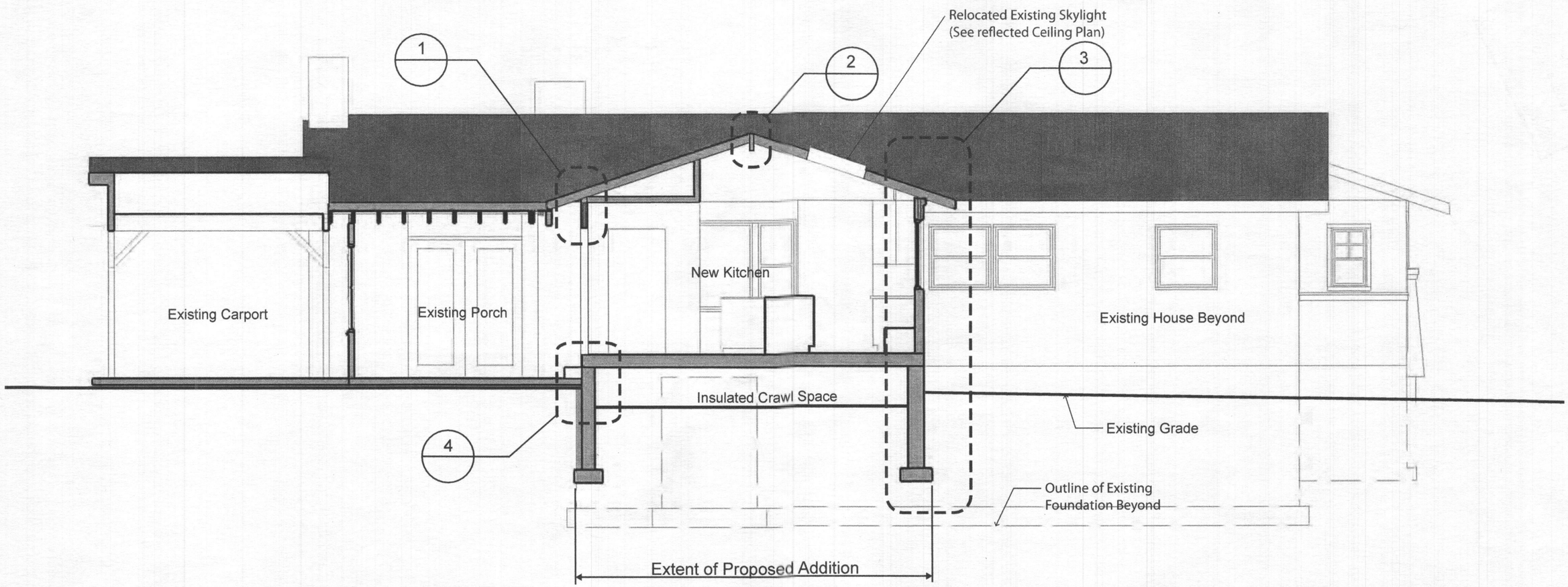
605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set

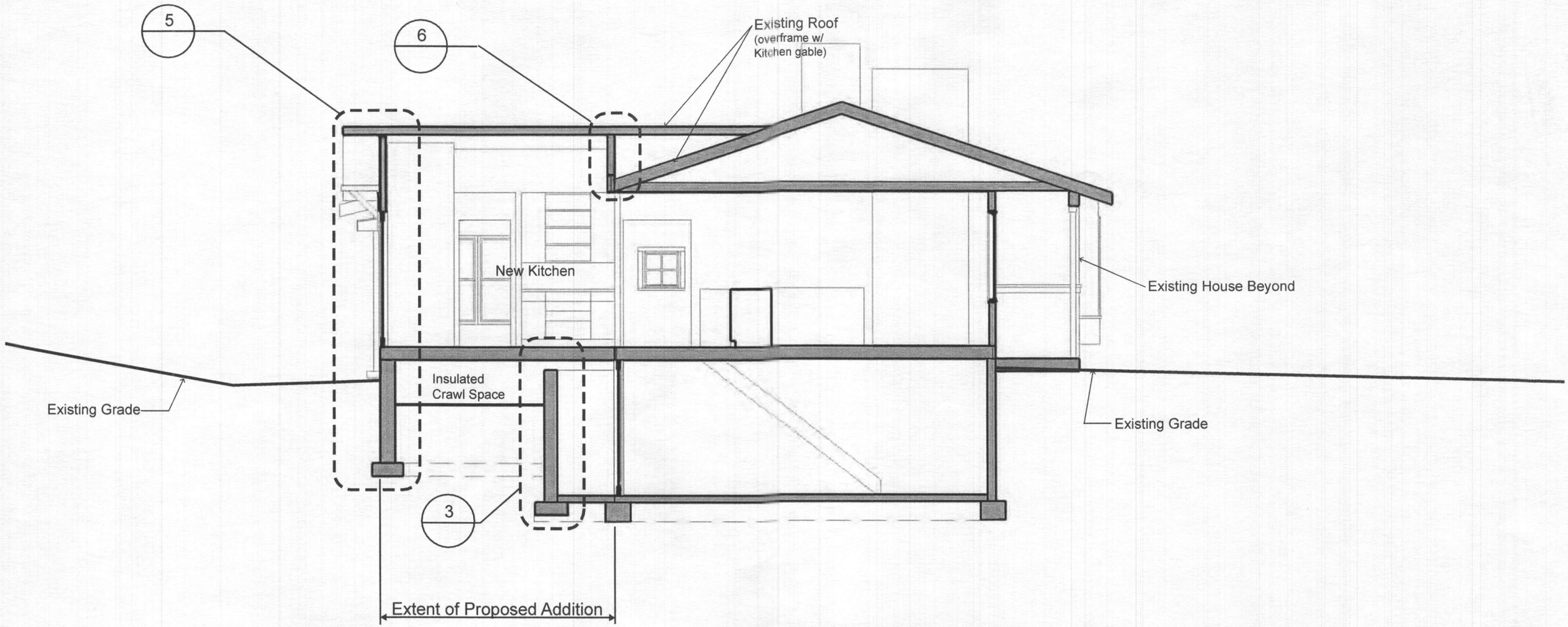


Section A-A

Scale: 3/16"= 1'-0"

