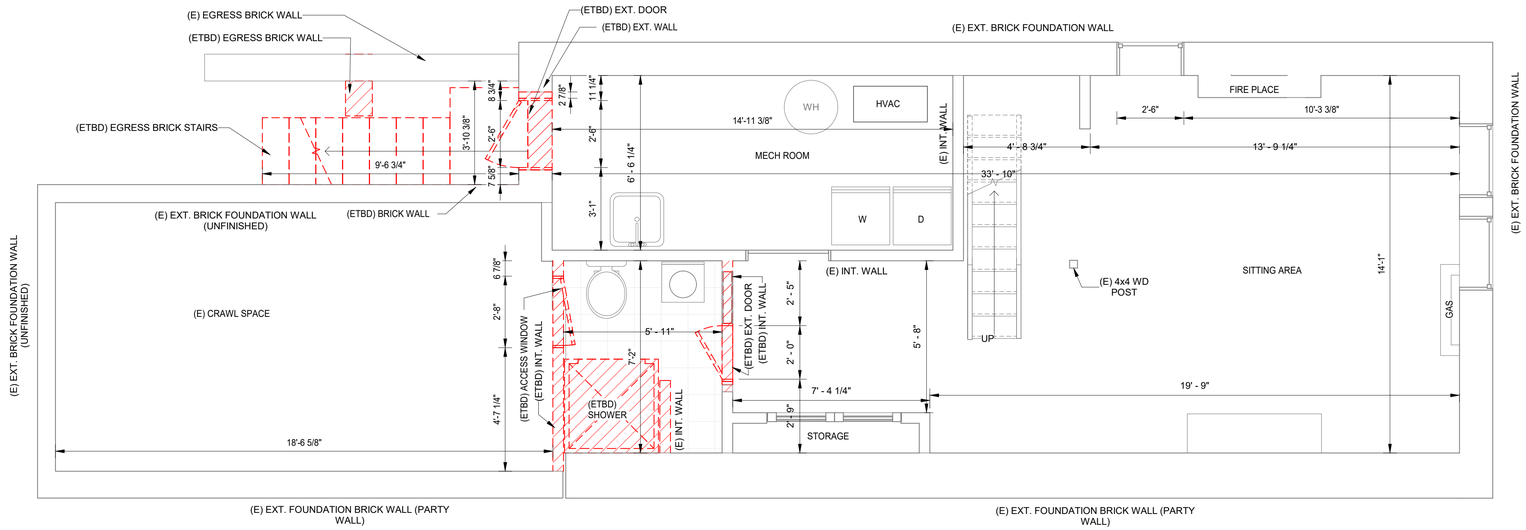
FLOORS:
   a. DRY SET MORTAR METHOD F113 FROM HANDBOOK FOR CERAMIC TILE INSTALLATION

GYPSUM WALLBOARD WALLS:
   a. ORGANIC ADHESIVE METHOD W223.

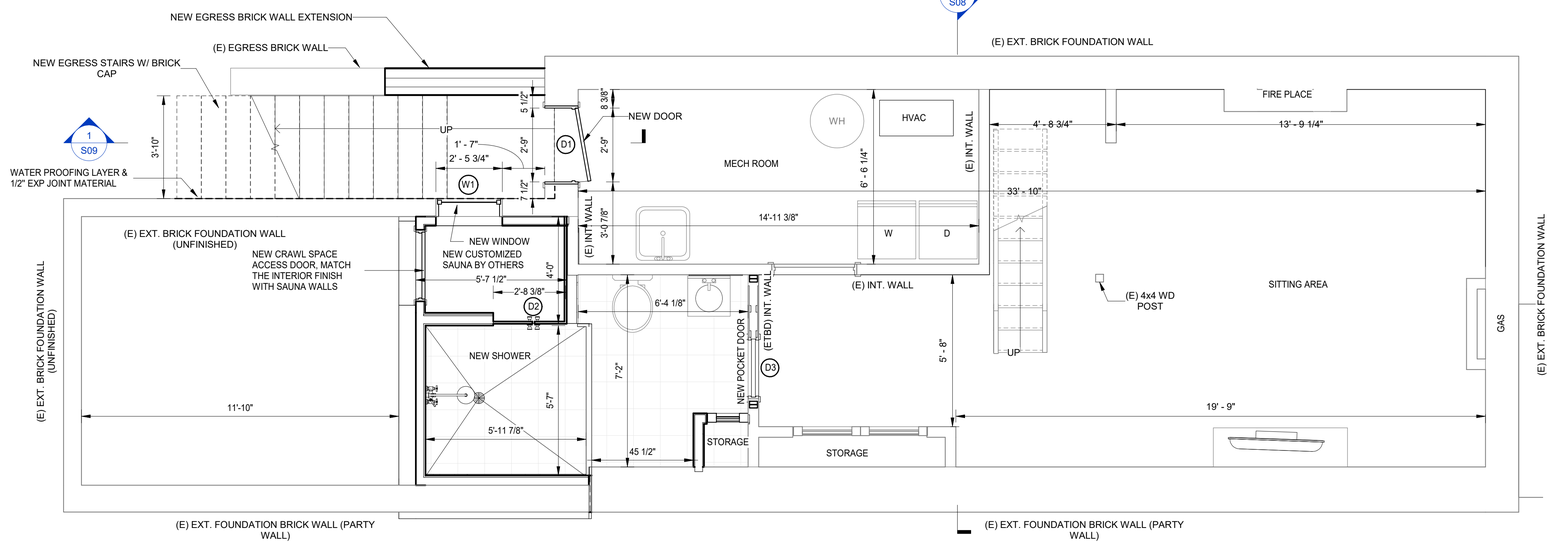
RESILIENT FLOORING:
   a. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND RECOMMENDATIONS.

WOOD STRIP FLOORING:
   a. MANUFACTURER'S STANDARD STRAIGHT EDGE TONGUE-AND-GROOVE AND END-MATCHED SOLID WOOD FLOORING.

PAINTING:
   a. ALL WALLS SHALL BE TAPED, BEDDED AND SANDED PRIOR TO PRIMING AND PAINTING.
   b. ALL WALLS ARE TO HAVE A LEVEL 4 FINISH UNLESS NOTED OTHERWISE.



1 A01 BASEMENT EXISTING FLOOR PLAN
3/8" = 1'-0"



3 A01 BASEMENT PROPOSED FLOOR PLAN
3/8" = 1'-0"

YFG Structural Engineering
YFG STRUCTURAL ENGINEERING, LLC.
YFGENGINEERING.COM
PHONE: (202)840-5216
YGHAFFARI@YFGENGINEERING.COM
203 YOAKYM PKWY, ALEXANDRIA, VA 22304

DISTRICT OF COLUMBIA
YOUSEF GHAFFARI
No. PE 922409
LICENSED
PROFESSIONAL ENGINEER
1/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

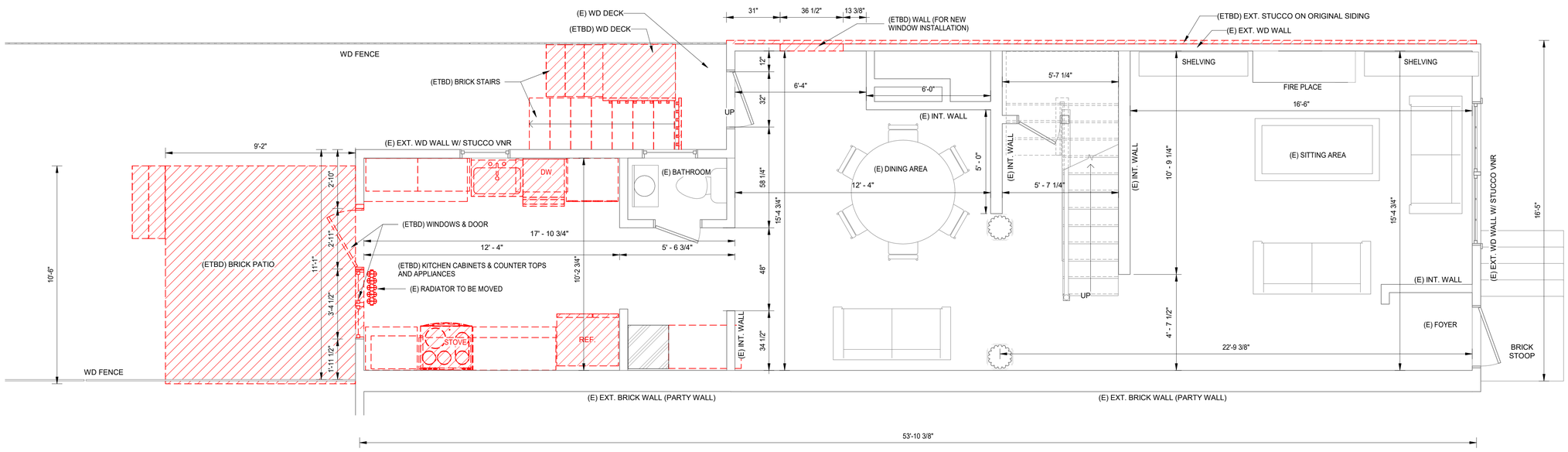
DESCRIPTION

FLOOR PLANS- BASEMENT LEVEL

SHEET

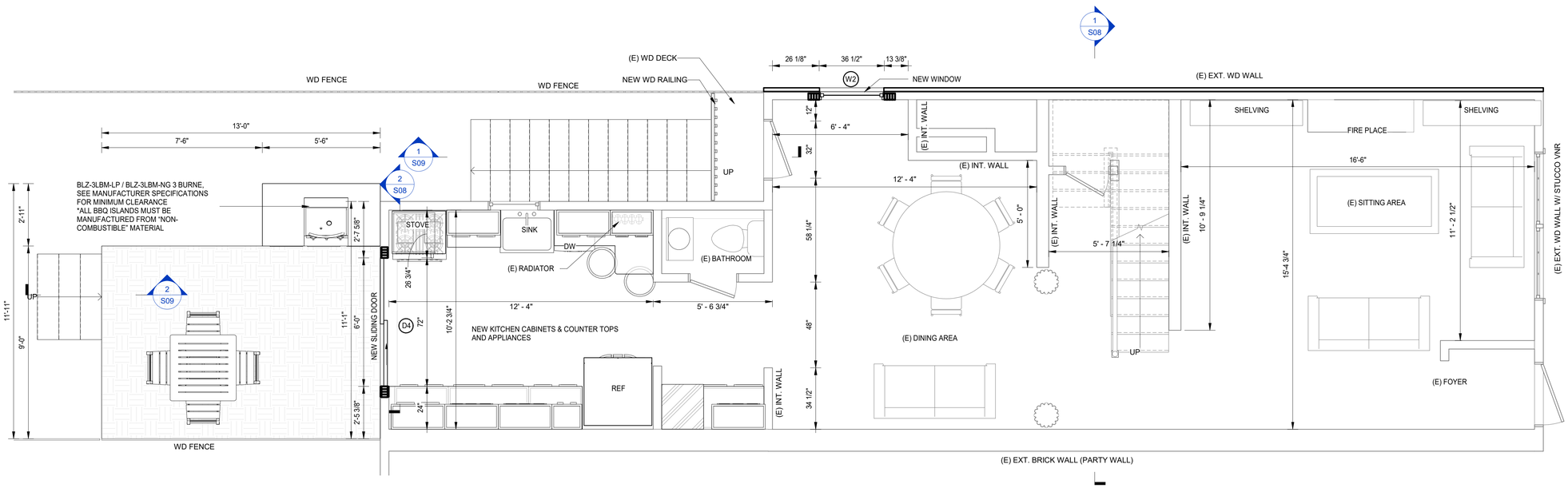
A01

Project No.: YFG21092701
THESE DRAWINGS, ALONG WITH THE ARCHITECTURAL DRAWINGS, AND PROJECT MANUAL CONSTITUTE A SINGULAR CONTRACT DOCUMENT AND MUST BE USED TOGETHER IN THEIR ENTIRETY IN THE CONSTRUCTION OF THIS PROJECT.
PAPER SIZE: 24" x 36"



1 A02 LEVEL 1 EXISTING FLOOR PLAN

3/8" = 1'-0"



2 A02 LEVEL 1 PROPOSED FLOOR PLAN

3/8" = 1'-0"

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1/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

DESCRIPTION

FLOOR PLANS- LEVEL 1

SHEET

A02

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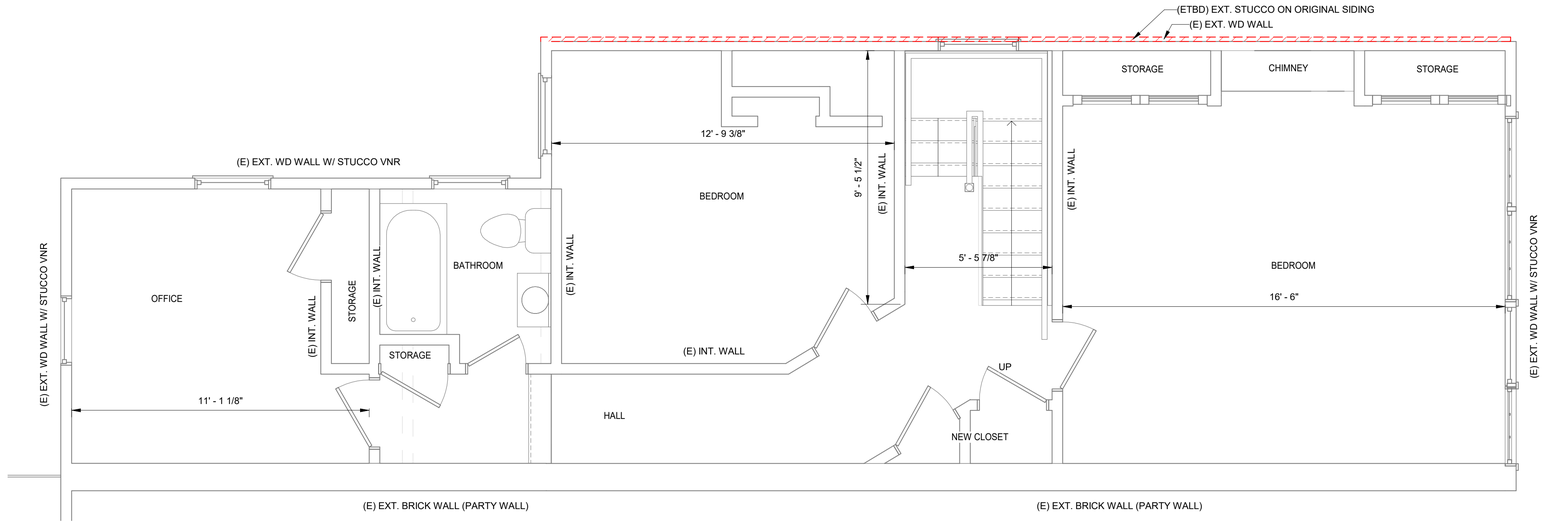
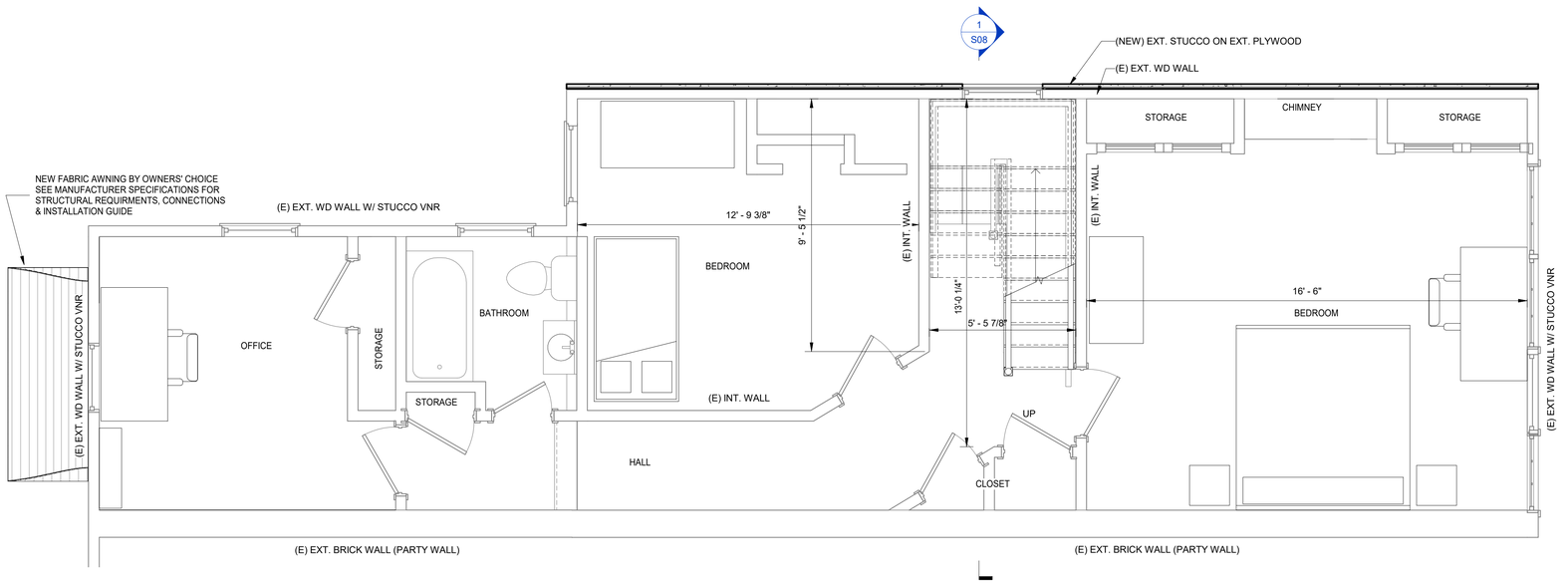


1 A03 LEVEL 2 EXISTING FLOOR PLAN

3/8" = 1'-0"



3 A03 LEVEL 2 PROPOSED FLOOR PLAN

3/8" = 1'-0"

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11/24/2022

REVISIONS		

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
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DESCRIPTION

FLOOR PLANS- LEVEL 2

SHEET

A03

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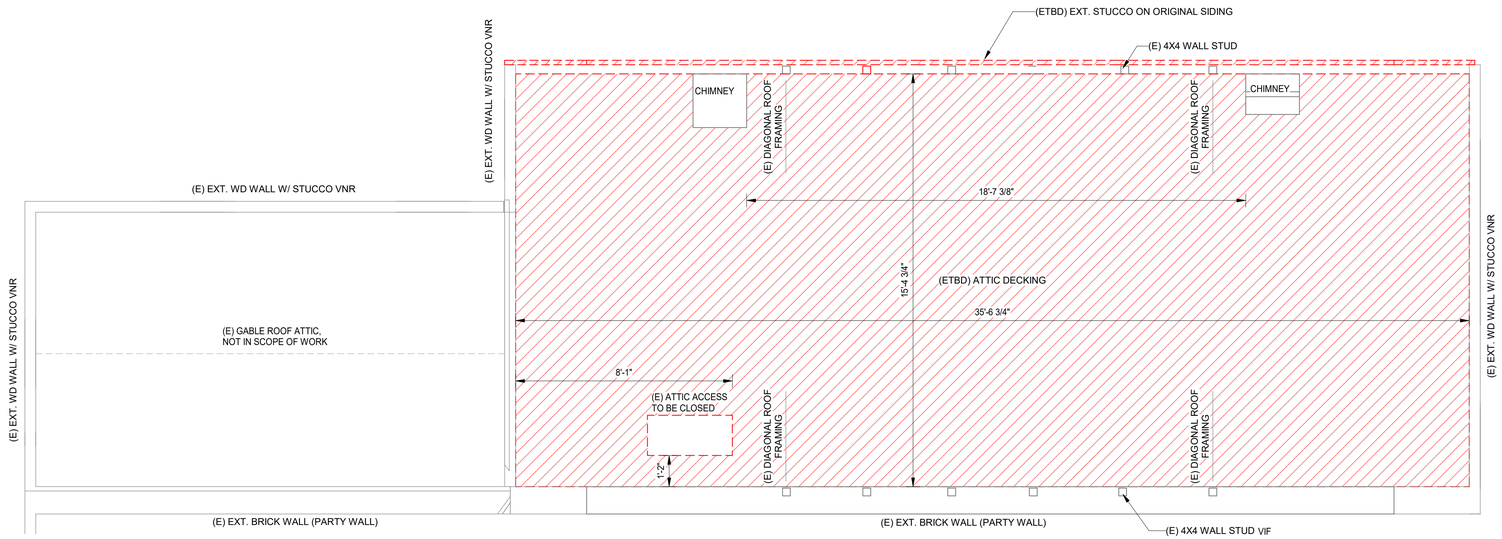
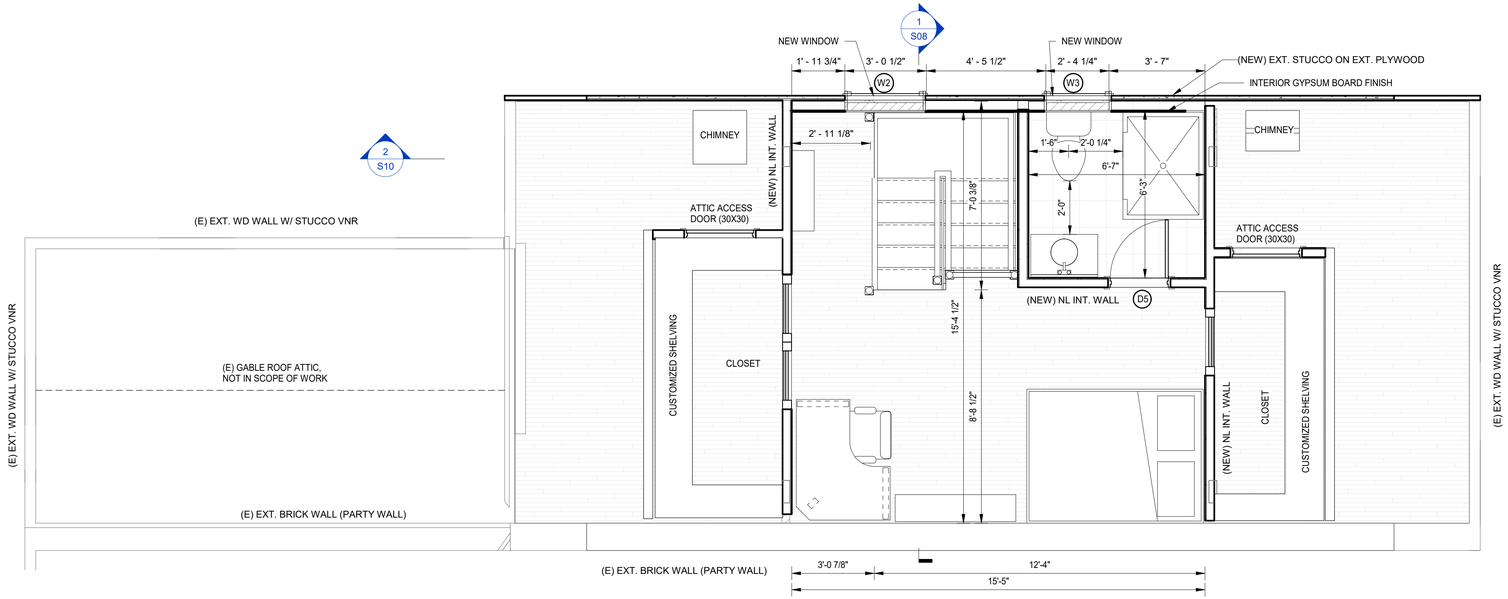