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set

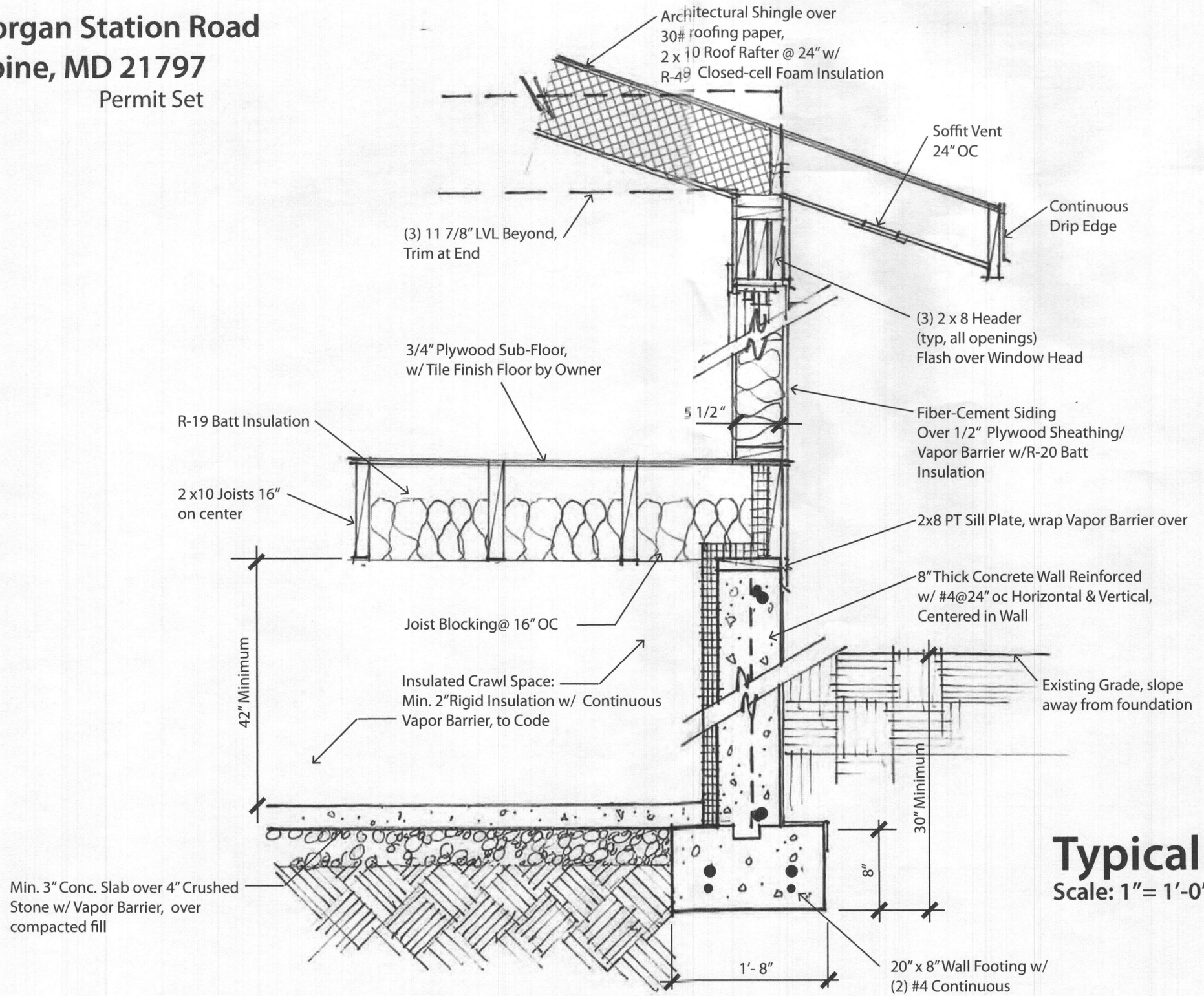


Section B-B

Scale: 3/16"= 1'-0"

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set

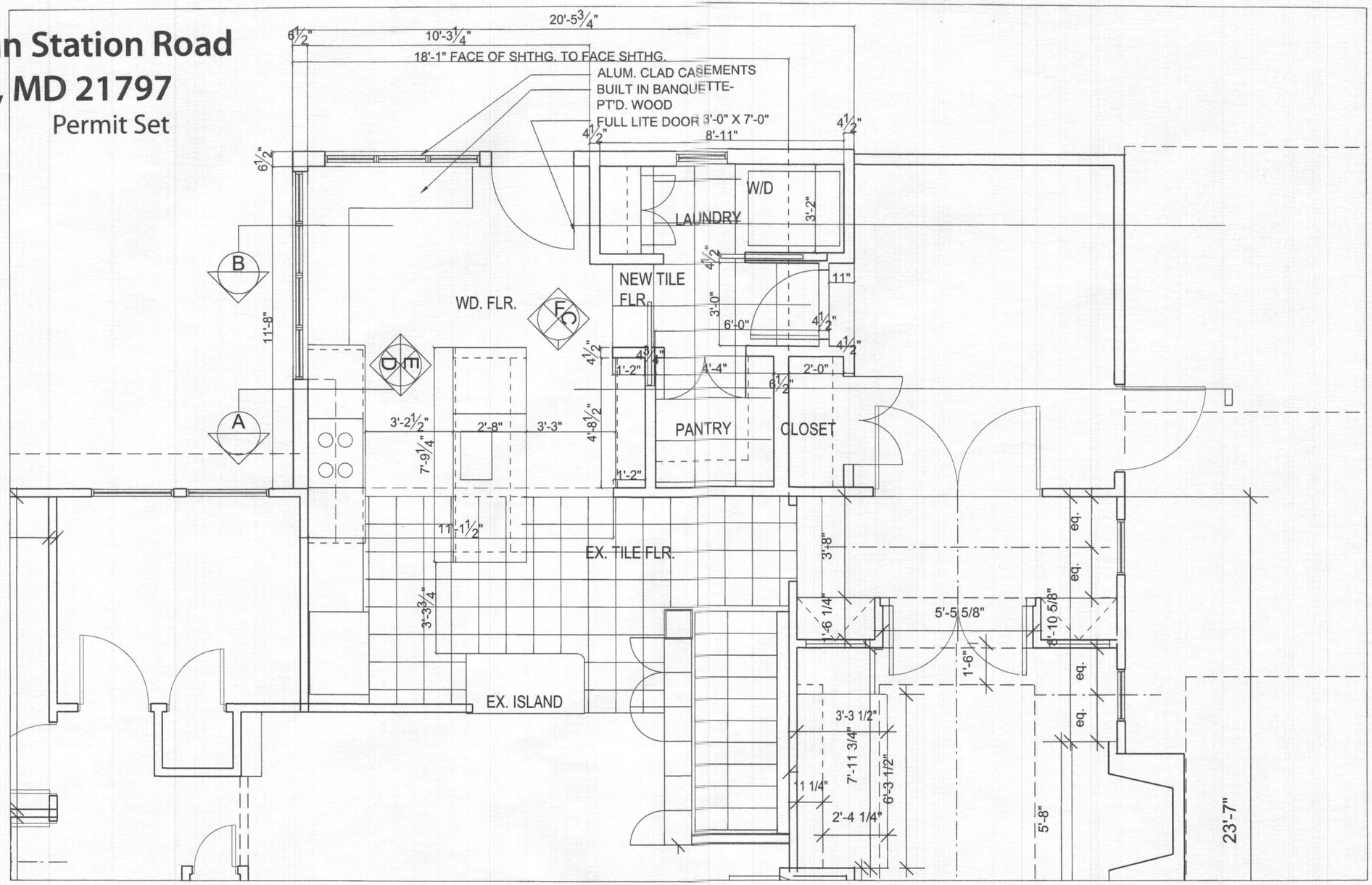


Typical Wall Section

Scale: 1"= 1'-0"

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



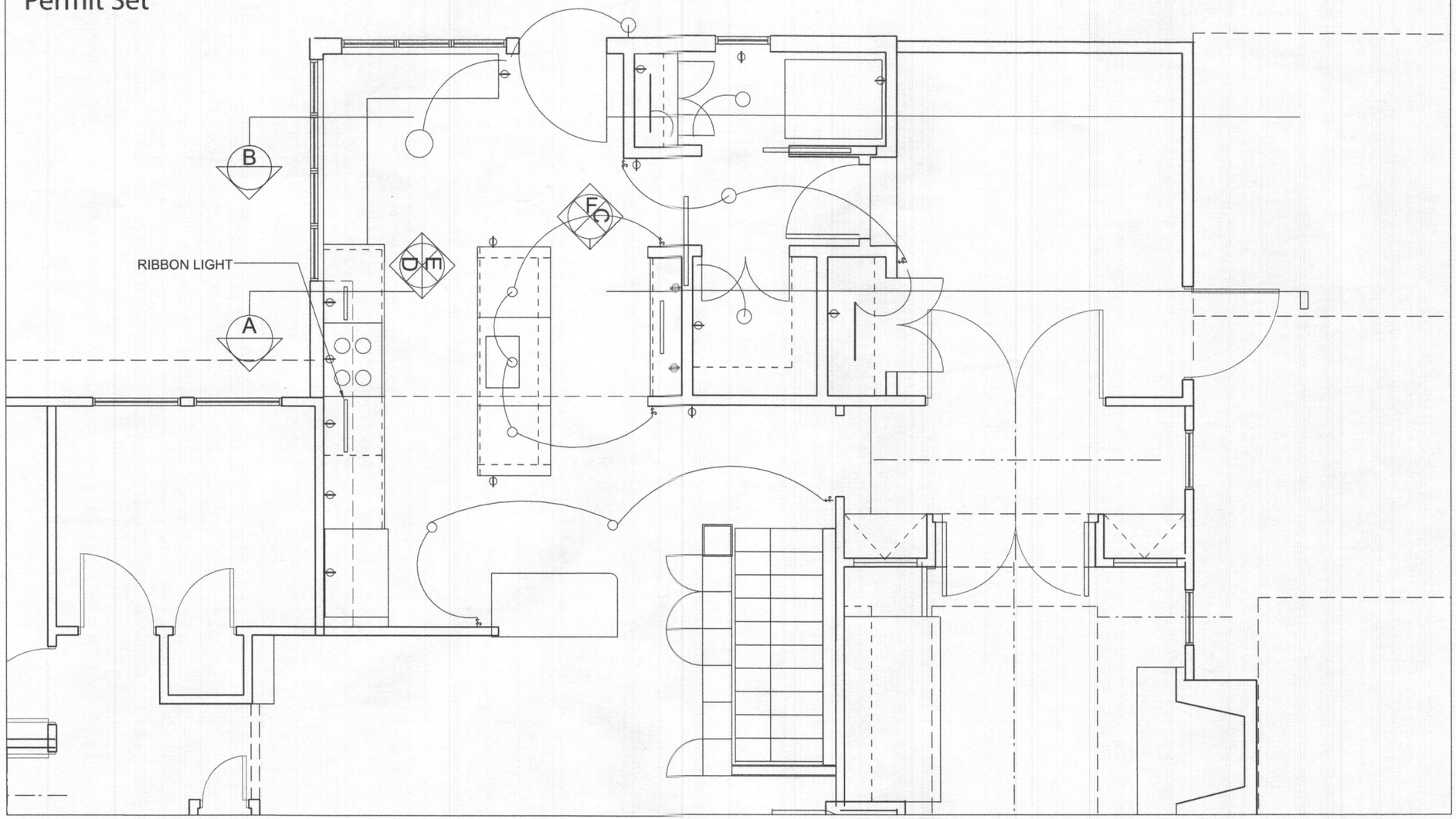
PLAN

1/4 " = 1'-0"