1 A04 LEVEL 3 EXISTING FLOOR PLAN

3/8" = 1'-0"



2 A04 LEVEL 3 PROPOSED FLOOR PLAN

3/8" = 1'-0"

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REVISIONS

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3221 VOLTA PI NW,
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DESCRIPTION

FLOOR PLANS- LEVEL 3

SHEET

A04

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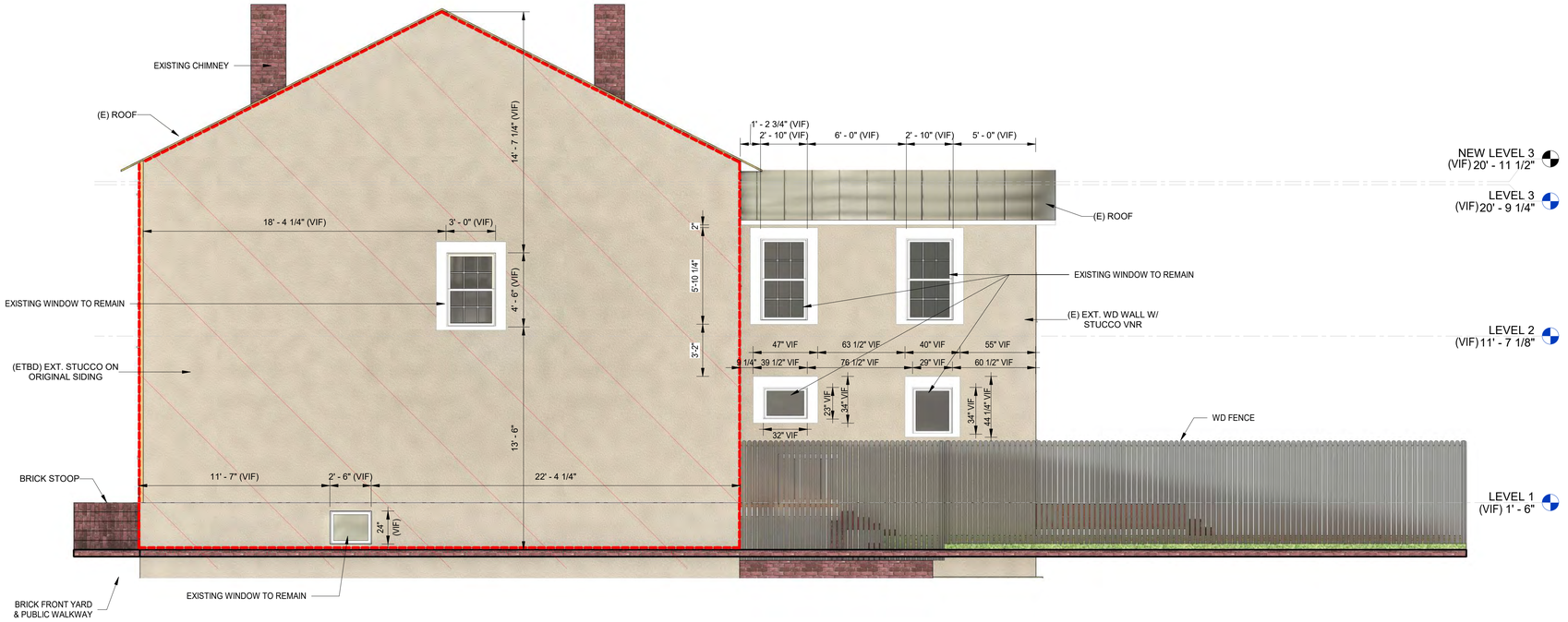

2 A05 SIDE (EAST) ELEVATION- DEMOLITION

1/4" = 1'-0"

3 A05 SIDE (EAST) ELEVATION- NEW CONSTRUCTION

1/4" = 1'-0"

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DESCRIPTION

BUILDING ELEVATIONS

SHEET

A05

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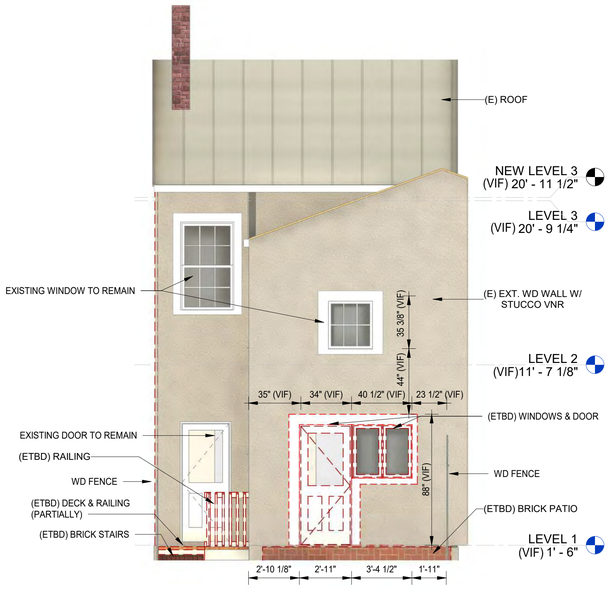
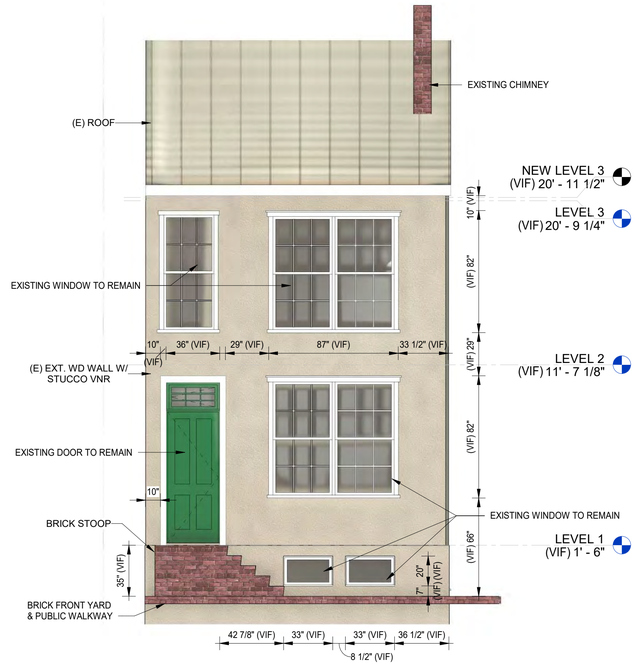
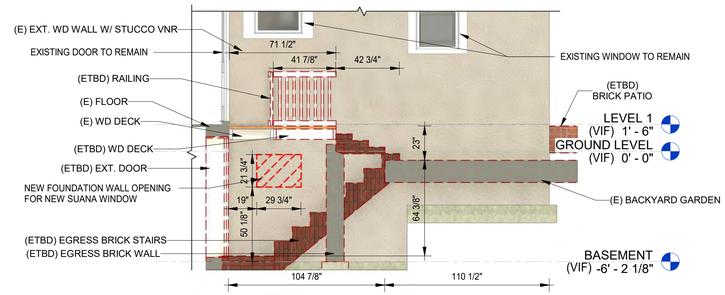


2 A06 REAR (NORTH) ELEVATION- DEMOLITION
1/4" = 1'-0"

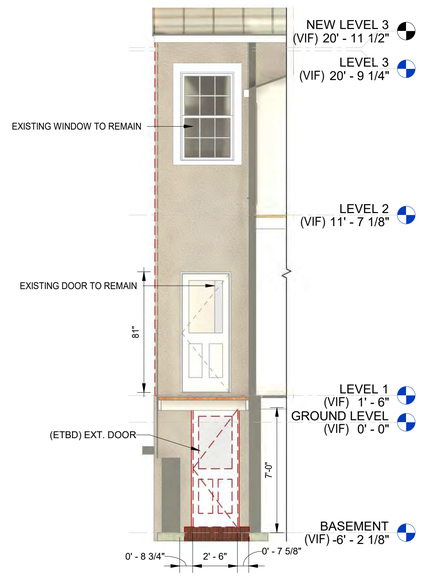
3 A06 REAR (NORTH) ELEVATION- NEW CONSTRUCTION
1/4" = 1'-0"



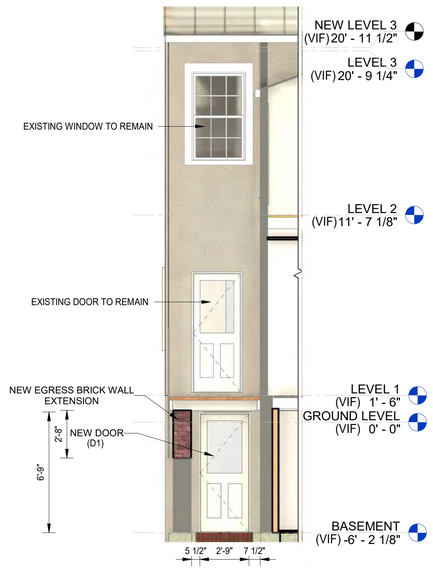
1 A06 FRONT (SOUTH) ELEVATION- EXISTING
1/4" = 1'-0"



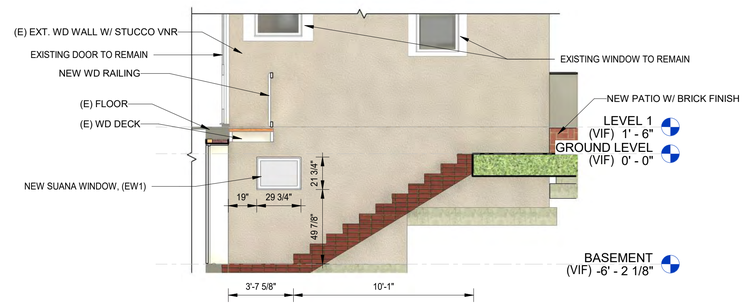
6 A06 SIDE (EAST) PARTIAL ELEVATION (BASEMENT EGRESS- DEMOLITION
1/4" = 1'-0"



REAR (NORTH) PARTIAL ELEVATION
(BASEMENT EGRESS)-- DEMOLITION
4 A06 1/4" = 1'-0"



REAR (NORTH) PARTIAL ELEVATION
(BASEMENT EGRESS)- NEW
CONSTRUCTION
5 A06 1/4" = 1'-0"



7 A06 SIDE (EAST) PARTIAL ELEVATION (BASEMENT EGRESS- NEW CONSTRUCTION
1/4" = 1'-0"

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11/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

DESCRIPTION
BUILDING ELEVATIONS

SHEET
A06

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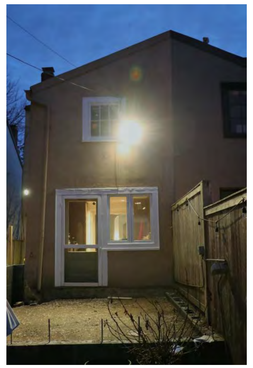
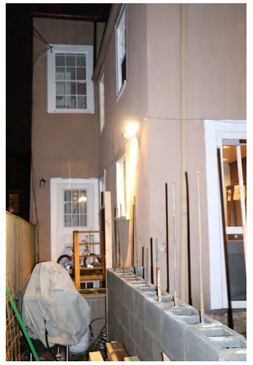
PAPER SIZE: 24" x 36"

FRONT VIEW

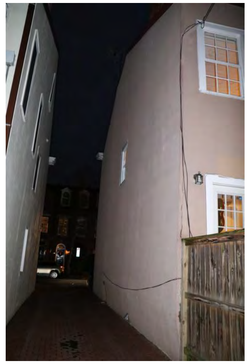
REAR VIEW W/ ORIGINAL PATIO & ADJACENT TREE



REAR VIEW



REAR VIEW



REAR VIEW (CASHEL ALLEY)

FRONT VIEW

REAR/ SIDE VIEW (ETBD STUCCO VNR)

REAR VIEW- EXISTING DOOR & WINDOWS TO BE REPLACED W/ NEW SLIDING DOOR

REAR/ SIDE VIEW

REAR/ SIDE VIEW- BASEMENT WINDOW (ETBD STUCCO VNR)

REAR/ SIDE VIEW- BASEMENT WINDOW (ETBD STUCCO VNR)

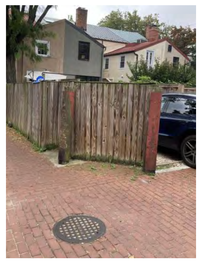
SIDE VIEW (ETBD STUCCO VNR)

INSIDE KITCHEN VIEW- EXISTING DOOR, WINDOWS & CABINETS TO BE REPLACED W/ NEW SLIDING DOOR

INSIDE KITCHEN VIEW- EXISTING DOOR, WINDOWS & CABINETS TO BE REPLACED W/ NEW SLIDING DOOR

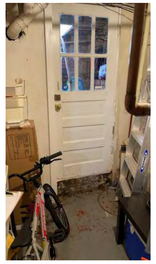
REAR VIEW- EXISTING DOOR & WINDOWS TO BE REPLACED W/ NEW SLIDING DOOR

REAR CORNER DAMAGED STUCCO AND WALL (CAUSED BY TREE ROOTS)



REAR VIEW (CASHEL ALLEY)

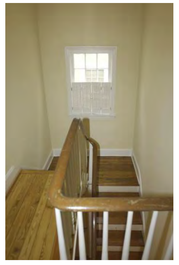
BASEMENT BATHROOM



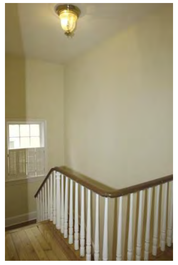
BASEMENT MECH ROOM- EXISTING DOOR TO BE REPLACED

LEVEL1- DINING AREA- A NEW WINDOW WILL BE INSTALLED ATEXTERIOR WALL

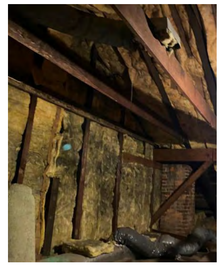
LEVEL1- DINING AREA- A NEW WINDOW WILL BE INSTALLED ATEXTERIOR WALL



LEVEL2- NEW STAIR CASE WILL BE BUILT TO ACCESS LEVEL 3



LEVEL3- EXISTING ATTIC AREA & ROOF FRAMING, NEW WINDOWS WILL BE INSTALLED AT THE EXTERIOR WALL



LEVEL3- EXISTING ATTIC AREA & ROOF FRAMING

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203 YOAKYM PKWY, ALEXANDRIA, VA 22304

DISTRICT OF COLUMBIA
YOUSEF GHAFFARI
No. PE 922409
LICENSED
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11/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

DESCRIPTION

BUILDING PHOTOES

SHEET

A07

Project No.: YFG21092701

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PAPER SIZE: 24" x 36"

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., November 15, 2021

Plat for Building Permit of :

SQUARE 1272 LOT 841

Scale: 1 inch = 20 feet

Recorded in Book A & T Page 3462 - U

Receipt No. 22-00850

Drawn by: A.S.

Furnished to: LUCA PANI

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

_____

Surveyor, D.C.

I hereby certify that on this plat on which the Office of the Surveyor has drawn the dimensions of this lot, I have accurately and completely depicted and labeled the following:
1) all existing buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, and any existing face-on-line or party wall labeled as such, well as projections and improvements in public space - with complete and accurate dimensions;
2) all proposed demolition or raze of existing buildings duly labeled as such; all proposed buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, any existing face-on-line or party wall labeled as such, as well as projections and improvements in public space and the improvements used to satisfy pervious surface or green area ratio requirements - with complete and accurate dimensions, in conformity with the plans submitted with building permit application _____; and
3) any existing chimney or vent on an adjacent property that is located within 10 feet of this lot.
I also hereby certify that:
1) my depiction on this plat, as detailed above, is accurate and complete as of the date of my signature hereon;
2) there is no elevation change exceeding ten feet measured between lot lines; or if so, this elevation change is depicted on a site plan submitted with the plans for this permit application;
3) I have/have not (*circle one*) filed a subdivision application with the Office of the Surveyor;
4) I have/have not (*circle one*) filed a subdivision application with the Office of Tax & Revenue; and
5) if there are changes to the lot and its boundaries as shown on this plat, or to the proposed construction and plans as shown on this plat, that I shall obtain an updated plat from the Office of the Surveyor on which I will depict all existing and proposed construction and which I will then submit to the Office of the Zoning Administrator for review and approval prior to permit issuance.
The Office of the Zoning Administrator will only accept a Building Plat issued by the Office of the Surveyor within the two years prior to the date DCRA accepts a Building Permit Application as complete.
I acknowledge that any inaccuracy or errors in my depiction on this plat will subject any permit or certificate of occupancy issued in reliance on this plat to enforcement, including revocation under Sections 105.6(1) and 110.5.2 of the Building Code (Title 12A of the DCMR) as well as prosecution and penalties under Section 404 of D.C. Law 4-164 (D.C. Official Code §22-2405).

Signature: _____
Date: _____

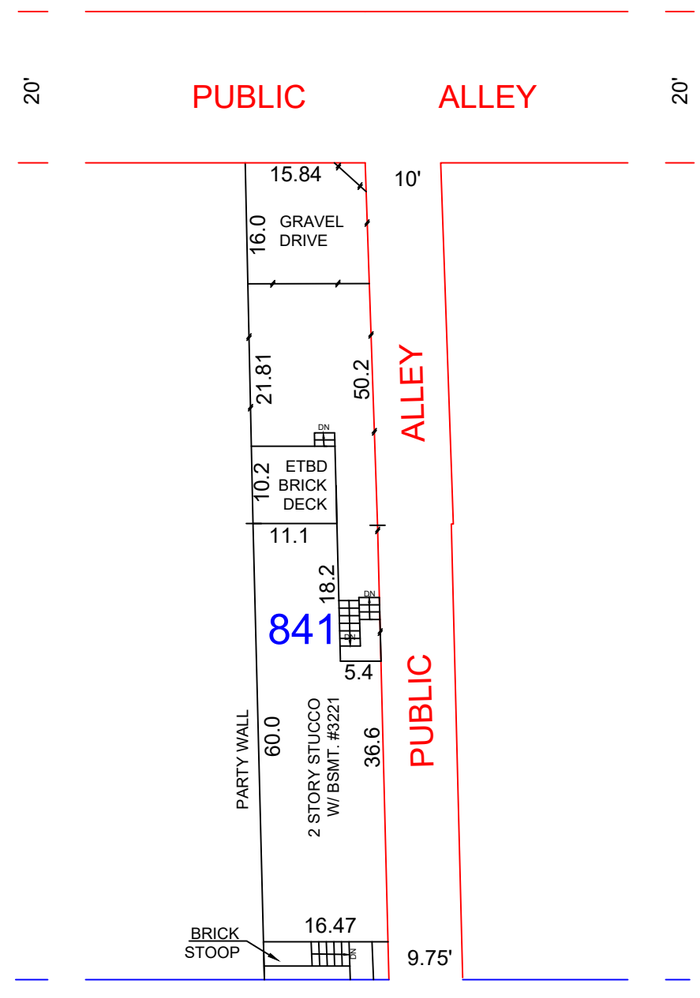
Printed Name: _____ Relationship to Lot Owner:_____

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

0 10 30 60 100

SCALE: 1:20

SQUARE 1272



VOLTA PLACE, N.W.