Detailed Kitchen Plan

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



ELECTRICAL PLAN

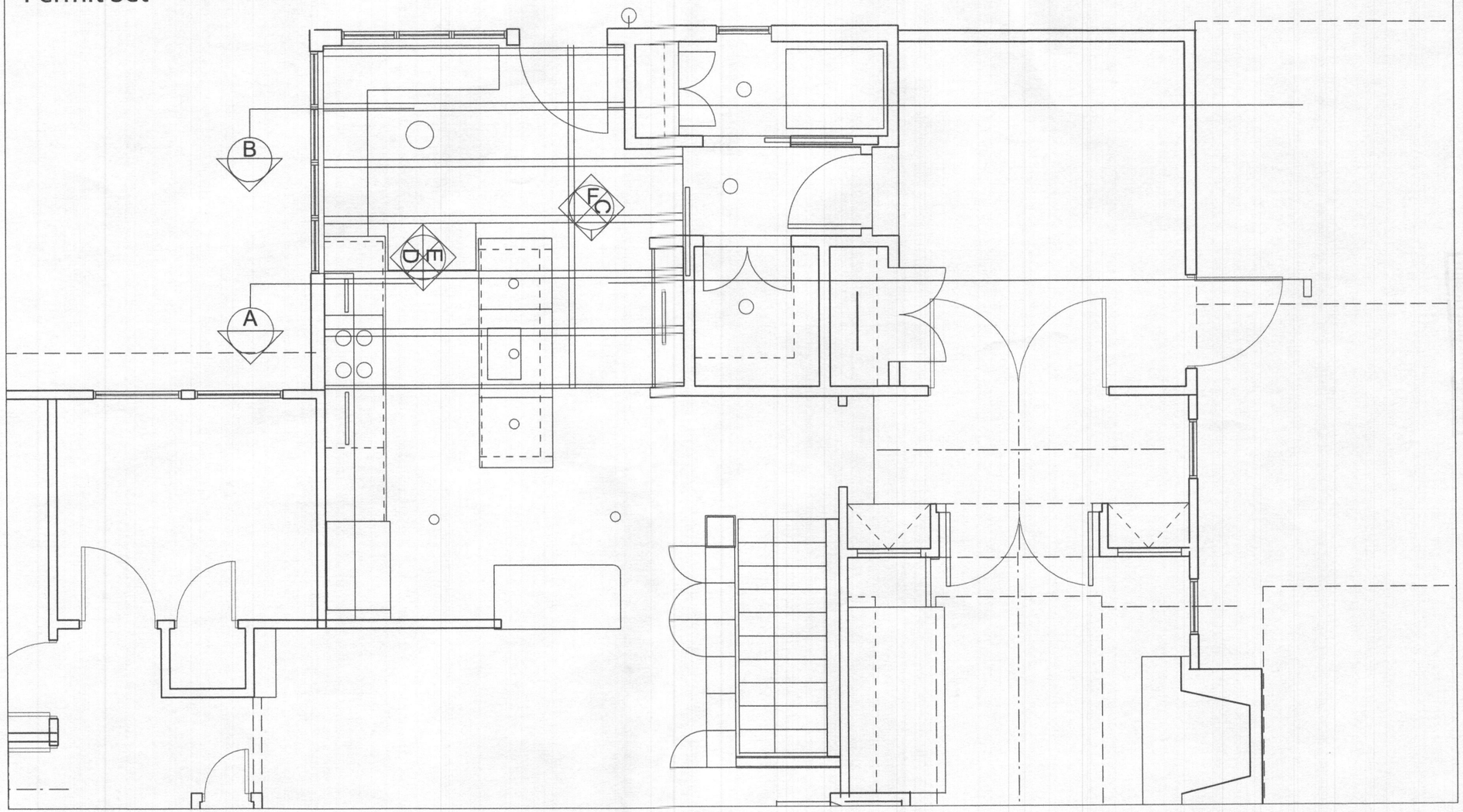
1/4 " = 1'-0"

Detailed Electrical Plan

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

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



REFLECTED CEILING PLAN

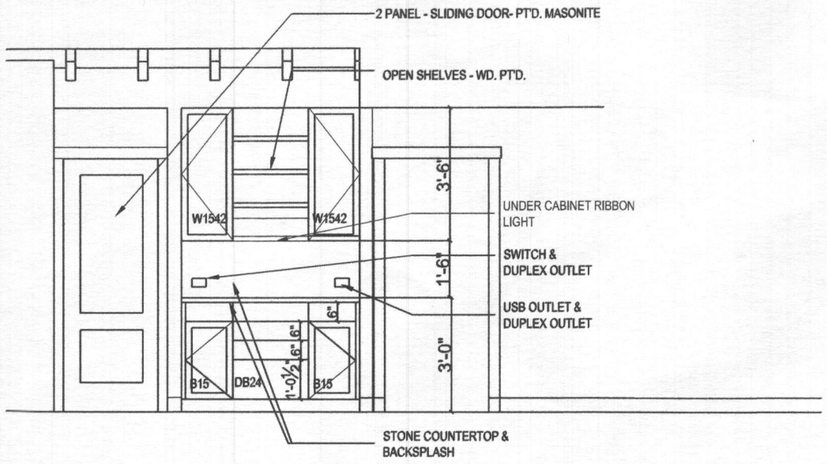
1/4 " = 1'-0"

Reflected Ceiling Plan

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

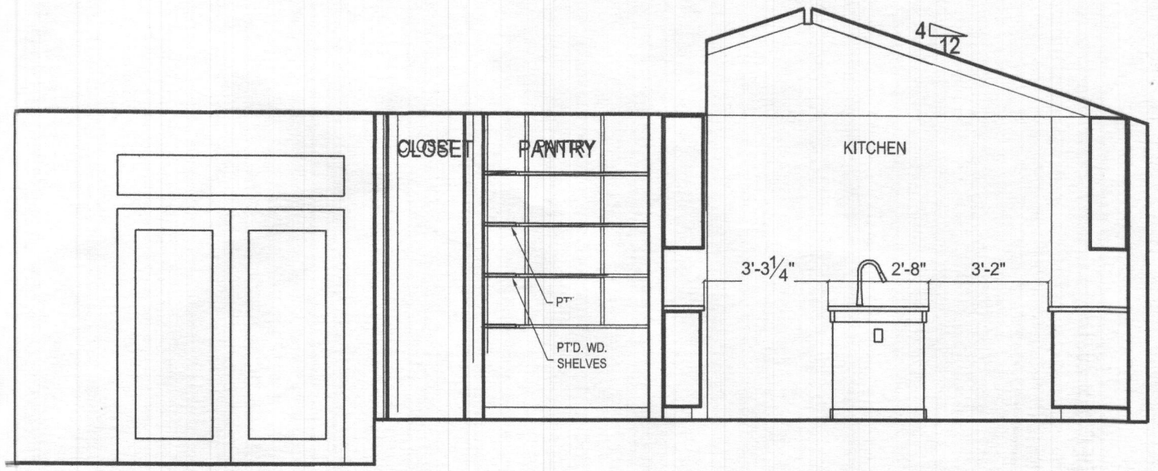
605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



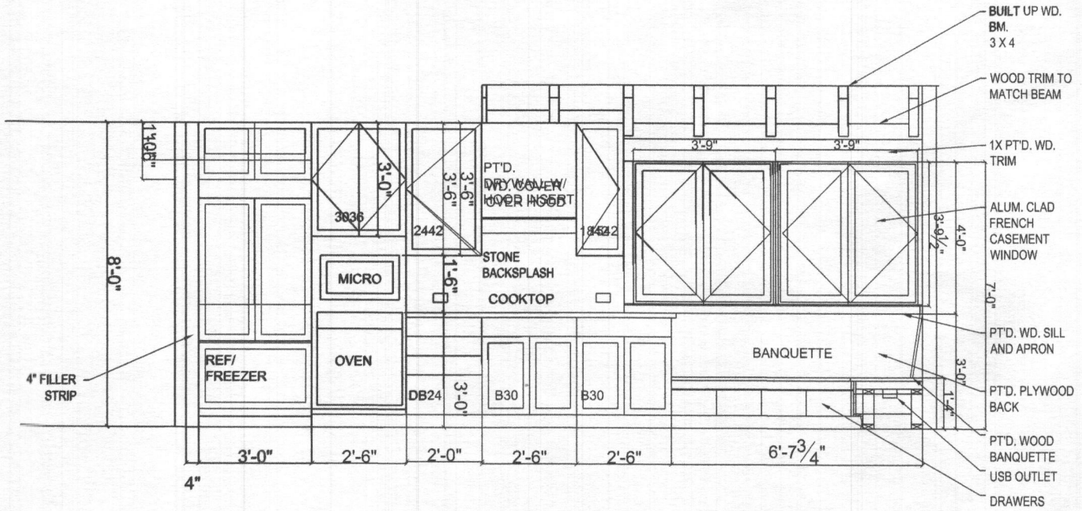
ELEVATION C

1/4 " = 1'-0"