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., November 15, 2021

Plat for Building Permit of :

SQUARE 1272 LOT 841

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Recorded in Book A & T Page 3462 - U

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_____

Surveyor, D.C.

I hereby certify that on this plat on which the Office of the Surveyor has drawn the dimensions of this lot, I have accurately and completely depicted and labeled the following:
1) all existing buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, and any existing face-on-line or party wall labeled as such, well as projections and improvements in public space - with complete and accurate dimensions;
2) all proposed demolition or raze of existing buildings duly labeled as such; all proposed buildings and improvements - including parking spaces, covered porches, decks and retaining walls over four feet above grade, any existing face-on-line or party wall labeled as such, as well as projections and improvements in public space and the improvements used to satisfy pervious surface or green area ratio requirements - with complete and accurate dimensions, in conformity with the plans submitted with building permit application _____; and
3) any existing chimney or vent on an adjacent property that is located within 10 feet of this lot.
I also hereby certify that:
1) my depiction on this plat, as detailed above, is accurate and complete as of the date of my signature hereon;
2) there is no elevation change exceeding ten feet measured between lot lines; or if so, this elevation change is depicted on a site plan submitted with the plans for this permit application;
3) I have/have not (*circle one*) filed a subdivision application with the Office of the Surveyor;
4) I have/have not (*circle one*) filed a subdivision application with the Office of Tax & Revenue; and
5) if there are changes to the lot and its boundaries as shown on this plat, or to the proposed construction and plans as shown on this plat, that I shall obtain an updated plat from the Office of the Surveyor on which I will depict all existing and proposed construction and which I will then submit to the Office of the Zoning Administrator for review and approval prior to permit issuance.
The Office of the Zoning Administrator will only accept a Building Plat issued by the Office of the Surveyor within the two years prior to the date DCRA accepts a Building Permit Application as complete.
I acknowledge that any inaccuracy or errors in my depiction on this plat will subject any permit or certificate of occupancy issued in reliance on this plat to enforcement, including revocation under Sections 105.6(1) and 110.5.2 of the Building Code (Title 12A of the DCMR) as well as prosecution and penalties under Section 404 of D.C. Law 4-164 (D.C. Official Code §22-2405).

Signature: _____
Date: _____

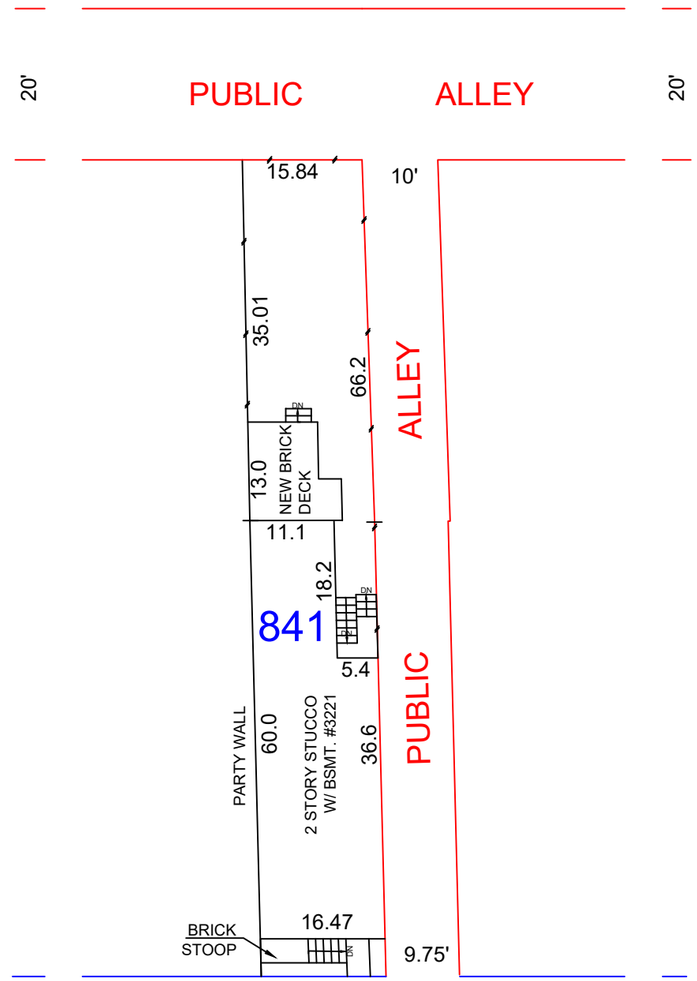
Printed Name: _____ Relationship to Lot Owner:_____

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

0 10 30 60 100

SCALE: 1:20

SQUARE 1272



VOLTA PLACE, N.W.

GENERAL:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS.
2. DIMENSIONS AND CONDITIONS ST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
3. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONAL INFORMATION.
4. AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE INCLUDING SAFETY OF PERSONS AND PROPERTY.
5. ENGINEERS' PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTORS' MEANS OR METHODS OF CONSTRUCTION.
6. SHORING, BRACING AND PROTECTION OF EXISTING AND ADJACENT STRUCTURES DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. PROTECT AND MAINTAIN THE INTEGRITY OF ADJACENT STREETS, BUILDINGS AND ALL OTHER STRUCTURES.
8. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE STRUCTURE IS COMPLETE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS.
10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
11. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY MEANS AND METHODS OF CONSTRUCTION OR FOR ANY RELATED SAFETY PRECAUTIONS OR PROGRAMS.

DESIGN LOADS:

1. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE **DISTRICT OF COLUMBIA** BUILDING CODE AND APPLICABLE REFERENCE STANDARDS.
2. THE FOLLOWING SUPERIMPOSED LOADINGS HAVE BEEN UTILIZED:

FLOOR:
- LIVE LOAD 40psf
- DEAD LOAD 15psf

ROOF:
- LIVE LOAD 20 psf
- DEAD LOAD 15 psf
- SNOW LOAD 30psf

WIND:
- EXPOSURE C
- RISK CATEGORY II
- ULTIMATE DESIGN WIND SPEED Vult=115 MPH (3-SECOND GUST)
- NOMINAL DESIGN WIND SPEED Vasd=90 MPH (3-SECOND GUST)

SEISMIC LOAD

RISK CATEGORY	II
SEISMIC DESIGN CATEGORY	D
Ss	0.13
S1	0.043
TL	8 SEC

CONTRACTOR PROPOSED CHANGES AND SUBSTITUTIONS:

1. PROPOSED CHANGES OR SUBSTITUTIONS TO STRUCTURAL DETAILS OR PLANS SHALL BE SUBMITTED TO ADMIN@YFGENGINEERING.COM TO THE YFG STRUCTURAL ENGINEERING, LLC FOR REVIEW AND APPROVAL.
2. SUBMITTALS SHALL CONTAIN FULL DOCUMENTATION OF CHANGES OR SUBSTITUTIONS WITH SUPPORTING, SEALED CALCULATIONS (WHERE APPLICABLE).
3. THE REVIEW OF CHANGES AND SUBSTITUTIONS, RE-ANALYSIS AND/OR RE-DRAFTING TO INCORPORATE CHANGES OR SUBSTITUTIONS INTO CONTRACT DOCUMENTS ARE ADDITIONAL SERVICES FOR THE EOR.
4. CONSTRUCTION COST REVISIONS ARE BETWEEN THE CONTRACTOR AND OWNER AND ARE NOT REVIEWED BY YFG STRUCTURE ENGINEERING. EXISTING STRUCTURE:
5. ALL EXISTING DIMENSIONS AND LOCATIONS OF EXISTING STRUCTURES INDICATED ON THE DRAWINGS SHALL BE VERIFIED BY FIELD MEASUREMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER AND ARCHITECT. DRAWINGS HAVE BEEN PREPARED BASED ON AVAILABLE KNOWLEDGE OF EXISTING CONDITIONS, IF, DURING DEMOLITION, EXCAVATION OR CONSTRUCTION, ACTUAL CONDITIONS ARE DISCOVERED TO DIFFER FROM THOSE INDICATED ON DRAWINGS, ENGINEER AND ARCHITECT SHALL BE NOTIFIED.

DEMOLITION

1. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
2. VERIFY ALL DIMENSIONS AFFECTED BY EXISTING CONSTRUCTION PRIOR TO DEMOLITION.
3. ACTUAL FIELD AS-BUILD CONDITIONS MAY VARY FROM WHAT IS INDICATED ON THE PLANS. ALL DIMENSIONS, ELEVATIONS AND ANY OTHER CONDITIONS OF THE EXISTING STRUCTURE SHALL BE FIELD VERIFIED PRIOR TO DEMOLITION, FABRICATION AND INSTALLATION OF NEW BUILDING COMPONENTS.
4. VERIFY WITH THE EOR PRIOR TO REMOVING OR MODIFYING ANY STRUCTURAL MEMBERS THAT HAVE NOT BEEN INCLUDED IN THE STRUCTURAL CONSTRUCTION DOCUMENTS.
5. REMOVE, REPLACE, PATCH AND REPAIR MATERIALS AND SURFACES CUT OR DAMAGED DURING SELECTIVE DEMOLITION, BY METHODS AND WITH MATERIALS SO AS NOT TO VOID EXISTING WARRANTIES.
6. SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED, PERFORM SURVEYS AS THE WORK PROGRESSES TO DETECT HAZARDS RESULTING FROM SELECTIVE DEMOLITION ACTIVITIES.
7. WHEN UNANTICIPATED STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE THE NATURE AND EXTENT OF THE CONFLICT(S) PROMPTLY AND SUBMIT A WRITTEN REPORT TO THE EOR AND AOR.
8. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE REMOVAL OF ANY ELEMENT WILL NOT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THE STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION ACTIVITIES.
9. PROVIDE AND MAINTAIN SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
10. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF SELECTIVE DEMOLITION.
11. SHORING LAYOUT AND DESIGN SHALL BE PERFORMED BY AN ENGINEER REGISTERED IN DESIGNATED STATELAND .
12. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS.
13. PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY EOR AND AOR, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION.
14. PROTECTIVE RAILING SHALL BE PUT IN PLACE AT ALL CHANGES IN ELEVATION OVER 12".

FOUNDATIONS:

1. NO BACKFILL SHALL BE PLACED AGAINST FOUNDATION WALLS UNLESS SUPPORTING SLABS ARE IN PLACE AND SET OR THE WALLS ARE ADEQUATELY BRACED.
2. DEWATERING OF THE SITE DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR NOT TO UNDERMINE EXISTING FOUNDATIONS. METHOD OF DEWATERING AND CALCULATIONS FOR THE APPROPRIATE SYSTEM ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
3. PROVIDE DOWELS IN FOUNDATIONS FOR ALL WALLS, COLUMNS, AND SHEAR WALLS OF SAME NUMBER, SIZE AND LAYOUT AS THE VERTICAL REINFORCEMENT ABOVE, U.N.O.
4. PROVIDE WATERSTOPS IN ALL VERTICAL CONSTRUCTION JOINTS IN FOUNDATION WALLS.
5. SLABS ON GROUND SHALL BE PLACED ON SELECT GRANULAR FILL COMPACTED TO 95 PERCENT MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557)
6. ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF1500 psf ON COMPACTED FILL.

CONCRETE

1. SHALL BE PER AN APPROVED MIX DESIGN PROPORTIONED TO ACHIEVE A STRENGTH AT 28 DAYS AS LISTED BELOW WITH A PLASTIC AND WORKABLE MIX:
   3000 psi FOR FOUNDATIONS AND SLABS ON GRADE.
2. CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ACI STANDARDS AND SPECIFICATIONS.
3. CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC.
4. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED.
5. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS.
6. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED.
7. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE.
8. CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.
9. CONCRETE DESIGN MIX SUBMITTALS SHALL INCLUDE TESTED, STATISTICAL BACK-UP DATA AS PER CHAPTER 5 OF ACI 318.

   CONCRETE TESTING:
10. AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE:
11. ASTM C143: "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE." MAXIMUM SLUMP SHALL BE XX INCHES.
12. ASTM C39: "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS." A SEPARATE TEST SHALL BE CONDUCTED FOR EACH CLASS, FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:
    1. 1 AT 3 DAYS
    2. 1 AT 7 DAYS
    3. 2 AT 28 DAYS

ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISCARDED.

REINFORCED MASONRY

1. REINFORCED MASONRY WALLS [SPECIAL INSPECTIONS REQUIRED UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS OR SPECIFIED WITHIN THE DESIGNATED STATELAND BUILDING CODE, ALL MASONRY CONSTRUCTION SHALL CONFORM TO REQUIREMENTS OF ACI 530-13 AND ACI 530.1 -08 AND 2018 DESIGNATED STATELAND BUILDING CODE SECTION 2122.

MATERIALS

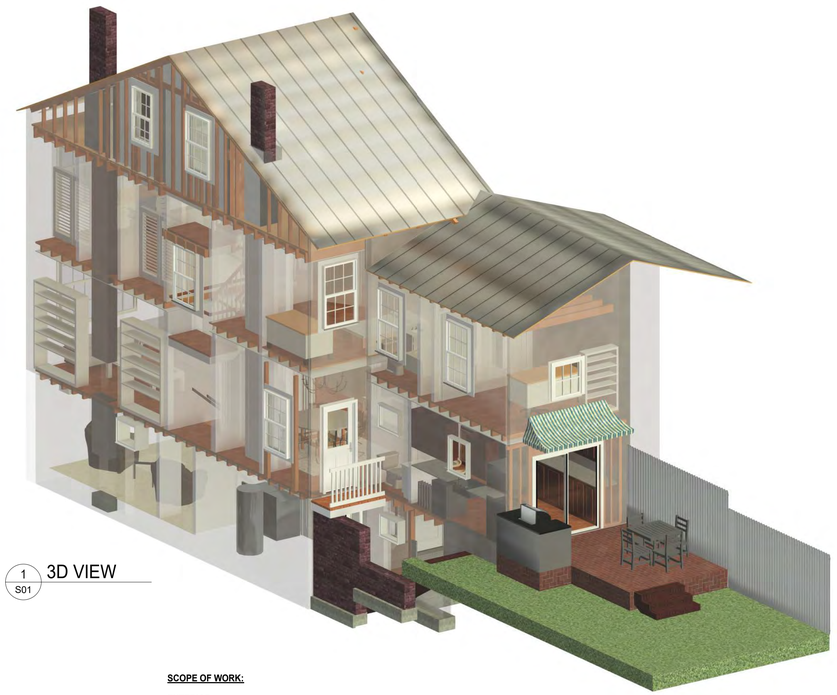
1. ALL CONCRETE BLOCK TO CONFORM TO ASTM C 90, GRADE N, TYPE II (NONMOISTURE CONTROLLED) WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 1900 PSI (PRISM STRENGTH OF MASONRY WALL 1500 PSI).
2. MORTAR SHALL BE TYPE "M" OR "S" WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI (USE PORTLAND TYPE CEMENT) AND MEET ASTM C-270.
3. TESTING OF MORTAR SHALL CONFORM TO ASTM C 270.
4. GROUT SHALL BE 2000 psi MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476.
5. GROUT SLUMP SHALL BE BETWEEN 8 AND 11 INCHES.
6. TESTING OF GROUT SHALL CONFORM TO ASTM C 1019.
7. AN APPROVED TESTING LABORATORY SHALL PERFORM TESTS OF GROUT AND MORTAR AT A RATE OF ONE PER EVERY 2000 SQUARE FEET OF WALL ERECTED.

INSTALLATION

1. PROVIDE FULL MORTAR BED AT THE FIRST COURSE OF BLOCK WALLS (ABOVE SUPPORTING SLAB, BEAM OR FOOTING) AND AT ALL COURSES OF PIERS, COLUMNS AND PILASTERS.
2. ALL VERTICAL REINFORCEMENT, AS SPECIFIED ON PLANS, SHALL BE PLACED IN FULLY GROUTED CELLS.
3. DOWELS SHALL BE PROVIDED TO ENSURE CONTINUITY OF REINFORCEMENT AT THE STRUCTURE ABOVE AND BELOW.
4. PROVIDE HOOKED DOWELS IN FOOTINGS FOR VERTICAL REINFORCING ABOVE. SEE SCHEDULE FOR LAP SPLICES.
5. BLOCK CELLS SHALL BE GROUT FILLED WITH VERTICAL REINFORCING BARS AT CORNERS, INTERSECTIONS, EACH SIDE OF OPENINGS OVER 4 FEET WIDE, AND AS SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
6. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE.
7. USE METAL LATH, MORTAR, OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA REQUIRED.
8. MASONRY SHALL BE LAID IN RUNNING BOND PATTERN WITH 50 PERCENT OVERLAP BETWEEN COURSES UNLESS NOTED OTHERWISE.
9. INTERSECTING WALLS SHALL BE INTERLOCKED WITH RUNNING BOND UNLESS NOTED OTHERWISE.
10. PROVIDE 9 GAGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O-WALL OR ENGINEER APPROVED SUBSTITUTION) AT ALTERNATE BLOCK COURSES.
11. CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE.
12. PROVIDE CLEANOUT HOLES IN REINFORCED WALL CELLS AT BOTTOM OF EACH POUR.
13. CLEAN CELLS FREE OF MORTAR AND DEBRIS.
14. THE CLEANOUTS SHALL BE SEALED BEFORE GROUTING, AFTER INSPECTION.
15. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM THE INSIDES OF WALL.
16. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 4 FEET.
17. CELLS CONTAINING REINFORCEMENT SHALL BE FILLED SOLIDLY WITH GROUT.
8. GROUT SHALL BE CONSOLIDATED AT TIME OF PLACING BY VIBRATING AND RECONSOLIDATED LATER BY VIBRATING BEFORE PLASTICITY IS LOST.
9. MINIMUM CELL DIMENSION SHALL BE IN ACCORDANCE WITH TABLE 5 OF ACI 530.1 (3" X 3" FOR COARSE GROUT, 12 FT. MAXIMUM POUR HEIGHT).
10. WHEN THE GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTALCONSTRUCTION JOINTS SHALL BE MADE BY STOPPING THE POUR OF GROUT NOT LESS THAN 1-1/2 INCH BELOW THE TOP OF THE UPPERMOST UNIT GROUTED.

WOOD:

1. STRUCTURAL WOOD COMPONENTS (BEAMS, JOISTS, RAFTERS, ETC.) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES OF NO. 2 SOUTHERN PINE:
   A. SHEAR Fv 175 psi
   B. BENDING 2X4 Fb 1,100 psi
   C. BENDING 2X6 Fb 1,000 psi
   D. BENDING 2X8 Fb 925 psi
   E. BENDING 2X10 Fb 800 psi
   F. BENDING 2X12 Fb 750 ps
2. MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE. SUBSTITUTIONS ARE ACCEPTABLE WITH THE APPROVAL OF THE STRUCTURAL ENGINEER.
3. UNLESS SHOWN OTHERWISE, INSTALL SIZE AND NUMBER OF FASTENERS SHOWN IN LATEST SIMPSON CATALOG.
4. WOOD IN CONTACT WITH CONCRETE OR MASONRY,CONCRETE, AND AT OTHER EXPOSED LOCATIONS SUCH AS DECK OR EXTERNAL STAIRS, AND ETC, SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS' ASSOCIATION STANDARDS.



1 S01 3D VIEW

SCOPE OF WORK:

EXTERIOR:

A. EAST FACE OF THE BUILDING:
   1. DEMOLISHING THE EXTERIOR STUCCO VENEER AND ORIGINAL SIDING BELOW IT.
   2. INSTALLING NEW PLYWOOD SHEATHING AND STUCCO VENEER FINISH.
   3. INSTALLING NEW WINDOWS AT THE THIRD LEVEL (FOR NEW ATTIC ROOM), AT FIRST LEVEL (FOR DINING AREA), AT BASEMENT LEVEL FOR THE NEW SAUNA.
B. NORTH FACE OF THE BUILDING:
   1. PARTIAL DEMOLITION OF WOOD DECK, RAILING, AND DEMOLISHING THE EXISTING BRICK STAIRS.
   2. REBUILDING NEW CONCRETE STAIRS W/ MATCHING BRICK FINISH FROM THE BACKYARD TO THE BASEMENT LEVEL.
   3. DEMOLISHING THE EXISTING BRICK DECK AND STAIRS.
   4. BUILDING NEW DECK W/ CMU FOUNDATION WALLS AND MATCHING BRICK FINISH AND BRICK STAIRS.

INTERIOR:

A. BASEMENT LEVEL:
   1. REPLACING THE EXTERIOR DOOR IN THE MECH ROOM WITH A NEW ONE.
   2. REPLACING THE EXISTING BATHROOM DOOR W/ THE NEW POCKET DOOR AND DEMOLISHING THE EXISTING NON-LOAD-BEARING INTERIOR WALL IN THE BATHROOM AND SHOWER.
   3. EXCAVATING THE SOIL BEHIND THE BATHROOM WALL FOR EXPANDING THE EXISTING BATHROOM FOR A NEW SAUNA AND A FLAT SHOWER.
   4. BUILDING A RETAINING WALL, STRUCTURAL SLAB ON THE GROUND, UNDERPINNING THE PARTY WALL AND INTERIOR STUD WALLS WITH (WOOD / TILE FINISH)
B. LEVEL 1:
   1. INSTALLING A NEW WINDOW AND REQUIRED FRAMING FOR THE DINING AREA.
   2. INSTALLING A NEW SLIDING DOOR AND REQUIRED FRAMING FOR THE KITCHEN.
   3. REPLACING THE EXISTING KITCHEN CABINETS AND APPLIANCES WITH NEW ONES. (SHOWN ON YFG ENGINEERING PLANS, BUT NOT DESIGNED BY YFG ENGINEERING.
C. LEVEL 2:
   1. EXPANDING INTERIOR STAIRCASE AND RAILING TO THE NEW LEVEL 3 (EXISTING ATTIC AREA).
D. LEVEL 3 (EXISTING ATTIC):
   1. EXPANDING INTERIOR STAIRCASE, RAILING, AND REQUIRED FRAMING TO NEW LEVEL 3 (EXISTING ATTIC AREA)
   2. REMOVING THE EXISTING FLOOR JOISTS, DECKING, AND ATTIC ACCESS.
   3. INSTALLING NEW FLOOR JOISTS, PLYWOOD SHEATHING, AND FINISH FLOOR.
   4. BUILDING INTERIOR NON-LOAD-BEARING WALLS FOR NEW BATHROOM, ROOM AREA, AND CLOSETS.
   5. INSTALLING NEW WINDOWS AND REQUIRED FRAMING FOR THE NEW ROOM AND BATHROOM.
   6. VERIFYING OR BUILDING REQUIRED WOOD FRAMING FOR THE EXTERIOR EAST WALL.
E. ROOF:
   1. SISTERING THE EXISTING ROOF RAFTERS WITH NEW LVL BEAMS AND INSTALLING NEW COLLAR TIES.

ABBREVIATION:

AOR	ARCHITECT OF RECORD
ADD'	ADDITIONAL
BMW	BRICK MASONRY WALL
BOTT	BOTTOM
C/C	CENTER TO CENTER
CF	CONTINUOUS FOOTING
CMU	CONCRETE MASONRY WALL
CONT.	CONTINUOUS
CONC.	CONCRETE
D&E	DRILL & EPOXY
(ETBD)	EXISTING TO BE DEMOLISHED
(E)	EXISTING
EOR	ENGINEER OF RECORD
ETR	EXISTING TO REMAIN
HORIZ.	HORIZONTAL
MAX.	MAXIMUM
MIN.	MINIMUM
(N)	NEW
RB	ROUND BAR
RCW	REINFORCED CONCRETE WALL
REINF.	REINFORCING
SW	SHEARWALL
T/	TOP OF
TYP	TYPICAL
VERT.	VERTICAL
VIF	VERIFIED IN FIELD
WD	WOOD
WW	WOOD WALL

SHEET INDEX

SHT NO.	DESCRIPTION	Current Revision	Current Revision Date
S01	STRUCTURAL NOTES		
S02	SPECIAL INSPECTION		
S03	STRUCTURAL PLAN- BASEMENT LEVEL		
S04	STRUCTURAL PLANS- LEVEL 1		
S05	STRUCTURAL PLANS- LEVEL 2		
S06	STRUCTURAL PLANS- LEVEL 3		
S07	STRUCTURAL SECTIONS & DETAILS		
S08	STRUCTURAL SECTIONS & DETAILS		
S09	STRUCTURAL SECTIONS & DETAILS		
S10	STRUCTURAL SECTIONS & DETAILS		
A01	FLOOR PLANS- BASEMENT LEVEL		
A02	FLOOR PLANS- LEVEL 1		
A03	FLOOR PLANS- LEVEL 2		
A04	FLOOR PLANS- LEVEL 3		
A05	BUILDING ELEVATIONS		
A06	BUILDING ELEVATIONS		
A07	BUILDING PHOTOES		

Digitally signed by YOUSEF GHAFFARI
Contact Info: yghaffari@yfgengineering.com
Date: 2022.01.25 12:32:25-05'00'

Project No.: YFG21092701

PAPER SIZE: 24" x 36"

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203 YOAKYM PKWY, ALEXANDRIA, VA 22304

DISTRICT OF COLUMBIA
YOUSEF GHAFFARI
No. PE 922409
LICENSED
PROFESSIONAL ENGINEER
1/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

DESCRIPTION
STRUCTURAL NOTES

SHEET
S01

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS INSPECTION	PERIODIC INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES		X		1704.2.5
2. SPECIAL CASES. SPECIAL INSPECTIONS AND TESTS SHALL BE REQUIRED FOR PROPOSED WORK THAT IS, IN THE OPINION OF THE BUILDING OFFICIAL, UNUSUAL IN ITS NATURE, SUCH AS, BUT NOT LIMITED TO, THE FOLLOWING EXAMPLES: a. CONSTRUCTION MATERIALS AND SYSTEMS THAT ARE ALTERNATIVES TO MATERIALS AND SYSTEMS PRESCRIBED BY THIS CODE. b. UNUSUAL DESIGN APPLICATIONS OF MATERIALS DESCRIBED IN THIS CODE. c. MATERIALS AND SYSTEMS REQUIRED TO BE INSTALLED IN ACCORDANCE WITH ADDITIONAL MANUFACTURER'S INSTRUCTIONS THAT PRESCRIBE REQUIREMENTS NOT CONTAINED IN THIS CODE OR IN STANDARDS REFERENCED BY THIS CODE.(1)	X			1705.1.1

(1) EXCEPTION: SPECIAL INSPECTIONS OF THE STEEL FABRICATION PROCESS SHALL NOT BE REQUIRED WHERE THE FABRICATOR DOES NOT PERFORM ANY WELDING, THERMAL CUTTING OR HEATING OPERATION OF ANY KIND AS PART OF THE FABRICATION PROCESS.
(2) EXCEPTION: SPECIAL INSPECTIONS OF THE STEEL FABRICATION PROCESS SHALL NOT BE REQUIRED WHERE THE FABRICATOR DOES NOT PERFORM ANY WELDING, THERMAL CUTTING OR HEATING OPERATION OF ANY KIND AS PART OF THE FABRICATION PROCESS
O – OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
P – PERFORM THESE TASKS FOR EACH BOLTED CONNECTION.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS INSPECTION	PERIODIC INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	–	X	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. INSPECT ANCHORS CAST IN CONCRETE.	–	X	ACI 318: 17.8.2	–
3. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY B. OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS C. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	X	X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	–
4. VERIFY USE OF REQUIRED DESIGN MIX.		X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
5. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	–	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
6. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	–	X	ACI 318: 26.4.7-26.4.9	1908.9
7. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS.	X X	– –	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3	–
8. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	–	X	ACI 318: Ch. 26.8	–
9. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	–	X	ACI 318: 26.10.2	–
10. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	–	X	ACI 318: 26.10.1(b)	–

REQUIRED SPECIAL INSPECTIONS AND TESTS OF WOOD

TYPE	CONTINUOUS INSPECTION	PERIODIC INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. FOR PREFABRICATED WOOD STRUCTURAL ELEMENTS, INSPECTION OF THE FABRICATION PROCESS AND ASSEMBLIES		X		TABLE 1704.2.5
2. FOR HIGH-LOAD DIAPHRAGMS, VERIFY GRADE AND THICKNESS OF STRUCTURAL PANEL SHEATHING AGREE WITH APPROVED BUILDING PLANS.		X		
3. FOR HIGH-LOAD DIAPHRAGMS, VERIFY OMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES, NAIL OR STAPLE DIAMETER AND LENGTH, NUMBER OF FASTENER LINES, AND THAT SPACING BETWEEN FASTENERS IN EACH LINE AND AT DGE MARGINS AGREE WITH APPROVED BUILDING PLANS		X		

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

TYPE	CONTINUOUS INSPECTION	PERIODIC INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		X		TABLE 1705.6
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		X		TABLE 1705.6
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		X		TABLE 1705.6
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X			TABLE 1705.6
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VER-IFY THAT SITE HAS BEEN PREPARED PROPERLY.		X		TABLE 1705.6

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11/24/2022

REVISIONS

PANI RESIDENCE- RENOVATION

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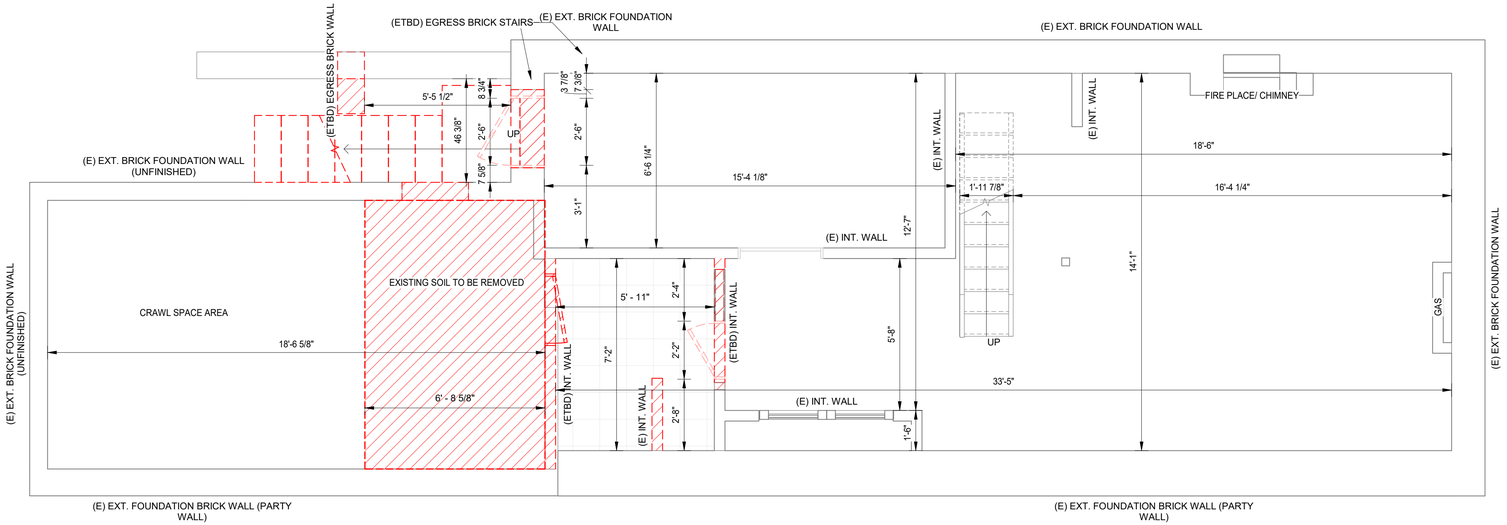
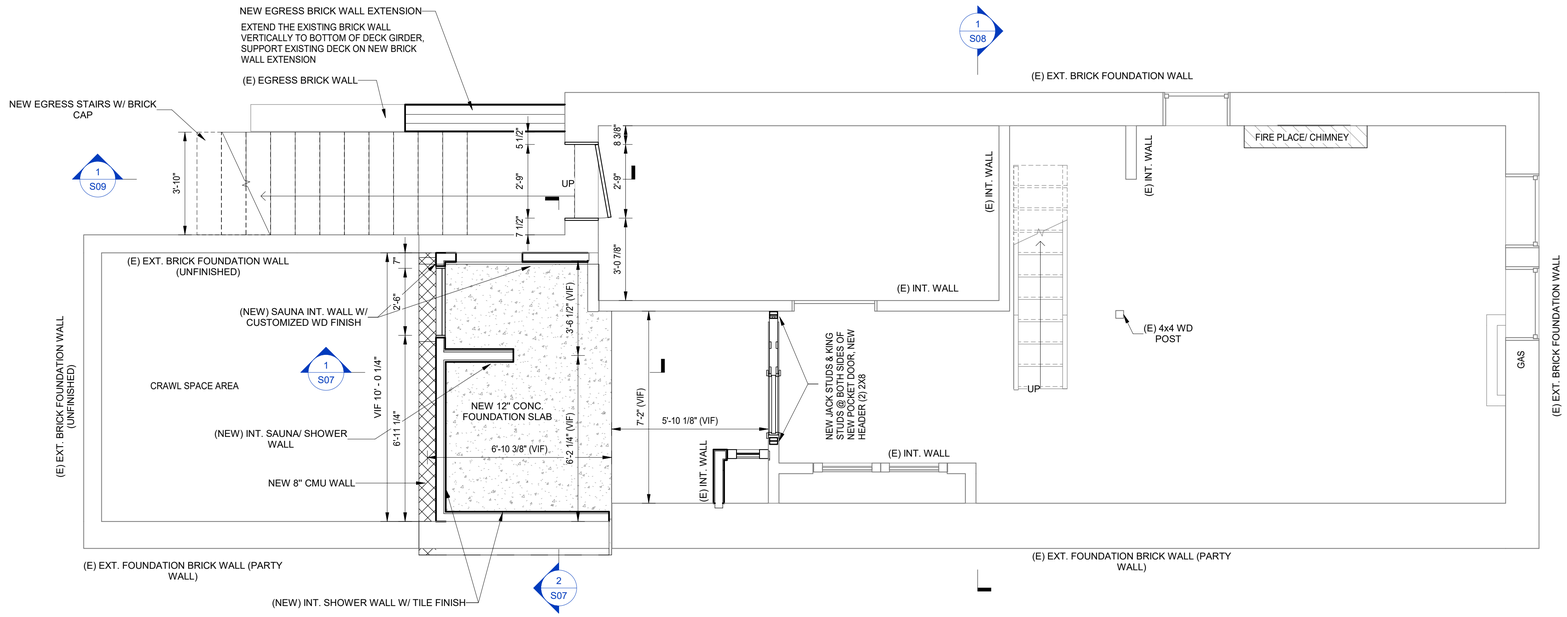
DESCRIPTION
SPECIAL INSPECTION

SHEET
S02



1 S03 BASEMENT STRUCTURAL PLAN- DEMOLITION

3/8" = 1'-0"



3 S03 BASEMENT STRUCTURAL PLAN- NEW CONSTRUCTION

3/8" = 1'-0"

N

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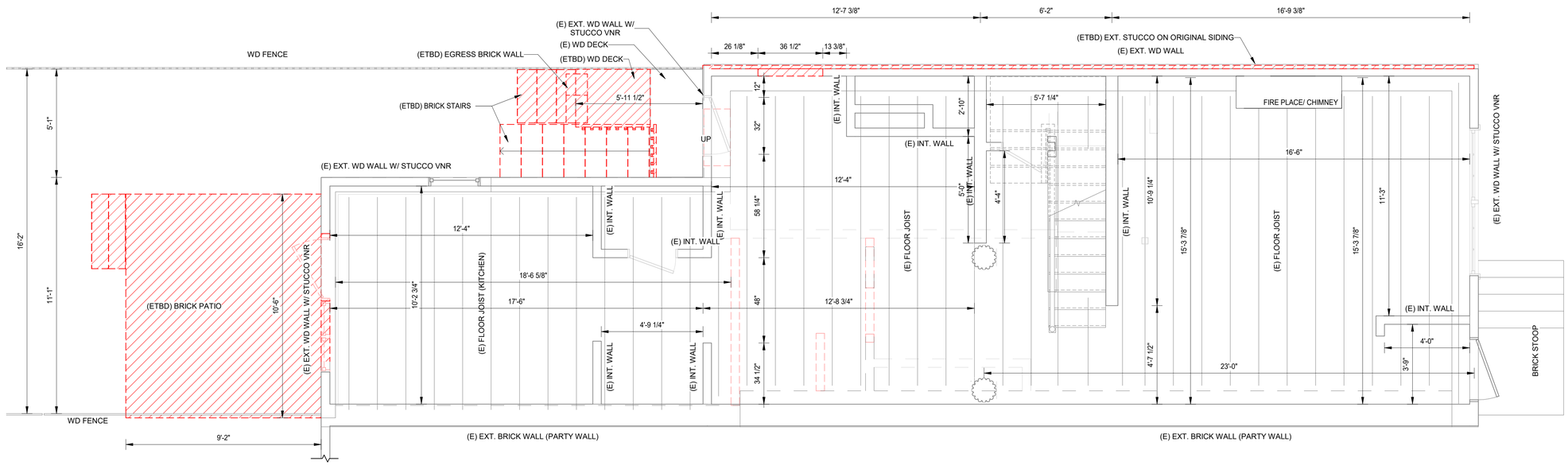
DESCRIPTION

STRUCTURAL PLAN- BASEMENT LEVEL

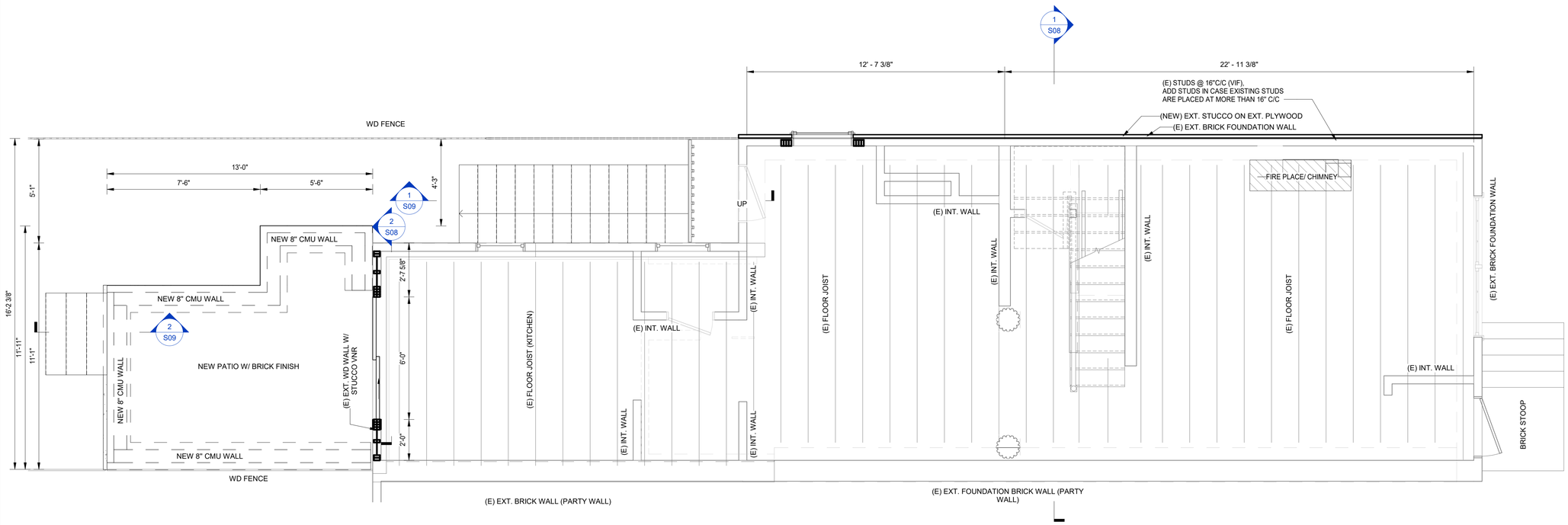
SHEET

S03



3 S04 LEVEL 1 STRUCTURAL PLAN- DEMOITION

3/8" = 1'-0"