SECTION A

1/4 " = 1'-0"



ELEVATION D

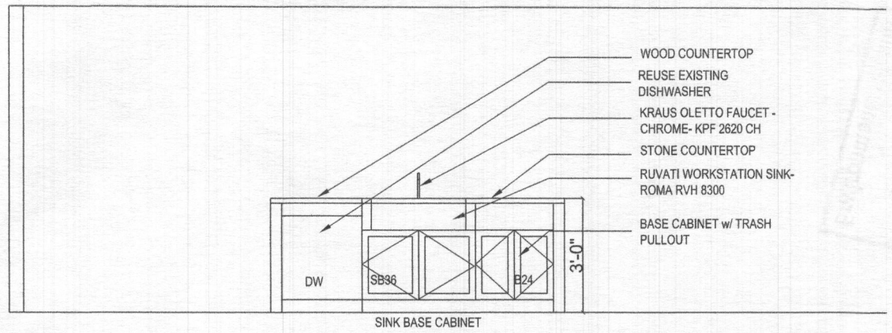
1/4 " = 1'-0"

SECTION B

1/4 " = 1'-0"

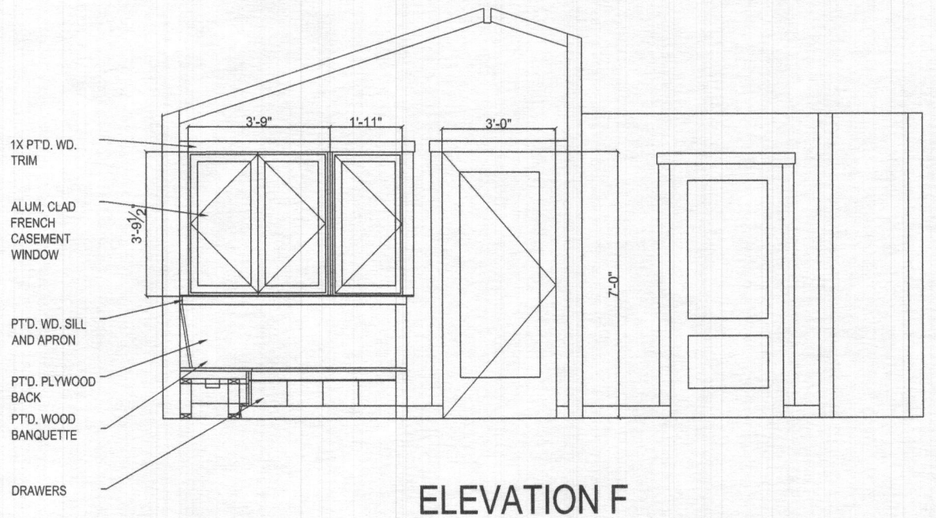
605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



ELEVATION E

1/4 " = 1'-0"