1 S04 LEVEL 1 STRUCTURAL PLAN- NEW CONSTRUCTION

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STRUCTURAL PLANS- LEVEL 1

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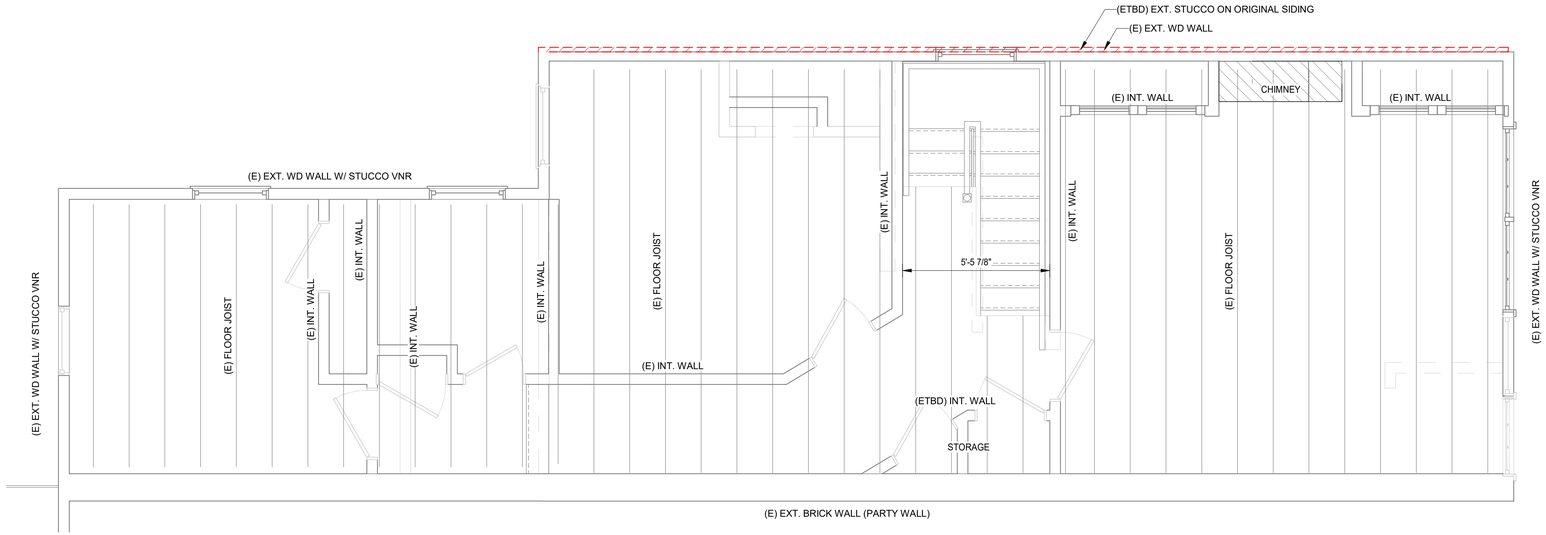
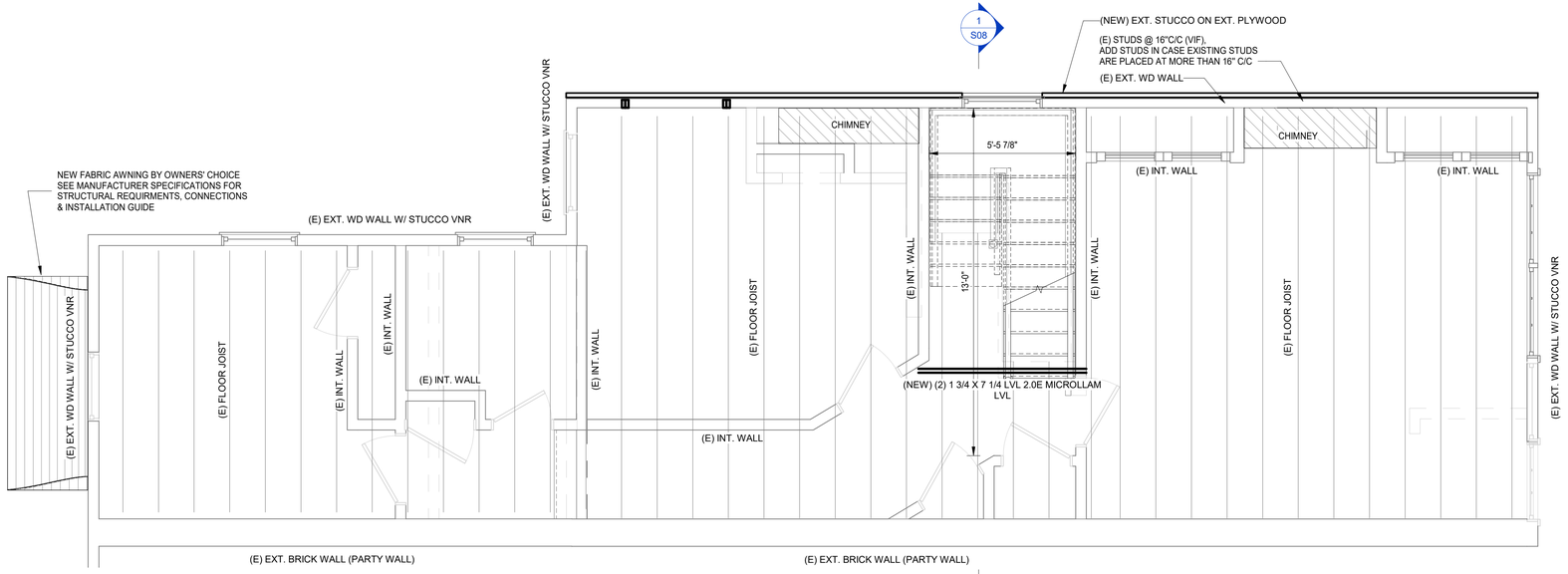


1 S05 LEVEL 2 STRUCTURAL PLAN- DEMOLITION

3/8" = 1'-0"



3 S05 LEVEL 2 STRUCTURAL PLAN- NEW CONSTRUCTION

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STRUCTURAL PLANS- LEVEL 2

SHEET

S05

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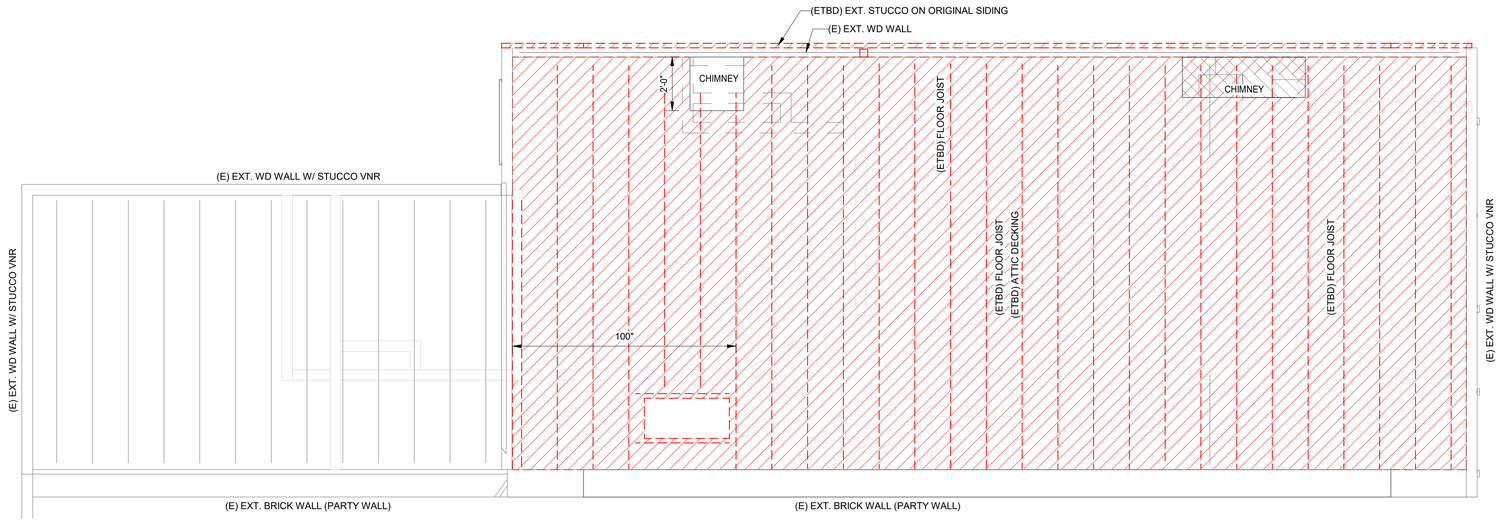
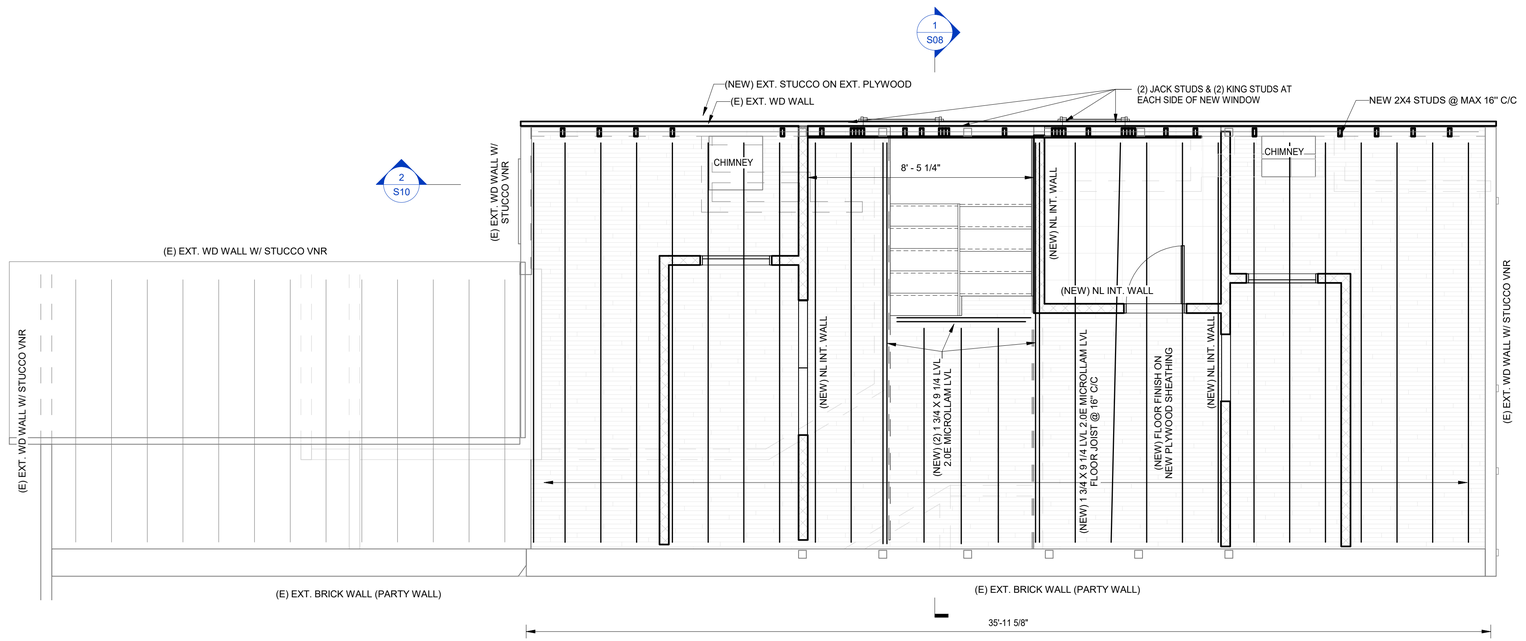
2. GC SHALL VERIFY ALL STUDS ARE IN GOOD CONDITION. IN THE CASE OF ANY DEFICIENCY WOOD MEMBER SHALL BE REPLACED.AT THE EXTERIOR WALL ORIGINAL SIDINGS SHALL BE REPLACED WITH NEW SHEATHING (SEE NOTE 1)



1 S06 LEVEL 3 STRUCTURAL PLAN- DEMOLITION
3/8" = 1'-0"



2 S06 LEVEL 3 STRUCTURAL PLAN- NEW CONSTRUCTION
3/8" = 1'-0"

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STRUCTURAL PLANS- LEVEL 3

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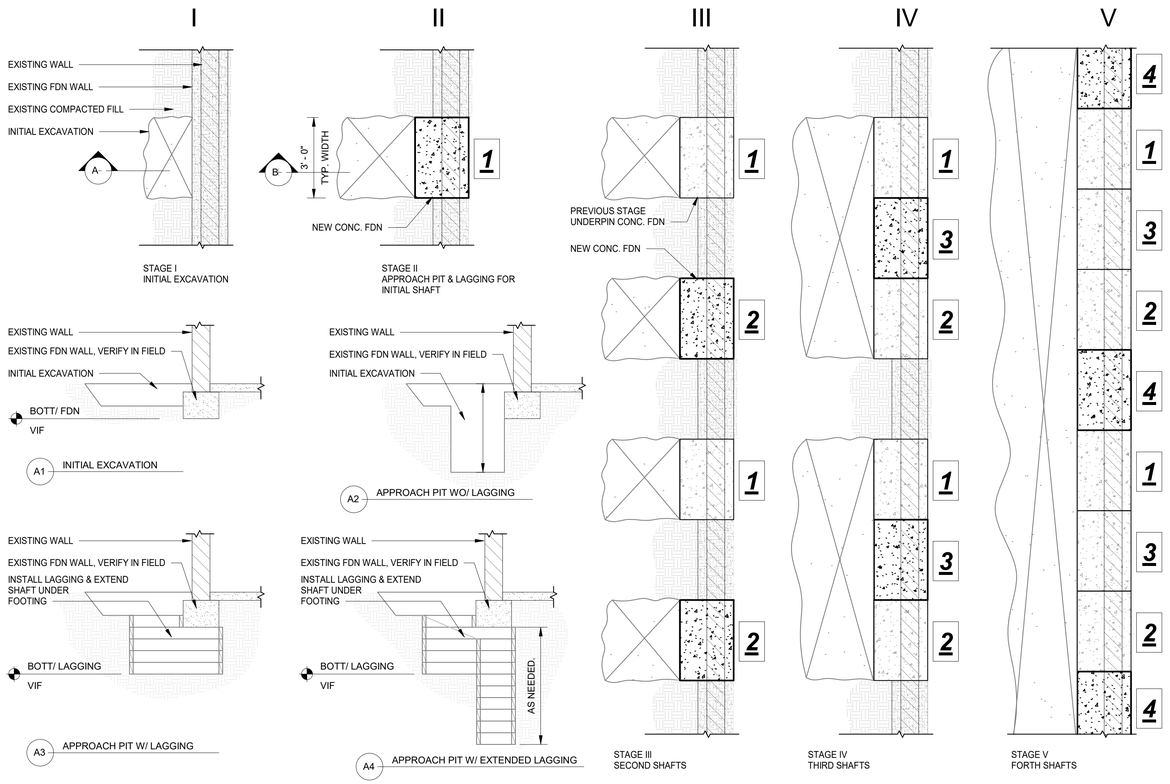
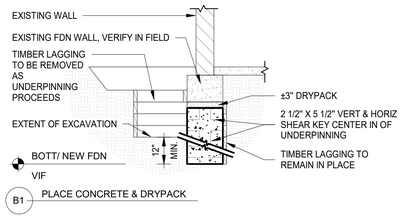
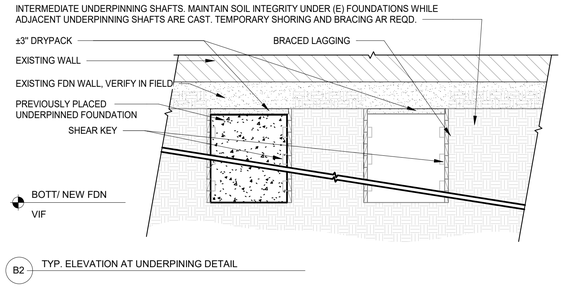






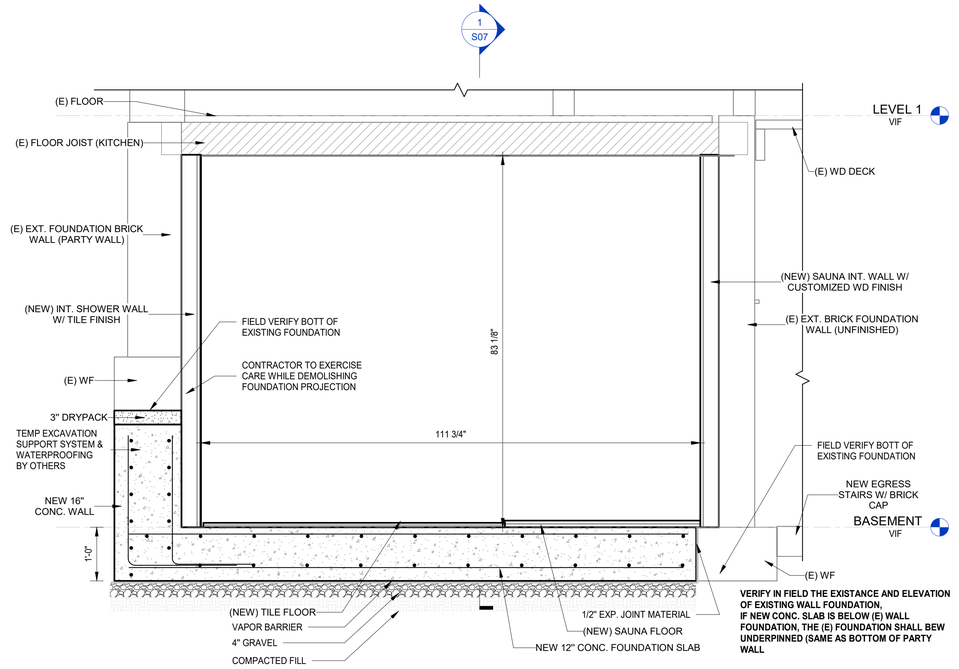
6 S07 TYP. UNDERPINNING SEQUENCE DETAIL

3/8" = 1'-0"

SEQUENCE OF FOUNDATION:

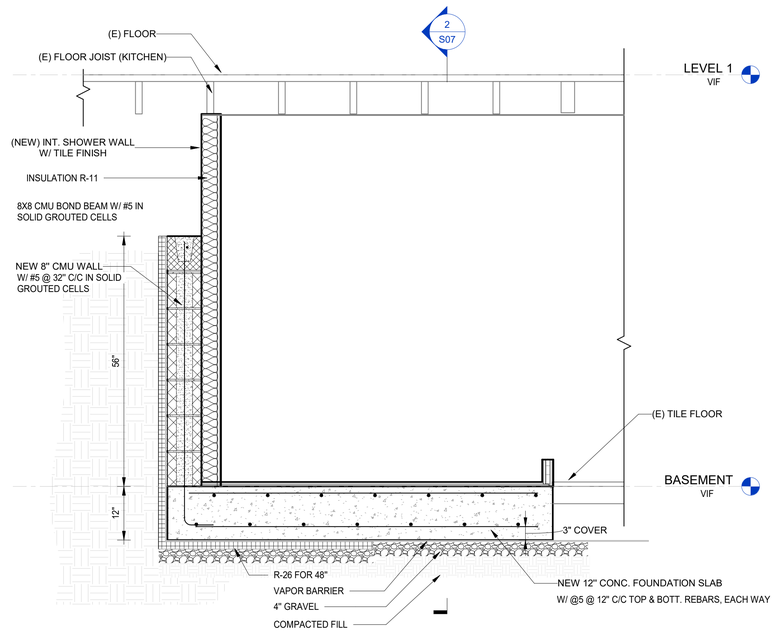
1. CONTRACTOR SHALL SUBMIT DRAWINGS AND A DETAILED SEQUENCE FOR THE UNDERPINNING SYSTEM. THE SUBMITTAL SHALL INCLUDE A SCHEDULE OF THE UNDERPINNING INSTALLATION SEQUENCE AND PROVIDE CONSIDERATION FOR:
   a. WALLS AT 90 DEGREE CORNERS.
   b. OPPOSITE ALTERNATING PLACEMENT OF UNDERPINNING FOR COLUMN FOOTINGS AND ASSOCIATED TEMPORARY SHORING.
2. THESE NOTES ARE TO BE USED IN CONJUNCTION WITH THE TYPICAL UNDERPINNING DETAILS.
3. UNDERPINNING OF EXISTING BUILDING FOUNDATION WALLS IS REQUIRED BASED ON ASSUMED CONDITIONS BELOW GRADE THE EXTENT OF UNDERPINNING IS INDICATED ON THE FOUNDATION PLAN. THE BOTTOM OF EXISTING FOUNDATION WALL ELEVATIONS ARE APPROXIMATE AND WILL REQUIRE FIELD VERIFICATION BY THE CONTRACTOR BEFORE THE PREPARATION OF UNDERPINNING SUBMITTAL.
4. THE CONTRACTOR SHALL PROVIDE HIS/HER PROGRAM INDICATED FOR EACH SEGMENT:
   a. COMMENCEMENT OF EXCAVATION
   b. COMPLETION OF EXCAVATION
   c. REINFORCEMENT
   d . CONCRETING
5. SHOULD ANY UNEXPECTED EVENT HAPPEN DURING CONSTRUCTION THAT ALTERS THIS PROGRAM, THE ENGINEER IS TO BE INFORMED IMMEDIATELY.
6. THE EXCAVATION AND CONSTRUCTION OF THE SECTIONS SHALL BE CARRIED OUT IN A SEQUENTIAL PATTERN SUCH THAT A MAXIMUM DEGREE OF SUPPORT IS OFFERED TO THE WALL AT ALL TIMES.
7. THREE DAYS SHALL ELAPSE BETWEEN COMPLETION OF BAY A AND START OF BAY B AND SIMILARLY FOR BAYS C,D.
8. BAY SECTIONS MUST NOT EXCEED 3'-6" OR AS DETERMINED ON-SITE BY THE STRUCTURAL ENGINEER. AN APPROACH PIT IS DUG NEXT TO THE FOUNDATION, AND THE SIDES OF THE PIT ARE STABILIZED WITH WOOD LAGGING. THE MAXIMUM PIT WIDTH IS MEASURED PARALLEL TO THE FOUNDATION.
9. ADEQUATE SUPPORT TO AT LEAST TWO-THIRDS OF THE LENGTH OF THE WALL IS TO BE MAINTAINED AT ALL TIMES.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS ,OR TIE-DOWNS. STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATORY EQUIPMENT. PLACE VIBRATORY EQUIPMENT ON VIBRATION ISOLATORS.,
11. PREFABRICATED OPENINGS TO BE COORDINATED WITH DUCT/PIPE SIZES ON MEP PLANS.
12. THE UNDERPINNING PIT IS EXCAVATED BENEATH THE FOUNDATION, AND THE SIDES ARE STABILIZED WITH LAGGING.
13. SPECIFIED REINFORCEMENT IS POSITIONED, THE OUTBOARD FACE OF THE UNDERPINNING PIT IS FORMED WITH LAGGING, AND THE CONCRETE IS PLACED. THE UPPER SEVERAL INCHES CANNOT BE CONCRETED, RESULTING IN A GAP.
14. AFTER THE CONCRETE HAS GAINED SUFFICIENT STRENGTH, THE GAP BETWEEN THE ORIGINAL FOUNDATION AND THE UNDERPINNING CONCRETE IS DRY-PACKED. THIS MOISTENED MIXTURE OF CEMENT AND SAND IS POUNDED INTO THE GAP TO HELP ENSURE THE UNIFORM BEARING OF THE ORIGINAL FOUNDATION ONTO THE UNDERPINNING CONCRETE. DRY PACK MATERIAL SHALL BE DAMP BUT NOT WET. DRY PACK GROUT SHALL BE NON-SHRINK NONMETALLIC WITH ONE PART PORTLAND CEMENT AND TWO-PART COARSE SAND. SOMETIMES WEDGES OR SHIMS ARE INSTALLED IN THE GAP PRIOR TO DRY PACKING. RAM IN PLACE WITH A HARDWOOD COMPACTOR. ALLOW DRY-PACKING TO CURE 24 HOURS BEFORE EXCAVATING THE NEXT SECTION.
15. ALLOW UNDERPINNING CONCRETE TO CURE 24 HOURS BEFORE DRY-PACKING THE VOID BETWEEN UNDERSIDE OF EXISTING FOUNDATION AND TOP OF UNDERPINNING
16. THIS PROCESS, WHICH IS INITIALLY DONE FOR THE "A" SERIES OF PITS, IS THEN REPEATED FOR THE "B" SERIES, AND SO ON UNTIL THE ENTIRE WALL IS UNDERPINNED. DEPENDING ON THE DEPTH, THE UNDERPINNING MAY NEED TO BE DONE IN SEVERAL "LIFTS."
17. EXCAVATE GRADE ADJACENT TO EXISTING BUILDING NO LOWER THAN 1'-0" ABOVE EXISTING FOOTING BOTTOMS BEFORE AND DURING UNDERPINNING WORK.
18. EACH SHAFT EXCAVATION IS TO BE FULLY LAGGED AND PROTECTED SO AS NOT TO DISTURB THE SOIL SUPPORTING THE ADJACENT PORTION OF THE EXISTING FOUNDATION.