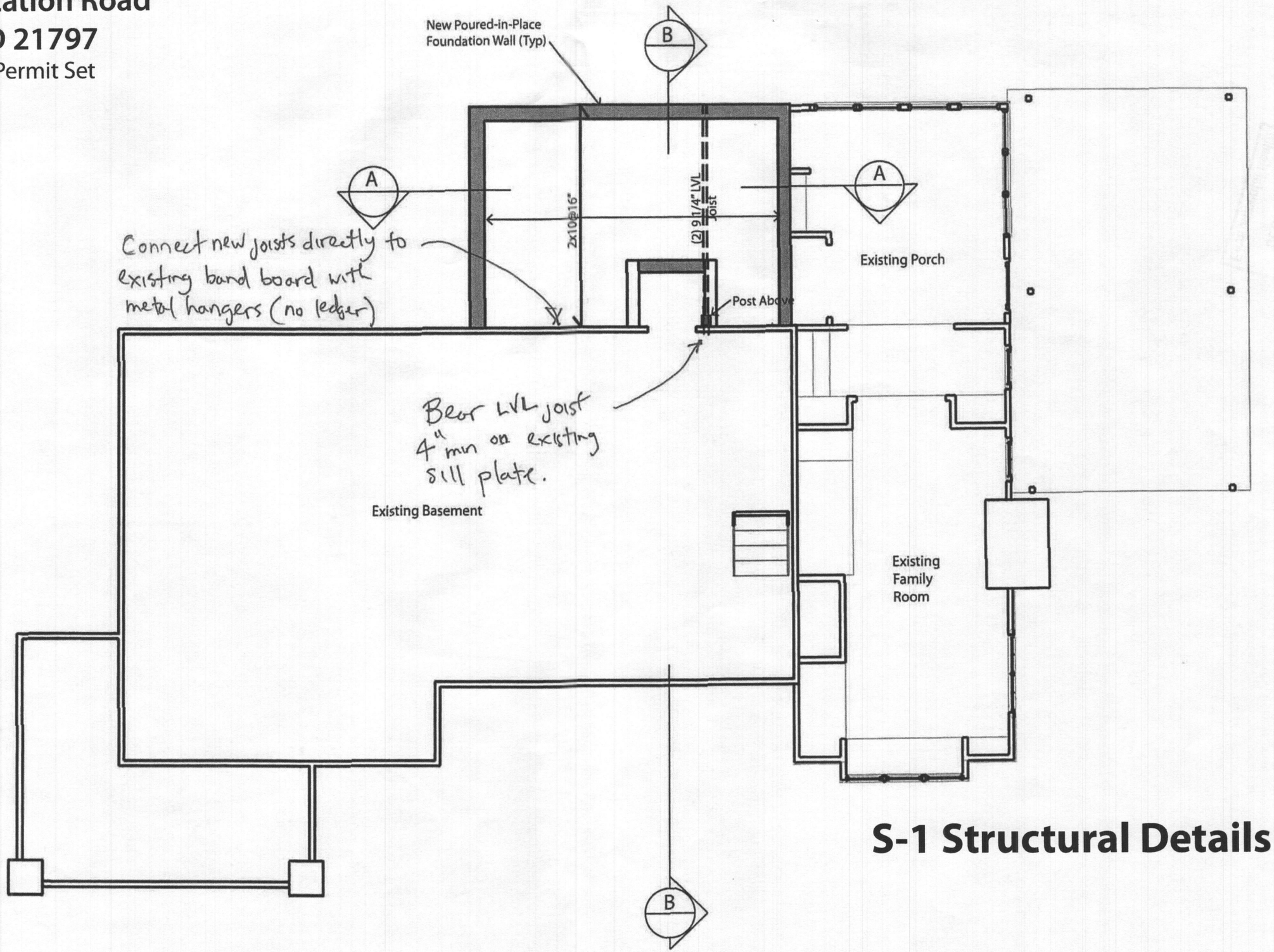


ELEVATION F

1/4 " = 1'-0"

605 Morgan Station Road
Woodbine, MD 21797

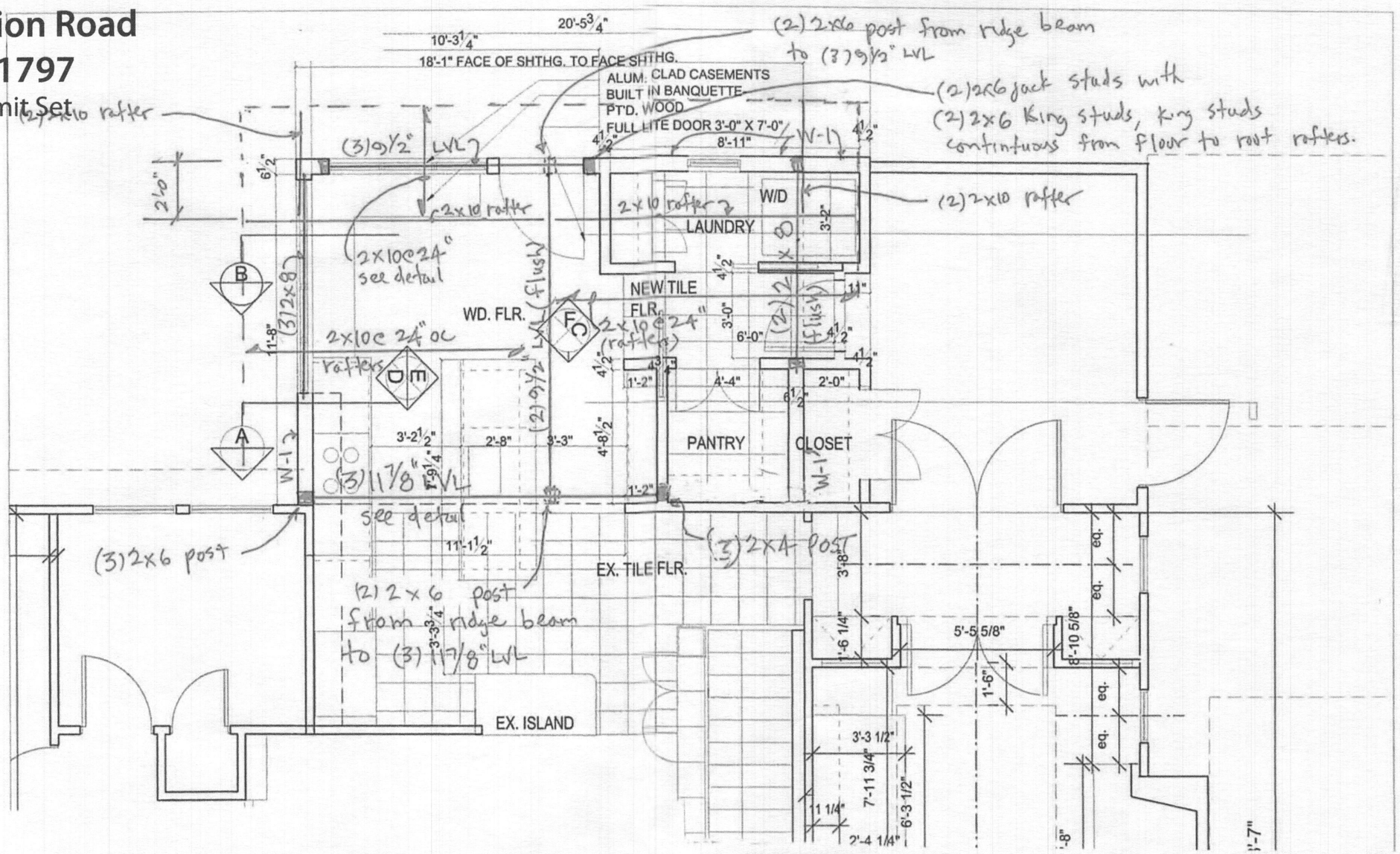
12.14.21 Permit Set



S-1 Structural Details

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



Framing notes

1. All beams are to be dropped below floor or roof framing unless noted flush, beams are to bear the full depth of posts.
2. Provide double wall stud post under all beams, headers, trimmers and multiple joists bearing on stud walls unless noted otherwise. Block solid between floor joists at floor levels to provide solid support to foundation. See general structural notes for jamb studs at bearing wall openings.
3. Connect all double LVLs together with LedgerLOK screws @ 12" oc staggered, connect all triple LVLs with 5" long LedgerLOK screws @ 8" oc staggered.
4. Connect all multiple ply stud posts with TimberLOK screws @ 12" oc staggered. Use 4" long screws at (2) ply studs and 6" long screws at (3) and (4) ply studs.
5. Provide metal hangers at all flush connections, connect all LVLs to posts with (2) Simpson LCE4 post caps and connect all rafters to supporting walls and beams with Simpson H2.5A hurricane tie.
6. Provide (3)2x8 wall header at all exterior stud wall openings unless noted.

Wall bracing note:

This house was designed in accordance with Section R301.1.3 of the IRC code which allows engineered design in lieu of the prescriptive design method. Engineered exterior shear walls were used instead of the prescriptive wall bracing specified in Section R602.10. See plan and shear wall schedule for additional information.

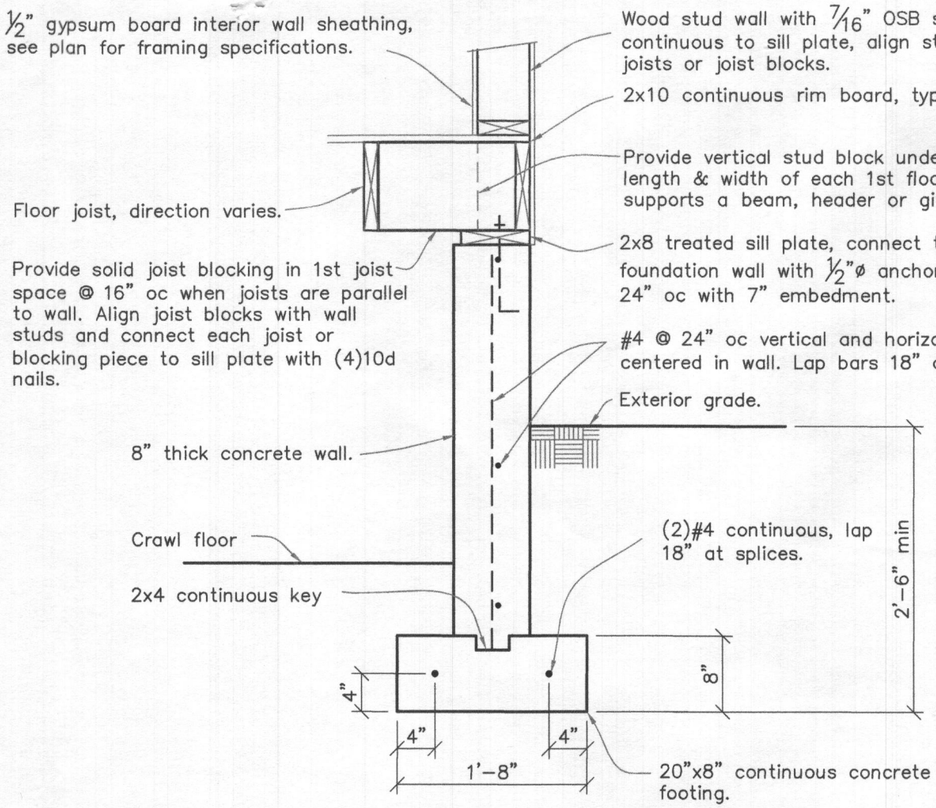
S-2 Structural Details

Shear Wall Schedule:

W-1: All exterior stud walls are shear walls and shall have 2x6 studs spaced at 16" oc with 7/16" OSB continuous sheathing on the outside face. Provide framing members or blocking at all sheathing edges and nail sheathing to walls studs, blocking and wall plates with 8d nails @ 6" oc at all sheathing edges. Nail to intermediate supports @ 12" oc. Connect wall bottom plates to joist, rim joist or blocking with (2)16d nails @ 16" oc. Connect abutting studs at wall corners with 16d face nails @ 12" oc. Provide 1/2" gypsum board sheathing on the inside face and connect sheathing to studs with #6x1-1/4" screws @ 12" oc. See detail for connection details.

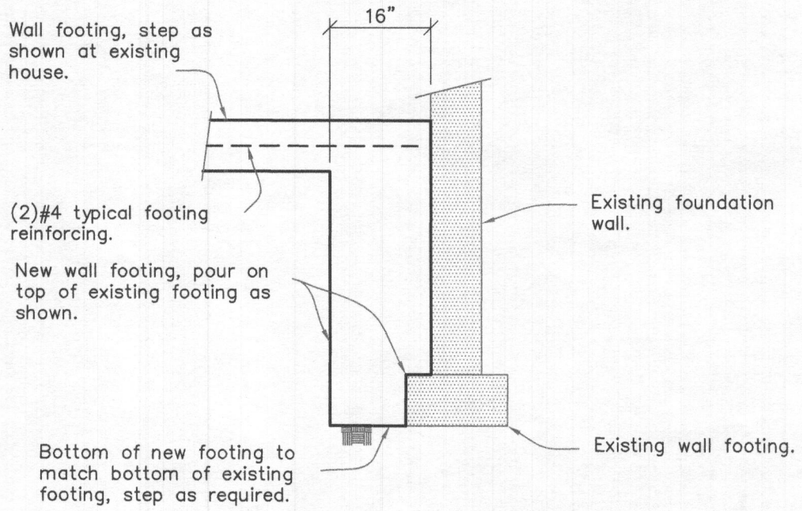
605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



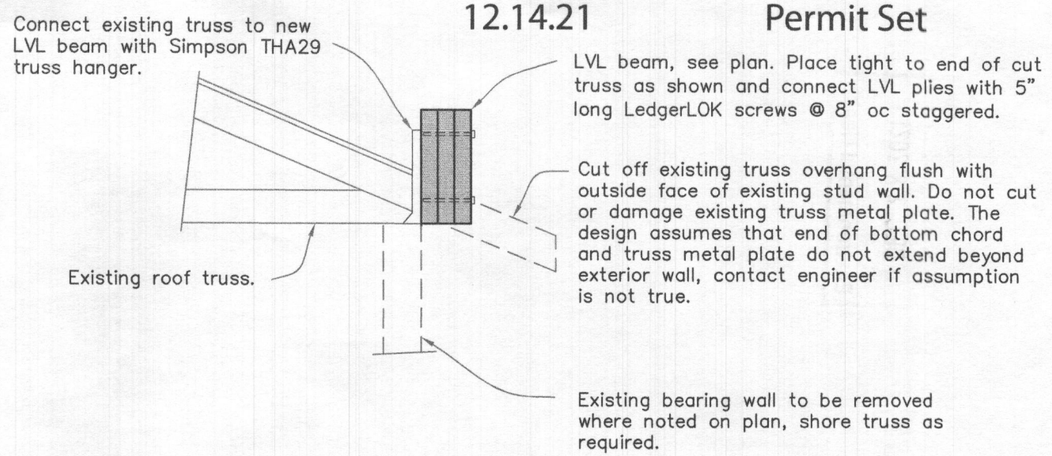
1 Foundation wall detail

Scale: ¾"=1'-0"