TIMBER LAGGING FOR SHAFTS SHALL BE A MINIMUM 2" FULL DIMENSIONED THICKNESS AND A MIXED HARDWOOD. ALL TIMBER THAT, BY NECESSITY, WILL REMAIN IN PLACE FOLLOWING COMPLETION OF UNDERPINNING SHALL BE PRESERVATIVE TREATED TO PREVENT TERMITE OR OTHER INSECT INFESTATION.



2 S07 SECTION AT NEW RETAINING WALL- BASEMENT 2

3/4" = 1'-0"



1 S07 SECTION AT NEW RETAINING WALL- BASEMENT 1

3/4" = 1'-0"

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STRUCTURAL SECTIONS & DETAILS

SHEET

S07

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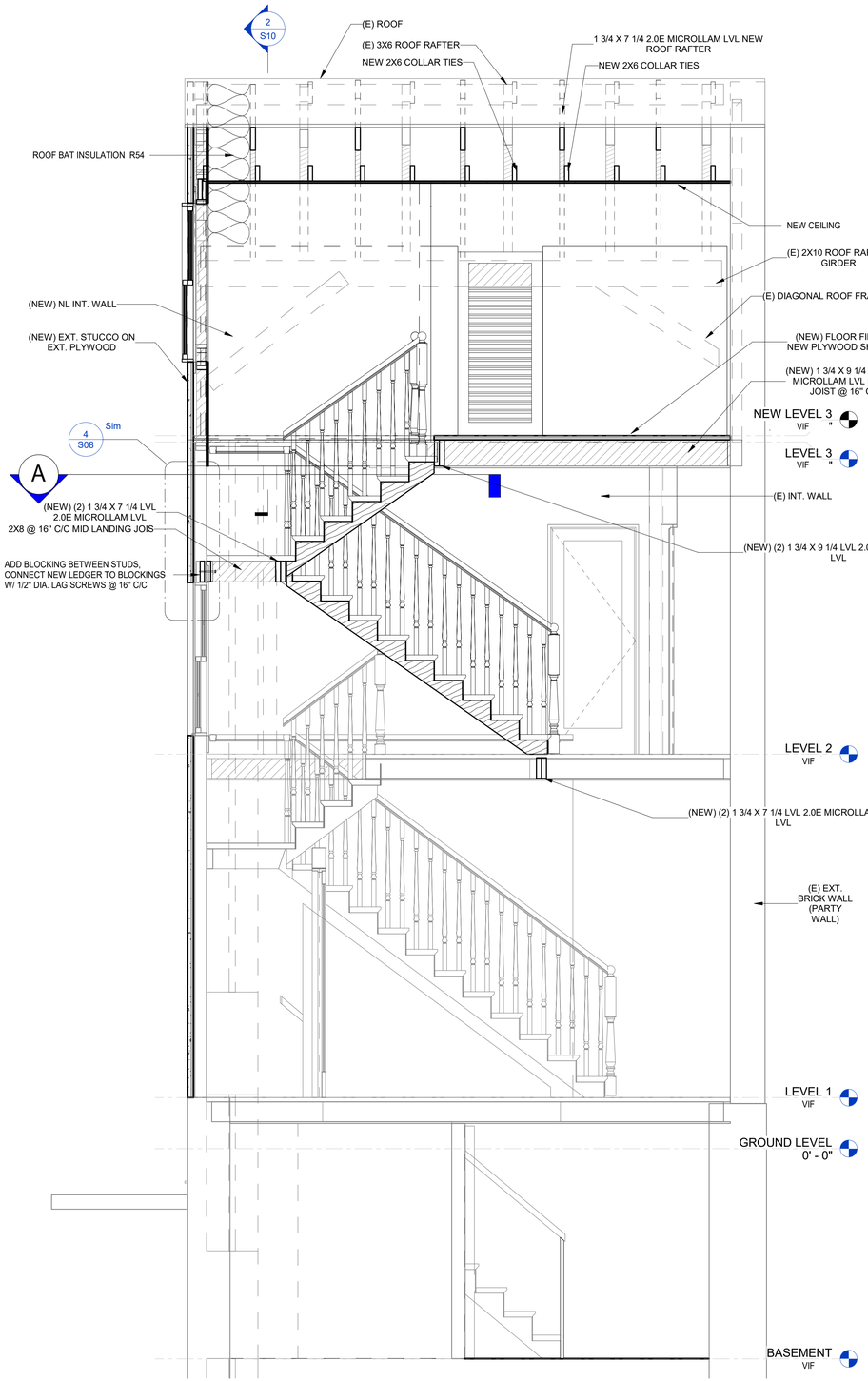
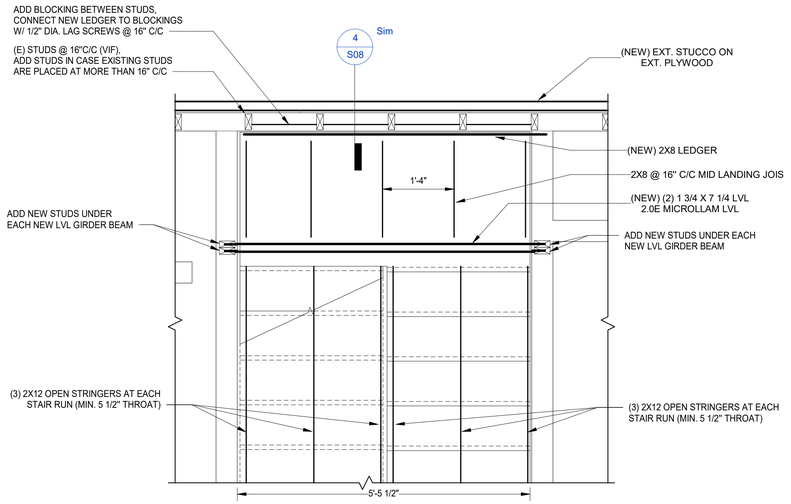


1 SECTION AT STAIR CASE- NEW CONSTRUCTION
S08 1/2" = 1'-0"

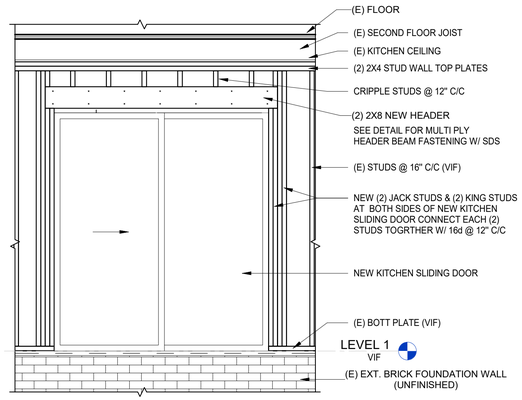


A PARTIAL PLAN AT NEW L2-L3 STAIRS- MID LANDING FLAMING
S08 3/4" = 1'-0"

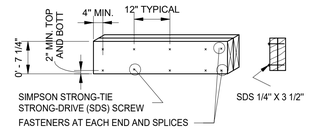
CMU WALL, PILASTER AND CMU COLUMN VERTICAL REINFORCEMENT DEVELOPMENT AND LAP SPLICE LENGTHS

BAR SIZE	8" CMU
	(1) BAR/CELL
#3	16
#4	21
#5	27
#6	41
#7	56

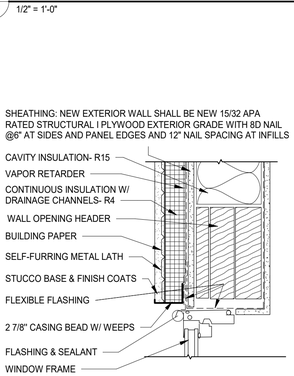
NOTES:
1. ALL DEVELOPMENT AND LAP SPLICE LENGTH ARE IN INCHES.
2. THE LAP SPLICE LENGTH TABLE SHALL BE USED FOR ALL REINFORCED CMU WALLS, PILASTERS AND COLUMNS UNLESS NOTED OTHERWISE IN DETAILS.
3. INCREASE TABULATED VALUES BY 50% FOR EPOXY COATED REINFORCEMENT.
4. THE TABLE IS DEVELOPED BASED ON f'm=1500PSI. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR CMU f'm.
5. WITH THE APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD, MECHANICAL SPLICES DEVELOPING AT LEAST 125% OF THE YIELD STRENGTH, fy, OF THE BAR MAY BE SUBSTITUTED IN SOME LOCATIONS
6. WHEN THE LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR.



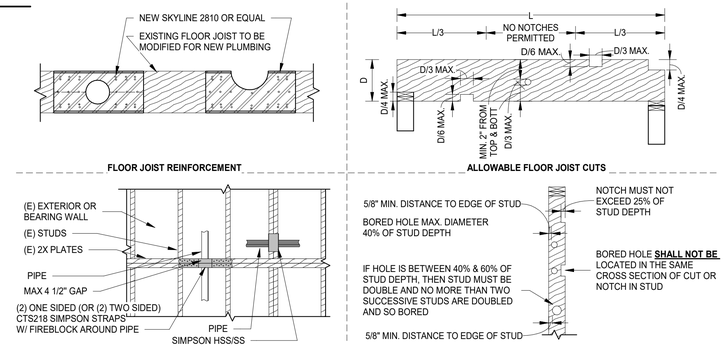
2 SECTION AT NEW KINTCHEN SLIDING DOOR
S08 1/2" = 1'-0"



3 MULTI PLY HEADER BEAM FASTENING W/ SDS
S08 3/4" = 1'-0"



4 TYP. EXT. WALL W/ STUCCO VENEER
S08 3/4" = 1'-0"



NOTE : SEE IRC R602.6 & R502.8 CUTTING, DRILLING AND NUTCHING PROVOSIONS

5 WD- TYP. WOOD MEMBER PENETRATION DETAILS
S08 1/2" = 1'-0"

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S08

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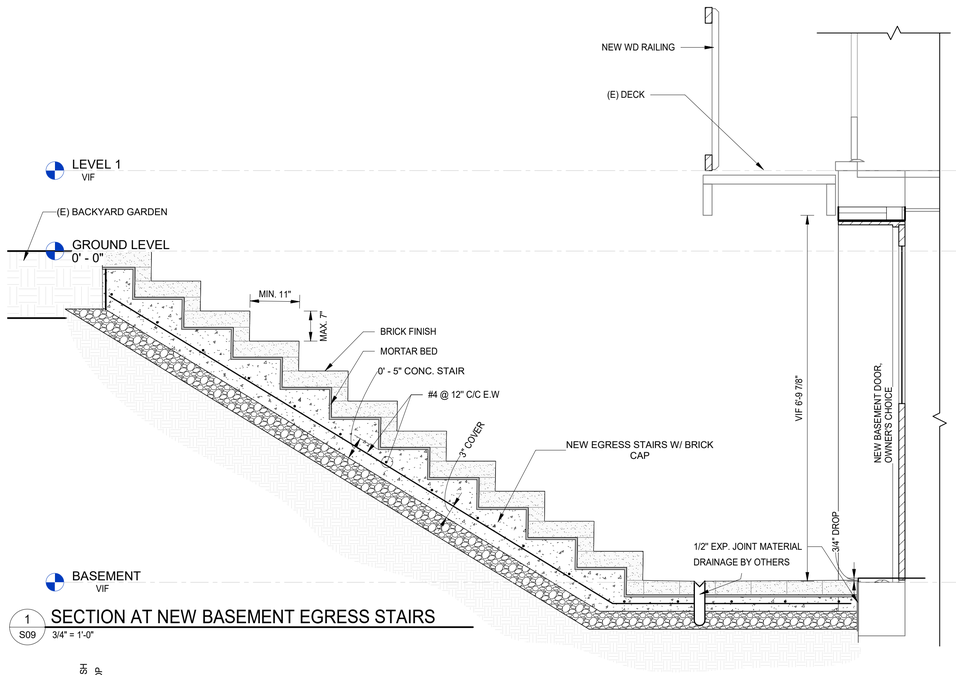
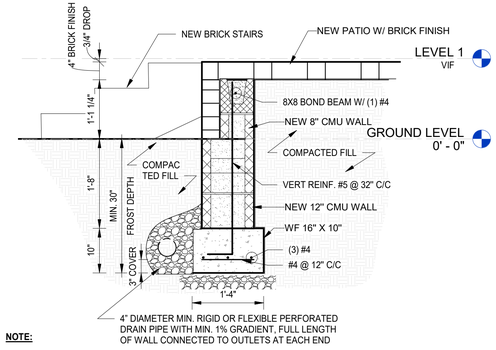


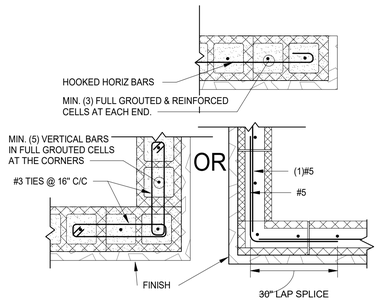
1 S09 — SECTION AT NEW BASEMENT EGRESS STAIRS
3/4" = 1'-0"



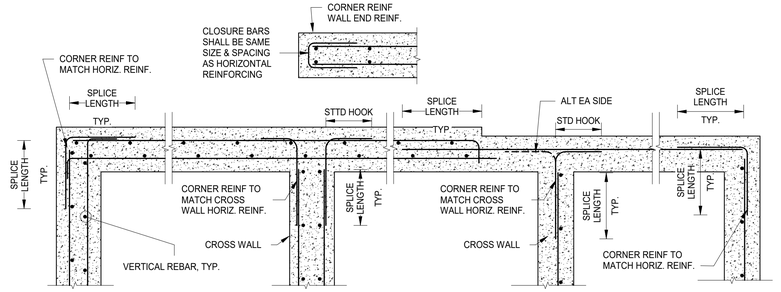
NOTE:

1. USE WIRE LOOP TO POSITION VERTICAL REINFORCEMENT PRIOR TO GROUTING.
2. WHERE SOILE UNDER THE FOOTING CONSISTS OF SOFT CLAY PLACE 4" TO 6" OF CRUSHED GRAVEL.
3. BOTTOM OF FOUNDATION SHALL BE MIN. 30" BELLOW THE GROUND LEVEL.
4. BACKFILLING AGAINST MASONRY OR CONCRETE RETAINING WALLS SHALL NOT BE PERMITTED UNTIL AT LEAST SEVEN DAYS AFTER PLACING CONCRETE OR GROUT. HEAVY EQUIPMENT SHALL MAINTAIN A DISTANCE AWAY FROM THE WALL EQUAL TO THE WALL'S HEIGHT. CARE SHALL BE TAKEN TO AVOID EXERTING LARGE IMPACT FORCES ON THE WALL.

2 S09 — SECTION AT NEW PATIO
3/4" = 1'-0"

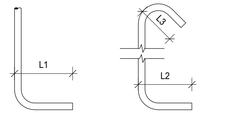


8 S09 — CMU- TYP. MASONRY CORNER & END DETAIL- TOP VIEW
3/4" = 1'-0"

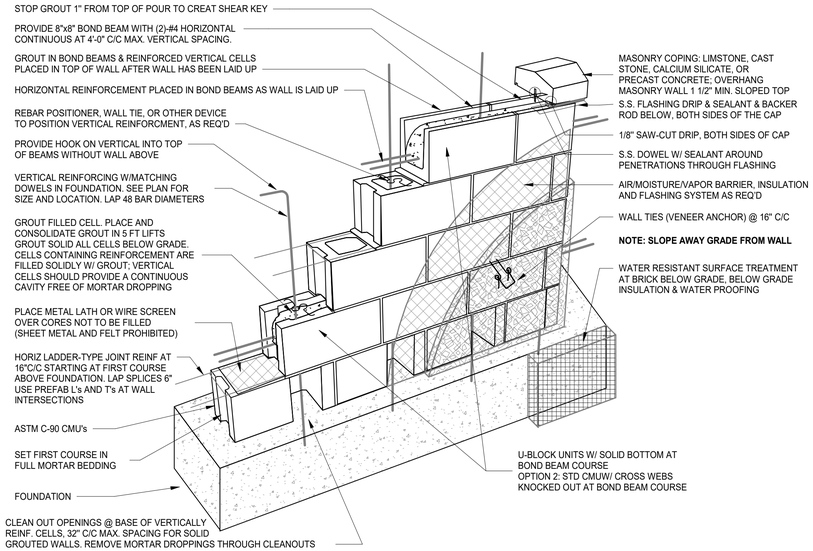


9 S09 — CONC- TYP. CORNER & END REINF AT FOUNDATION WALLS
3/4" = 1'-0"

STANDARD HOOK LENGTHS			
BAR SIZE	REINF HOOK	STIRRUP & TIE HOOKS	
	L1	L2	L3
#3	6"	4"	2 1/2"
#4	8"	4 1/2"	3"
#5	10"	-	-
#6	1'-0"	-	-



REINF HOOKS — STIRRUP & TIE HOOKS



7 S09 — CMU- TYP. MASONRY WALL CONSTRUCTION DETAIL FOR RUNING BOND LAYOUT
1/2" = 1'-0"

INSTALL HELIBAR ACCORDING TO THE MANUFACTURER GUIDE

A. HELIBAR TO BE LONG ENOUGH TO EXTEND A MINIMUM OF 20" EITHER SIDE OF THE CRACK OR **20"** BEYOND THE OUTER CRACKS IF TWO OR MORE ADJACENT CRACKS ARE BEING STITCHED USING ONE ROD.
B. FOR SOLID MASONRY IN EXCESS OF **81/2"** THICK AND IN A CAVITY WALL WHERE BOTH WYTHES ARE CRACKED,THE WALL MUST BE CRACK STITCHED ON BOTH SIDES.
C. NORMAL VERTICAL SPACING IS **12"-16"** (4 BRICK COURSES).
D. DEPTH OF SLOT INTO THE MASONRY TO BE 1" TO 1 1/2" + THICKNESS OF ANY RENDER.
E. WHERE A CRACK IS LESS THAN 20" FROM THE END OF A WALL OR AN OPENING,THE HELIBAR IS TO BE CONTINUED FOR AT LEAST **8"** AROUND THE CORNER AND BONDED INTO THE ADJOINING WALL OR BENT BACK AND FIXED INTO THE REVEAL, AVOIDING ANY DPC
F. ENSURE THE MASONRY IS WELL WETTED OR PRIMED TO PREVENT PREMATURE DRYING OF THE HELIBOND DUE TO RAPID DE-WATERING, ESPECIALLY IN HOT CONDITIONS. IDEALLY ADDITIONAL WETTING OF THE SLOT SHOULD BE CARRIED OUT 1 TO 2 MINUTES PRIOR TO INJECTING THE HELIBOND GROUT.CLEAN OUT ALL DUST AND LOOSE MORTAR FROM THE SLOTS AND THOROUGHLY FLUSH WITH WATER.
G. DO NOT USE HELIBOND WHEN THE AIR TEMPERATURE IS 40°F AND FALLING OR APPLY OVER ICE. IN ALL INSTANCES THE SLOT MUST BE THOROUGHLY DAMP OR PRIMED PRIOR TO INJECTION OF THE HELIBOND GROUT.
H. INSERT A BEAD OF CEMENTITIOUS GROUT (HELIBOND MM2 OR SIMILAR APPROVED) OVER THE EXPOSED ROD AND IRON INTO THE SLOT USING A FINGER TROWEL.
I. INSTALL FIRST HELIBAR ONE COURSE ABOVE THE WALL OPENING

10 S09 — BMW- TYP. BRICKWALL CRACK REPAIR DETAIL
3/4" = 1'-0"

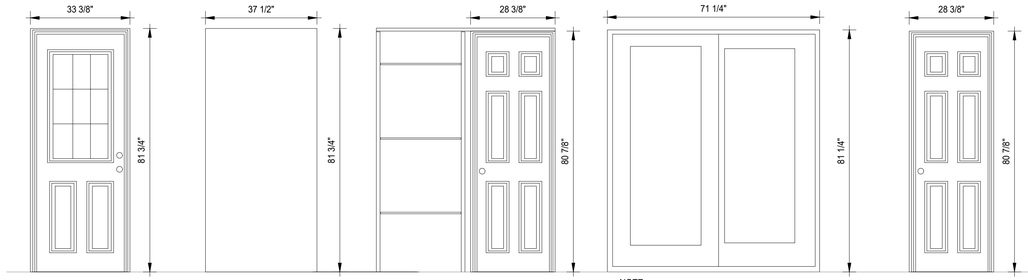
D1
32 IN. X 80 IN. 9 LITE PRIMED STEEL PREHUNG LEFT-HAND INSWING BACK DOOR WITH BRICKMOULD

D2
24 IN. X 82" CUSTOMIZED SAUNA DOOR ROLH SWING (BY SAUNA SPECIALIST)

D3
28 IN. X 80 IN. STEEL SINGLE POCKET DOOR FRAME SYSTEM OR EQ BY OWNER CHOICE

D4
72 IN. X 82 IN. DOUBLE SLIDING DOOR. CONTEMPORARY,, VENT RIGHT / FIXED, 71.25 X 81.5, WITHOUT HGP, WHITER OR EQ BY OWNER CHOICE

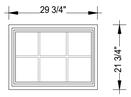
D5
28 IN. X 80 IN. COLONIST PRIMED TEXTURED MOLDED COMPOSITE MDF INTERIOR DOOR SLAB OR EQ BY OWNER CHOICE



NOTE:
1. USE (2) 2X8 HEADER FOR ALL WALLS AND WINDOWS (LESS THAN 48" WIDE)
2. SEE MANUFACTURER GUIDES FOR SPECIFICATIONS AND INSTALLATIONS

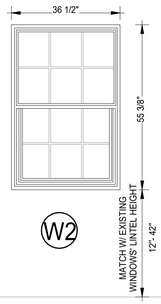
3 S09 — WINDOW & DOOR SCHEDULES
1/2" = 1'-0"

TRADITIONAL, AWNING, VENT, 29 X 21, WHITE, ROUGH OPENING: 29 3/4" X 21 3/4" OR EQ BY OWNER CHOICE



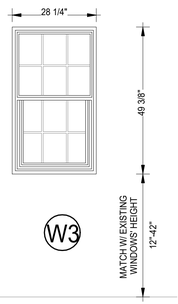
W1

TRADITIONAL, DOUBLE HUNG, 35.75 X 53.5, ROUGH OPENING: 36 1/2" X 55 3/8" OR EQ BY OWNER CHOICE



W2

TRADITIONAL, DOUBLE HUNG, 27.5 X 47.5, ROUGH OPENING: 36 1/2" X 55 3/8" OR EQ BY OWNER CHOICE



W3

CLASS 'B' SPLICE SCHEDULE		
DEVELOPMENT LENGTH SHALL BE PER FOLLOWING TABLE MODIFIED PER NOTES BELOW		
GRADE 60 STEEL		
NORMAL WEIGHT CONCRETE STRENGTH		
BAR	3000 PSI	4000 PSI
#3	1'-9"	1'-6"
#4	2'-4"	2'-1"
#5	3'-3"	2'-7"
#6	3'-7"	3'-1"
#7	5'-2"	4'-6"

NOTES:
1. FOR CLEAR SPACING BETWEEN BARS <db AND/OR CLEAR COVER <db, MULTIPLY BY 1.5.
2. FOR TOP BARS MULTIPLY BY **1.3.**
3. FOR EPOXY COATED BARS, IF SPECIFIED OR APPROVED AS AN ALTERNATE, MULTIPLY BY 1.3.
4. FOR MMFX BARS, IF SPECIFIED OR USED, USE GRADE 75 KSI VALUES.
5. WHERE MORE THAN ONE FACTOR APPLIES, PRODUCT OF ALL APPLICABLE FACTORS SHALL BE APPLIED.
6. IF DETAILER IS TO USE A DIFFERENT SCHEDULE, HE/SHE MUST SUBMIT A SEALED LETTERINDICATING THAT HIS/HER VALUES CORRESPOND TO CURRENT ACI 318 CODE.

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DISTRICT OF COLUMBIA
YOUSEF GHAFFARI
No. PE 922409
LICENSED
PROFESSIONAL ENGINEER
11/24/2022

REVISIONS		

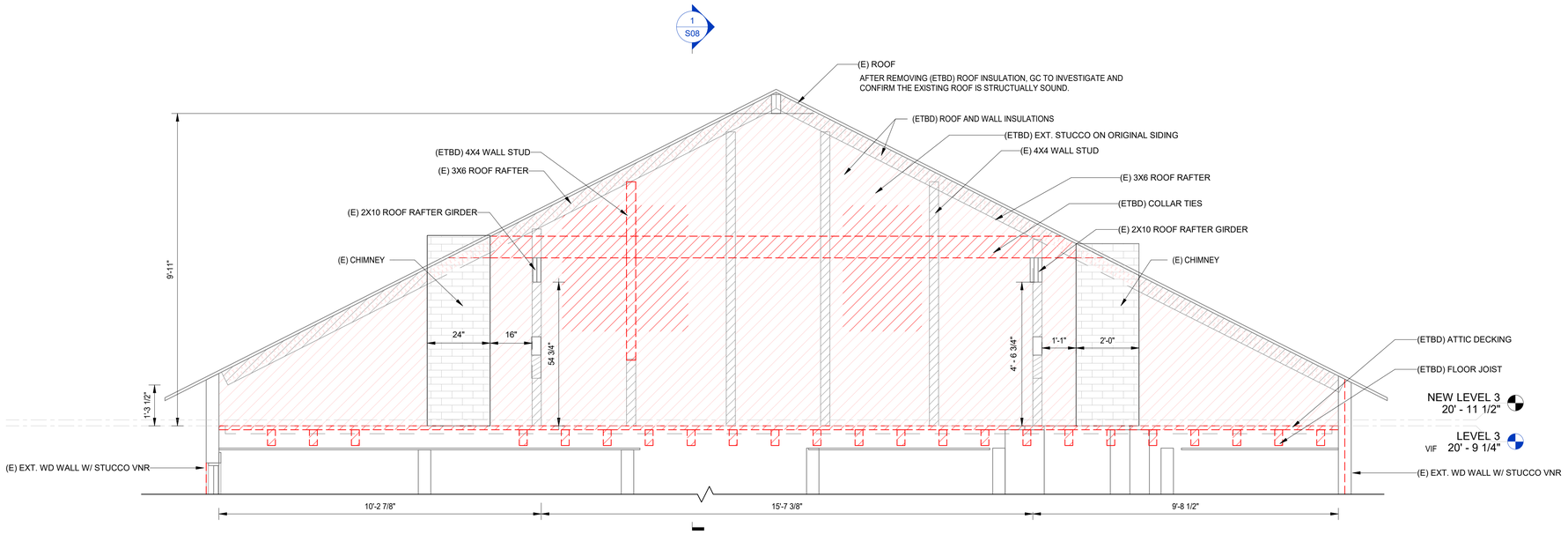
PANI RESIDENCE- RENOVATION

3221 VOLTA PI NW,
WASHINGTON, DC 20007

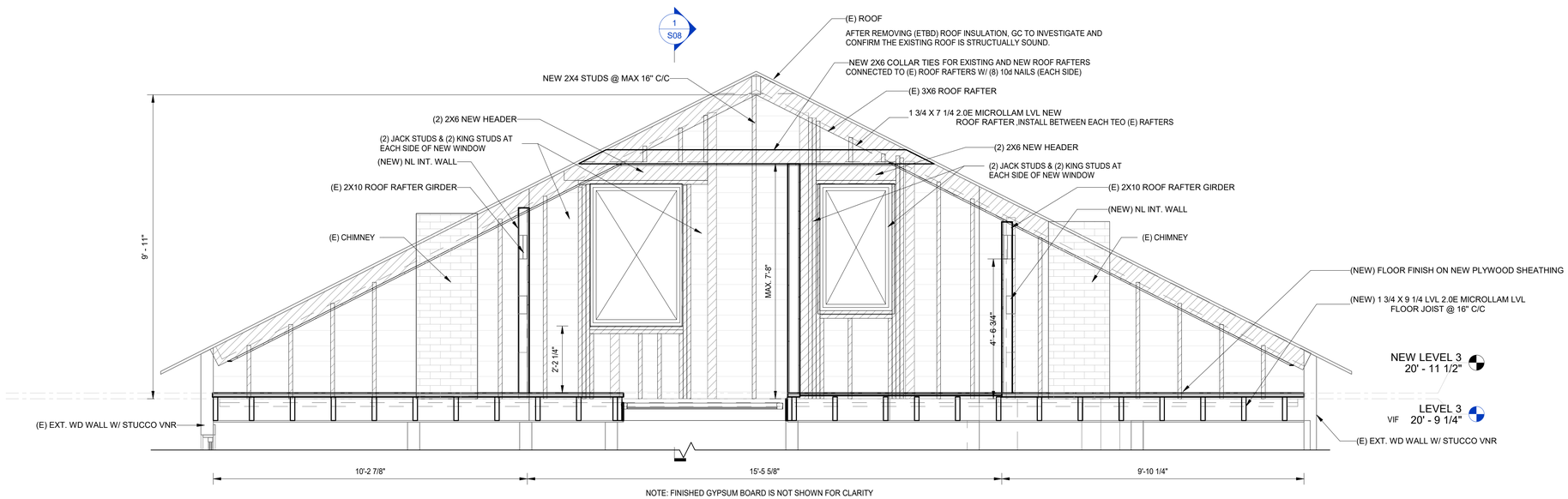
DESCRIPTION
STRUCTURAL SECTIONS & DETAILS

SHEET
S09

Project No.: YFG21092701
THESE DRAWINGS, ALONG WITH THE ARCHITECTURAL DRAWINGS, AND PROJECT MANUAL CONSTITUTE A SINGULAR CONTRACT DOCUMENT AND MUST BE USED TOGETHER IN THEIR ENTIRETY IN THE CONSTRUCTION OF THIS PROJECT.
PAPER SIZE: 24" x 36"



1 S10 SECTION AT ROOF RAFTERS- DEMOLITION
1/2" = 1'-0"



NOTE: FINISHED GYPSUM BOARD IS NOT SHOWN FOR CLARITY

2 S10 SECTION AT ROOF RAFTERS- NEW CONSTRUCTION
1/2" = 1'-0"

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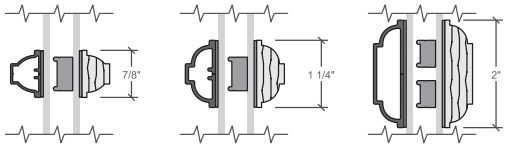
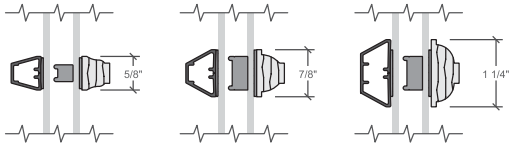
Integral Light Technology® Grilles

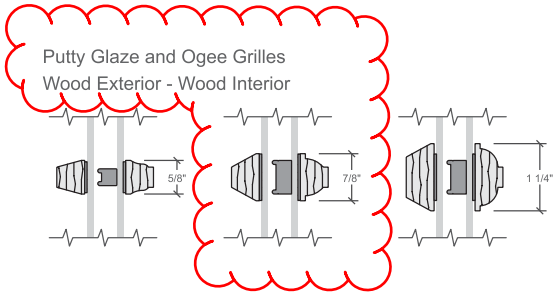
Ogee Grilles
Clad Exterior - Wood Interior



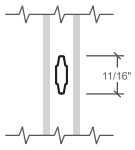
Putty Glaze and Ogee Grilles
Clad Exterior - Wood Interior



Putty Glaze and Ogee Grilles
Wood Exterior - Wood Interior



Grilles-Between-the-Glass



3/4"
Contoured Grille

Interior wood ILT grilles available in Pine, Mahogany or Douglas Fir to match complete unit.
Exterior wood ILT grilles available in Pine or Mahogany to match complete unit.

Size Tables - Replacement Equal Sash Sizes

Transoms

Opening		(616) (597)	(718) (699)	(762) (749)	(819) (800)	(921) (902)	(1 022) (1 003)	(1 073) (1 054)
	Frame	2' 0 1/4" 1' 11 1/2"	2' 4 1/4" 2' 3 1/2"	2' 6 1/4" 2' 5 1/2"	2' 8 1/4" 2' 7 1/2"	3' 0 1/4" 2' 11 1/2"	3' 4 1/4" 3' 3 1/2"	3' 6 1/4" 3' 5 1/2"
(375) (356)	1' 2 3/4" 1' 2"	23.5 x 14	27.5 x 14	29.5 x 14	31.5 x 14	35.5 x 14	39.5 x 14	41.5 x 14
(451) (432)	1' 5 3/4" 1' 5"	23.5 x 17	27.5 x 17	29.5 x 17	31.5 x 17	35.5 x 17	39.5 x 17	41.5 x 17
(654) (635)	2' 1 3/4" 2' 1"	23.5 x 25	27.5 x 25	29.5 x 25	31.5 x 25	35.5 x 25	39.5 x 25	41.5 x 25

Vent Units

(921) (902)	3' 0 1/4" 2' 11 1/2"	23.5 x 35.5	27.5 x 35.5	29.5 x 35.5	31.5 x 35.5	35.5 x 35.5	39.5 x 35.5	41.5 x 35.5
(972) (953)	3' 2 1/4" 3' 1 1/2"	23.5 x 37.5	27.5 x 37.5	29.5 x 37.5	31.5 x 37.5	35.5 x 37.5	39.5 x 37.5	41.5 x 37.5
(1 073) (1 054)	3' 6 1/4" 3' 5 1/2"	23.5 x 41.5	27.5 x 41.5	29.5 x 41.5	31.5 x 41.5	35.5 x 41.5	39.5 x 41.5	41.5 x 41.5
(1 175) (1 156)	3' 10 1/4" 3' 9 1/2"	23.5 x 45.5	27.5 x 45.5	29.5 x 45.5	31.5 x 45.5	35.5 x 45.5	39.5 x 45.5	41.5 x 45.5
(1 226) (1 206)	4' 0 1/4" 3' 11 1/2"	23.5 x 47.5	27.5 x 47.5	29.5 x 47.5	31.5 x 47.5	35.5 x 47.5	39.5 x 47.5	41.5 x 47.5
(1 327) (1 308)	4' 4 1/4" 4' 3 1/2"	23.5 x 51.5	27.5 x 51.5	29.5 x 51.5	31.5 x 51.5	35.5 x 51.5	39.5 x 51.5	41.5 x 51.5
(1 378) (1 359)	4' 6 1/4" 4' 5 1/2"	23.5 x 53.5	27.5 x 53.5	29.5 x 53.5	31.5 x 53.5	35.5 x 53.5	39.5 x 53.5	41.5 x 53.5
(1 473) (1 461)	4' 10 1/4" 4' 9 1/2"	23.5 x 57.5	27.5 x 57.5	29.5 x 57.5	31.5 x 57.5	35.5 x 57.5 E1	39.5 x 57.5 E	41.5 x 57.5 E

Egress Notes:

Check all applicable local codes for emergency egress requirements.

E = Window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².

E1 = Window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

See Design Data pages in this section for clear opening dimensions.

Clear opening (egress) information does not take into consideration the addition of a Rolscreen (or any other accessory) to the product. You should consult your local building code to ensure products with Rolscreens meet egress requirements.

Not to scale.

Traditional grille patterns shown. Refer to Grille Types section for additional patterns and profiles.

Replacement Equal Sash for Single- and Double-Hung

Unit	Egress	Clear Opening		Vent Area Ft²	Visible Glass Ft²	Standard Glass Thickness (mm)		Performance Class & Grade [1]	
		Width (Inches)	Height (Inches)			Annealed	Tempered	Clad	Wood
31.5x35.5		27-13/16	13-5/16	2.6	4.8	2.5	3	CW50	CW45
31.5x37.5		27-13/16	14-5/16	2.8	5.2	2.5	3	CW50	CW45
31.5x41.5		27-13/16	16-5/16	3.2	5.9	2.5	3	CW50	CW45
31.5x45.5		27-13/16	18-5/16	3.5	6.6	2.5	3	CW50	CW45
31.5x47.5		27-13/16	19-5/16	3.7	7.0	2.5	3	CW50	CW45
31.5x51.5		27-13/16	21-5/16	4.1	7.7	2.5	3	CW50	CW45
31.5x53.5		27-13/16	22-5/16	4.3	8.0	2.5	3	CW50	CW45
31.5x57.5		27-13/16	24-5/16	4.7	8.8	2.5	3	CW50	CW45
31.5x59.5		27-13/16	25-5/16	4.9	9.1	2.5	3	CW50	CW45
31.5x61.5	E1	27-13/16	26-5/16	5.1	9.5	2.5	3	CW50	CW45
31.5x65.5	E1	27-13/16	28-5/16	5.5	10.2	2.5	3	CW50	CW45
31.5x71.5	E	27-13/16	31-5/16	6.0	11.3	2.5	3	CW50	CW45
35.5x35.5		31-13/16	13-5/16	2.9	5.6	2.5	3	CW50	CW45
35.5x37.5		31-13/16	14-5/16	3.2	6.0	2.5	3	CW50	CW45
35.5x41.5		31-13/16	16-5/16	3.6	6.8	2.5	3	CW50	CW45
35.5x45.5		31-13/16	18-5/16	4.0	7.6	2.5	3	CW50	CW45
35.5x47.5		31-13/16	19-5/16	4.3	8.0	2.5	3	CW50	CW45
35.5x51.5		31-13/16	21-5/16	4.7	8.9	2.5	3	CW50	CW45
35.5x53.5		31-13/16	22-5/16	4.9	9.3	2.5	3	CW50	CW45
35.5x57.5	E1	31-13/16	24-5/16	5.4	10.1	2.5	3	CW50	CW45
35.5x59.5	E1	31-13/16	25-5/16	5.6	10.5	2.5	3	CW50	CW45
35.5x61.5	E	31-13/16	26-5/16	5.8	10.9	2.5	3	CW50	CW45
35.5x65.5	E	31-13/16	28-5/16	6.3	11.8	2.5	3	CW50	CW45
35.5x71.5	E	31-13/16	31-5/16	6.9	13.0	2.5	3	CW50	CW45
39.5x35.5		35-13/16	13-5/16	3.3	6.3	2.5	3	CW50	CW45
39.5x37.5		35-13/16	14-5/16	3.6	6.8	2.5	3	CW50	CW45
39.5x41.5		35-13/16	16-5/16	4.1	7.7	2.5	3	CW50	CW45
39.5x45.5		35-13/16	18-5/16	4.6	8.7	2.5	3	CW50	CW45
39.5x47.5		35-13/16	19-5/16	4.8	9.1	2.5	3	CW50	CW45
39.5x51.5		35-13/16	21-5/16	5.3	10.1	2.5	3	CW50	CW45
39.5x53.5		35-13/16	22-5/16	5.5	10.5	2.5	3	CW50	CW45
39.5x57.5	E	35-13/16	24-5/16	6.0	11.5	2.5	3	CW50	CW45
39.5x59.5	E	35-13/16	25-5/16	6.3	11.9	2.5	3	CW50	CW45
39.5x61.5	E	35-13/16	26-5/16	6.5	12.4	2.5	3	CW50	CW45
39.5x65.5	E	35-13/16	28-5/16	7.0	13.4	2.5	3	CW50	CW45
39.5x71.5	E	35-13/16	31-5/16	7.8	14.8	2.5	3	CW50	CW45
41.5x35.5		37-13/16	13-5/16	3.5	6.7	2.5	3	CW50	CW45
41.5x37.5		37-13/16	14-5/16	3.8	7.2	2.5	3	CW50	CW45
41.5x41.5		37-13/16	16-5/16	4.3	8.2	2.5	3	CW50	CW45
41.5x45.5		37-13/16	18-5/16	4.8	9.2	2.5	3	CW50	CW45
41.5x47.5		37-13/16	19-5/16	5.1	9.7	2.5	3	CW50	CW45
41.5x51.5		37-13/16	21-5/16	5.6	10.7	2.5	3	CW50	CW45
41.5x53.5		37-13/16	22-5/16	5.9	11.2	2.5	3	CW50	CW45
41.5x57.5	E	37-13/16	24-5/16	6.4	12.2	2.5	3	CW50	CW45
41.5x59.5	E	37-13/16	25-5/16	6.6	12.7	2.5	3	CW50	CW45
41.5x61.5	E	37-13/16	26-5/16	6.9	13.1	2.5	3	CW50	CW45
41.5x65.5	E	37-13/16	28-5/16	7.4	14.1	2.5	3	CW50	CW45
41.5x71.5	E	37-13/16	31-5/16	8.2	15.6	2.5	3	CW50	CW45

Egress Notes:

Check all applicable local codes for emergency egress requirements.

E = Window meets minimum clear opening of 24" height, 20" width, and 5.7 ft².

E1 = Window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

(1) Maximum performance when glazed with the appropriate glass thickness.

To convert area to square meters (m²), multiply square feet by 0.0929.

Design Data - Replacement Sizes

Replacement Equal Sash for Single- and Double-Hung

Unit	Egress	Clear Opening		Vent Area Ft²	Visible Glass Ft²	Standard Glass Thickness (mm)		Performance Class & Grade [1]	
		Width (Inches)	Height (Inches)			Annealed	Tempered	Clad	Wood
23.5x35.5		19-13/16	13-5/16	1.8	3.3	2.5	3	CW50	CW45
23.5x37.5		19-13/16	14-5/16	2.0	3.6	2.5	3	CW50	CW45
23.5x41.5		19-13/16	16-5/16	2.2	4.1	2.5	3	CW50	CW45
23.5x45.5		19-13/16	18-5/16	2.5	4.6	2.5	3	CW50	CW45
23.5x47.5		19-13/16	19-5/16	2.7	4.8	2.5	3	CW50	CW45
23.5x51.5		19-13/16	21-5/16	2.9	5.3	2.5	3	CW50	CW45
23.5x53.5		19-13/16	22-5/16	3.1	5.6	2.5	3	CW50	CW45
23.5x57.5		19-13/16	24-5/16	3.3	6.1	2.5	3	CW50	CW45
23.5x59.5		19-13/16	25-5/16	3.5	6.3	2.5	3	CW50	CW45
23.5x61.5		19-13/16	26-5/16	3.6	6.5	2.5	3	CW50	CW45
23.5x65.5		19-13/16	28-5/16	3.9	7.0	2.5	3	CW50	CW45
23.5x71.5		19-13/16	31-5/16	4.3	7.8	2.5	3	CW50	CW45
27.5x35.5		23-13/16	13-5/16	2.2	4.1	2.5	3	CW50	CW45
27.5x37.5		23-13/16	14-5/16	2.4	4.4	2.5	3	CW50	CW45
27.5x41.5		23-13/16	16-5/16	2.7	5.0	2.5	3	CW50	CW45
27.5x45.5		23-13/16	18-5/16	3.0	5.6	2.5	3	CW50	CW45
27.5x47.5		23-13/16	19-5/16	3.2	5.9	2.5	3	CW50	CW45
27.5x51.5		23-13/16	21-5/16	3.5	6.5	2.5	3	CW50	CW45
27.5x53.5		23-13/16	22-5/16	3.7	6.8	2.5	3	CW50	CW45
27.5x57.5		23-13/16	24-5/16	4.0	7.4	2.5	3	CW50	CW45
27.5x59.5		23-13/16	25-5/16	4.2	7.7	2.5	3	CW50	CW45
27.5x61.5		23-13/16	26-5/16	4.4	8.0	2.5	3	CW50	CW45
27.5x65.5		23-13/16	28-5/16	4.7	8.6	2.5	3	CW50	CW45
27.5x71.5	E1	23-13/16	31-5/16	5.2	9.5	2.5	3	CW50	CW45
29.5x35.5		25-13/16	13-5/16	2.4	4.4	2.5	3	CW50	CW45
29.5x37.5		25-13/16	14-5/16	2.6	4.8	2.5	3	CW50	CW45
29.5x41.5		25-13/16	16-5/16	2.9	5.4	2.5	3	CW50	CW45
29.5x45.5		25-13/16	18-5/16	3.3	6.1	2.5	3	CW50	CW45
29.5x47.5		25-13/16	19-5/16	3.5	6.4	2.5	3	CW50	CW45
29.5x51.5		25-13/16	21-5/16	3.8	7.1	2.5	3	CW50	CW45
29.5x53.5		25-13/16	22-5/16	4.0	7.4	2.5	3	CW50	CW45
29.5x57.5		25-13/16	24-5/16	4.4	8.1	2.5	3	CW50	CW45
29.5x59.5		25-13/16	25-5/16	4.5	8.4	2.5	3	CW50	CW45
29.5x61.5		25-13/16	26-5/16	4.7	8.7	2.5	3	CW50	CW45
29.5x65.5	E1	25-13/16	28-5/16	5.1	9.4	2.5	3	CW50	CW45
29.5x71.5	E1	25-13/16	31-5/16	5.6	10.4	2.5	3	CW50	CW45

Continued on next page

Egress Notes:

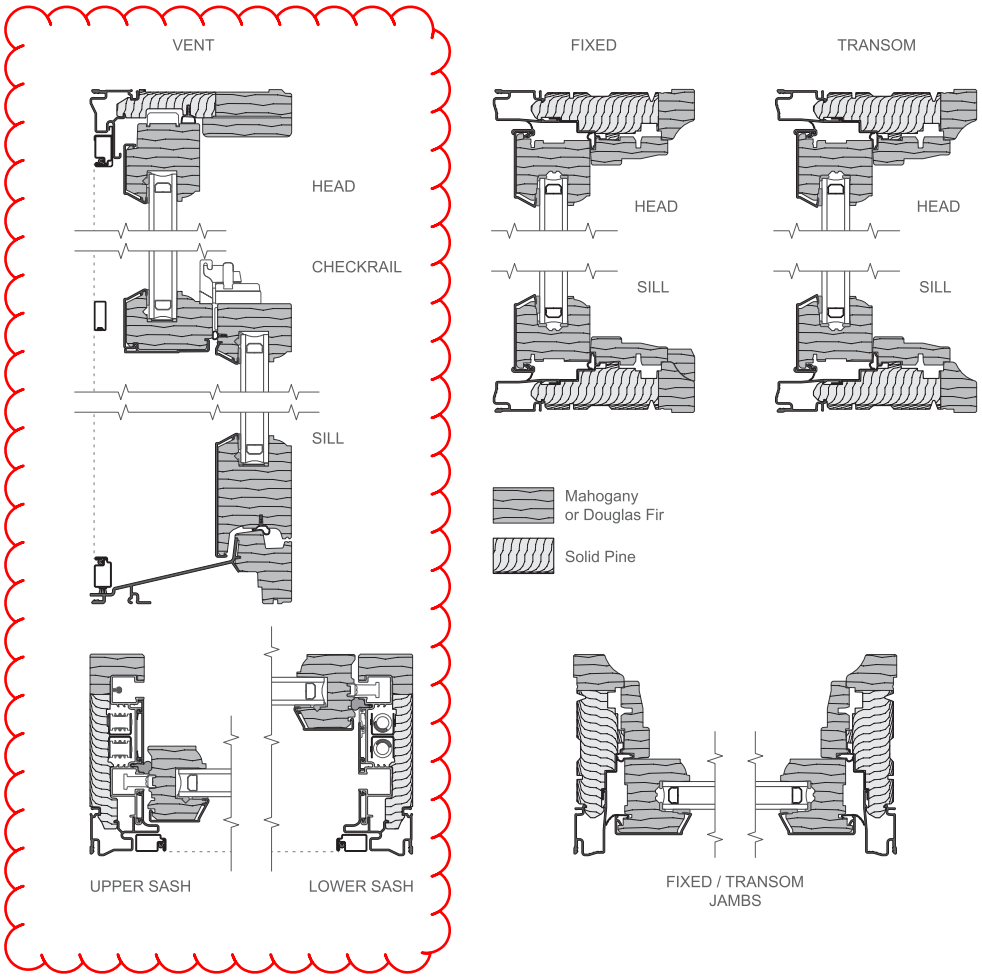
Check all applicable local codes for emergency egress requirements.

E1 = Window meets minimum clear opening of 24" height, 20" width, and 5.0 ft².

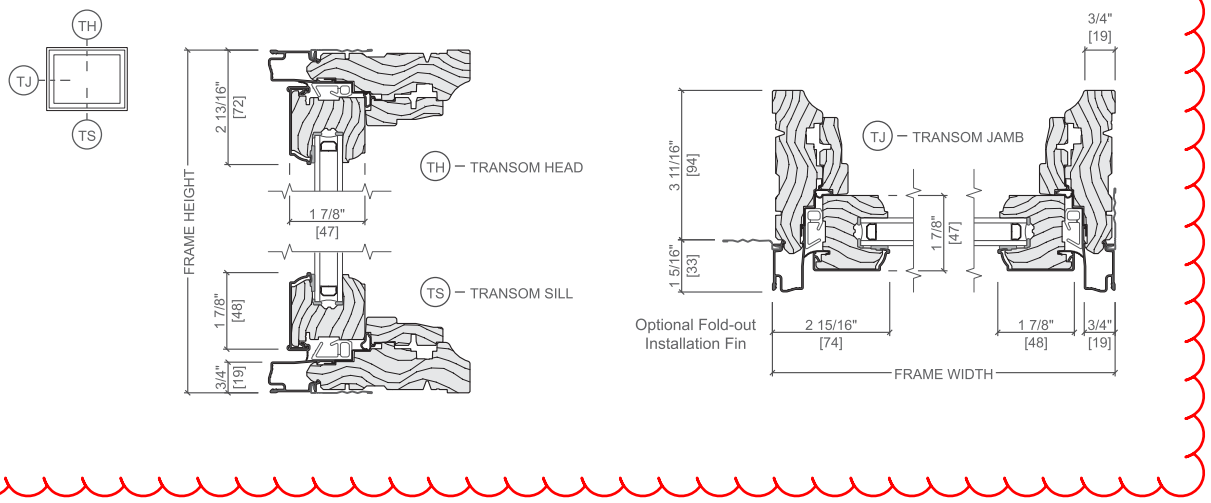
(1) Maximum performance when glazed with the appropriate glass thickness.

To convert area to square meters (m²), multiply square feet by 0.0929.

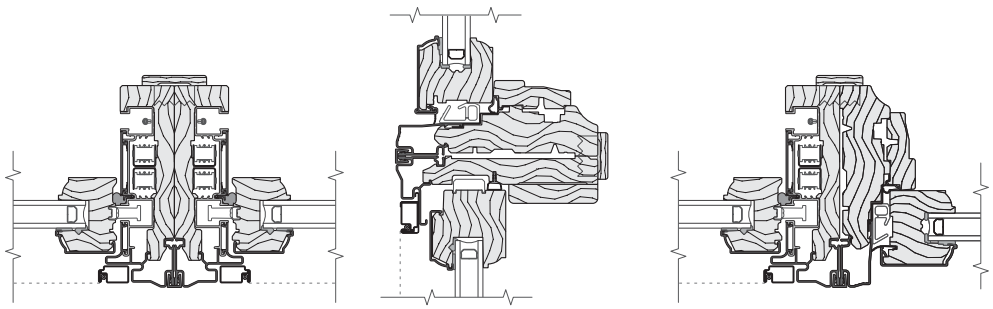
Unit Sections – Wood Collection



Unit Sections - Aluminum-Clad Ogee Exterior Glazing Profile



Typical Joining Mullions



VERTICAL JOINING MULLION
LX VENT / LX VENT

HORIZONTAL JOINING MULLION
TRANSOM / VENT

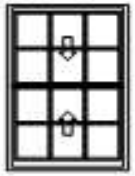
VERTICAL JOINING MULLION
LX VENT / FIXED

Scale 3" = 1' 0"

All dimensions are approximate.

See www.Pella.com for mullion limitation and reinforcing requirements.

Line #	Location:	Attributes
20	DINING ROOM	



Viewed From Exterior

Rough Opening: 36 - 1/2" X 55 - 3/8"

Pella® Reserve, Traditional, Double Hung, 35.75 X 53.5

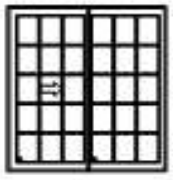
Qty 1

PK # 2096

1: Traditional, Non-Standard Size Double Hung, Equal
Frame Size: 35 3/4 X 53 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 32.375, Clear Opening Height 22.312, Clear Opening Area 5.016326, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 179".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location:	Attributes
25	KITCHEN	



Viewed From Exterior

Rough Opening: 72" X 82"

Lifestyle, Double Sliding Door, Contemporary,, Vent Right / Fixed, 71.25 X 81.5, Without HGP, White

Qty 1

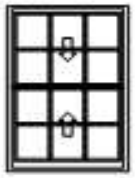
PK # 2096

1: 7282 Vent Right / Fixed Double Sliding Door
Frame Size: 71 1/4 X 81 1/2
General Information: No Package, Without Hinged Glass Panel, Clad, Pine, 5 7/8", 4 9/16", No Certification, Oak Threshold
Exterior Color / Finish: Standard Enduraclad, White
Interior Color / Finish: Prefinished White Paint Interior
Glass: Insulated Tempered Low-E Advanced Low-E Insulating Glass Argon Non High Altitude
Hardware Options: Black, Standard, Handle Included, Handle Included, Satin Nickel, White, No Integrated Sensor
Screen: Rolscreen®, White, Satin Nickel
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.45, CPD PEL-N-230-00078-00001, Performance Class LC, PG 50, Calculated Positive DP Rating 50, Calculated Negative DP Rating 50, Year Rated 08|11
Grille: SDL w/Spacer, No Custom Grille, 7/8", Traditional (3W5H / 3W5H)
Wrapping Information: Foldout Fins, Factory Applied, No Exterior Trim, 4 9/16", 5 7/8", Factory Applied, Pella Recommended Clearance, Perimeter Length = 306".

RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1

RIINSTMSC - MISC Labor-Permitted work, Portal Framing, Drywall Finishing	Qty	5
RIW269 - Opening Modification less than 3"	Qty	1
PSPAINTRR22 - PAINTRR22 Paint Trim to Match Pella Pre-Finished Entry Syste	Qty	1
RIW234 - Sliding Door Installation - up to 6' wide	Qty	1

Line #	Location:	Attributes	Qty
30	2ND FLOOR BEDROOM	**Pella® Reserve, Traditional, Double Hung, 35.75 X 53.5**	1



PK #
2096

Viewed From Exterior
Rough Opening: 36 - 1/2" X 55 - 3/8"

1: Traditional, Non-Standard Size Double Hung, Equal
Frame Size: 35 3/4 X 53 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 32.375, Clear Opening Height 22.312, Clear Opening Area 5.016326, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 179".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location:	Attributes	Qty
35	OFFICE	**Pella® Reserve, Traditional, Double Hung, 32.75 X 47.5**	1

Viewed From Exterior

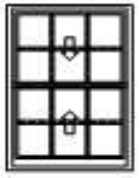
PK # 2096

Rough Opening: 33 - 1/2" X 49 - 3/8"

1: Traditional, Non-Standard Size Double Hung, Equal
Frame Size: 32 3/4 X 47 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 29.375, Clear Opening Height 19.312, Clear Opening Area 3.939514, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 161".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIP006 - Includes Two Coats of Drywall/Paint Up to 8’ Wide Opening	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1
RIP001 - Permit-Structural Plans- 1 NonMasonry Opening up to 8’	Qty	1
RIW270 - Widen Frame Opening over 3" up to 10'	Qty	1

Line #	Location:	Attributes	Qty
40	OFFICE	**Pella® Reserve, Traditional, Double Hung, 32.75 X 47.5**	1



Viewed From Exterior

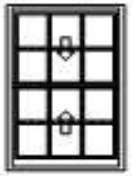
PK # 2096

Rough Opening: 33 - 1/2" X 49 - 3/8"

1: Traditional, Non-Standard Size Double Hung, Equal
Frame Size: 32 3/4 X 47 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 29.375, Clear Opening Height 19.312, Clear Opening Area 3.939514, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 161".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location:	Attributes	Qty
45	BATHROOM	**Pella® Reserve, Traditional, Double Hung, 30.75 X 47.5**	1



Viewed From Exterior

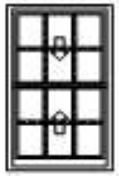
PK # 2096

Rough Opening: 31 - 1/2" X 49 - 3/8"

1: Traditional, Non-Standard Size Double Hung, Equal
Frame Size: 30 3/4 X 47 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 27.375, Clear Opening Height 19.312, Clear Opening Area 3.671292, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 157".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location	Attributes
50	ATTIC BEDROOM	



Viewed From Exterior

Rough Opening: 28 - 1/4" X 49 - 3/8"

PK #
2096

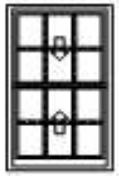
Pella® Reserve, Traditional, Double Hung, 27.5 X 47.5

Qty
1

1: Traditional, 27.547.5 Double Hung, Equal
Frame Size: 27 1/2 X 47 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 24.125, Clear Opening Height 19.312, Clear Opening Area 3.235431, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 150".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1
RIW270 - Widen Frame Opening over 3" up to 10'	Qty	1

Line #	Location:	Attributes	Qty
55	ATTIC BEDROOM		



PK # 2096

Viewed From Exterior

Rough Opening: 28 - 1/4" X 49 - 3/8"

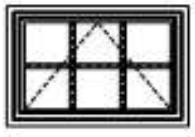
Pella® Reserve, Traditional, Double Hung, 27.5 X 47.5

Qty 1

1: Traditional, 27.547.5 Double Hung, Equal
Frame Size: 27 1/2 X 47 1/2
General Information: Standard, Luxury, Wood, Pine, 4 3/8", 4 3/16", No Certification
Exterior Color / Finish: Primed, Primed Wood
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Putty Glaze, Ogee, Standard, No Sash Lugs
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude STC 5mm/3mm Combination
Hardware Options: Cam-Action Lock, Satin Nickel, No Window Opening Control Device, No Limited Opening Hardware, No Sash Lift, No Integrated Sensor
Screen: Half Screen, Standard EnduraClad, White, Standard, InView™
Performance Information: U-Factor 0.30, SHGC 0.25, VLT 0.46, CPD PEL-N-234-01003-00001, Performance Class CW, PG 45, Calculated Positive DP Rating 45, Calculated Negative DP Rating 45, Year Rated 08|11, Clear Opening Width 24.125, Clear Opening Height 19.312, Clear Opening Area 3.235431, Egress Does not meet typical United States egress, but may comply with local code requirements
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H / 3W2H), Putty Glaze, Ogee
Wrapping Information: Wood Brickmould, 1 7/8", Factory Applied, 1 1/8" Wood Subsill, Factory Applied, No Exterior Trim, 4 9/16", 4 3/4", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 150".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR02 - PAINTRR02 Window w/muntin & trim 96 - 120 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location:	Attributes	Qty
60	ATTIC BATHROOM		



PK # 2096

Viewed From Exterior

Rough Opening: 29 - 3/4" X 21 - 3/4"

Pella® Reserve, Traditional, Awning, Vent, 29 X 21, White

Qty 1

1: Traditional, 2921 Vent Awning
Frame Size: 29 X 21
General Information: Standard, Clad, Pine, 5", 3 11/16", No Certification
Exterior Color / Finish: Painted, Standard Enduraclad, White
Interior Color / Finish: Prefinished White Paint Interior
Sash / Panel: Ogee, Ogee, Standard
Glass: Insulated Dual Low-E Advanced Low-E Insulating Glass Argon Non High Altitude
Hardware Options: Wash Hinge Hardware, Fold-Away Crank, Satin Nickel, No Limited Opening Hardware, No Integrated Sensor, Right Jamb
Screen: Full Screen, White, InView™
Performance Information: U-Factor 0.29, SHGC 0.23, VLT 0.43, CPD PEL-N-30-13426-00002, Performance Class CW, PG 50, Calculated Positive DP Rating 50, Calculated Negative DP Rating 50, Year Rated 11, Egress Not Applicable
Grille: ILT, No Custom Grille, 7/8", Traditional (3W2H), Ogee, Ogee
Wrapping Information: Foldout Fins, Factory Applied, No Exterior Trim, 5 3/16", 6 1/2", Standard Four Sided Jamb Extension, Factory Applied, Pella Recommended Clearance, Perimeter Length = 100".

RIW210 - Full Tear Out Installation - Single Unit	Qty	1
RIW353 - Install Above 1st floor (No Equipment necessary)	Qty	1
RIWLSF10 - Lead Safe Removal Full Tear Out Installation per opening	Qty	1
PSPAINTRR01 - PAINTRR01 Window w/muntin & trim <96 UI	Qty	1
PSPAINTRR24 - PAINTRR24 Paint Picture Frame, Stool, Shirt for Full Tear Ou	Qty	1

Line #	Location:	Attributes

Line #	Location:	Attributes

3221 Volta Pl NW
3221 Volta Pl NW, Was...
38.91°N, 77.07°W
3221 Volta Pl NW
3D
10 m
Videocamera: 146 m
38°54'35"N 77°03'54"W
42 m