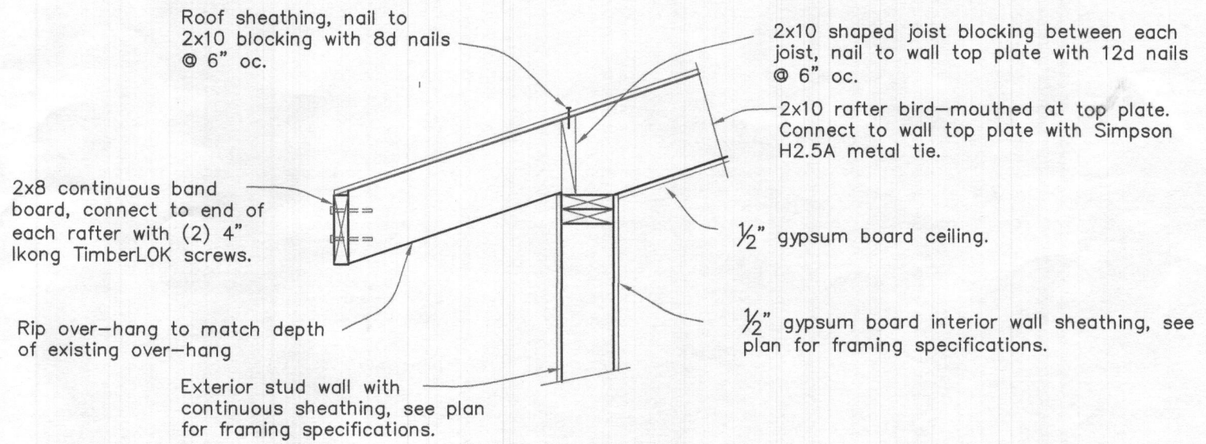
2 Typical step footing at existing wall

Scale: ½"=1'-0"



3 Existing roof truss connection detail

Scale: ¾"=1'-0"



4 Typical exterior wall supporting rafters

Scale: ¾"=1'-0"

S-3 Structural Details

www.sweeneyengineering.net
pat@sweeneyengineering.net

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 14452, Expiration Date: May 31, 2021.

Sweeney Engineering, PC Structural Engineers (410)719-7446	Project: Harry/Landsman Kitchen Addition	Title: Structural Details	Sheet#: S1 Date: Dec 22, 2020 Job#: 20213

STATE OF MARYLAND · PATRICK WILLIAM SWEENEY · No. 14452 · PROFESSIONAL ENGINEER

General Structural Notes:

1. General
   - 1.1. All construction shall conform with the provisions of the 2018 International Residential Code for one and two family dwellings.
   - 1.2. Design live loads:

Floors	40 psf
Sleeping areas	30 psf
Ground Snow Load, Pg	40 psf
Ultimate wind speed (3 second gust)	115 mph
Seismic design category	B
Seismic site class	D

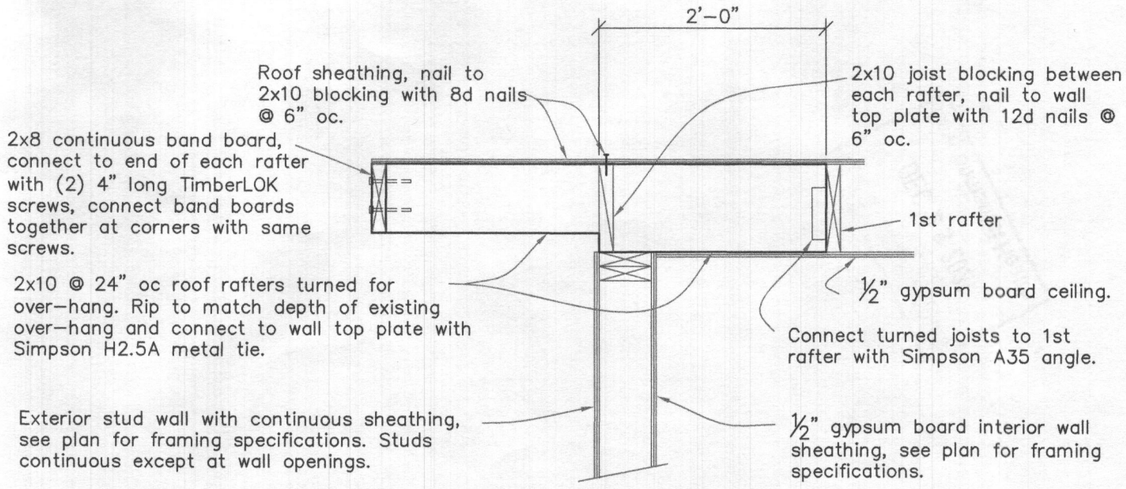
   - 1.3. The contractor shall provide all shoring and bracing as required to support the existing structure. The contractor shall examine the existing structure to determine the extent of necessary shoring and bracing. The capacity and method used for shoring and bracing shall be the responsibility of the contractor.
2. Foundations
   - 2.1. Footings are designed for an allowable soil bearing capacity of 2000 psf. Contractor to verify that the existing soil conditions meet or exceed this bearing capacity. Footings shall bear on natural undisturbed soil, 1'–0" below original grade. The bottom of exterior footings shall be a minimum of 2'–6" below finished grade.
3. Cast in place concrete
   - 3.1. All concrete shall be (f'c=3,000 psi) stone aggregate concrete at 28 days. All concrete exposed to the weather shall be air entrained.
   - 3.2. Slabs on ground shall be 4" thick concrete reinforced with 6"x6" W1.4xW1.4 WWF over 6 mil polyethylene vapor barrier and 4" washed gravel unless otherwise noted.
4. Reinforcing steel
   - 4.1. All reinforcing shall be high strength new billet steel conforming to ASTM designation A615, grade 60.
   - 4.2. All splices in reinforcing shall be 24". Bend horizontal reinforcing 1'–0" around all corners or provide 4'–0" long corner bars to match horizontal reinforcing.
   - 4.3. Provide 4" concrete protection for reinforcing unless noted otherwise.
5. Wood
   - 5.1. Structural solid wood rafters, joists, beams and studs shall be Spruce Pine Fir No.2 surfaced dry at a maximum of 19 % moisture content. All lumber exposed to weather shall be pressure treated Southern Pine No.2
   - 5.2. All laminated veneer lumber (LVL) shall have the following minimum properties: Fb=2600psi, Fv=285psi, E=2,000,000psi, Fc=2510psi(parallel), Fc=750psi(perpendicular). All LVL's shall have a 1¾" minimum thickness.
   - 5.3. All multiple members 10" or less in depth shall have each member nailed with 2 rows of 16d nails spaced at 12" o.c. Members deeper than 10" shall have 3 rows of 16d nails spaced at 12" oc.n.
   - 5.4. All nails are to be common wire nails. Nailing of all framing shall be as specified in the contract documents but in no case shall be less than the recommended nailing schedule contained in the 2018 International Residential Code.
   - 5.5. Provide the following jamb studs at all bearing wall openings unless noted otherwise:

0'–0" – 5'–0" opening	1 jack stud, 1 king stud
5'–1" – 7'–0" opening	2 jack studs, 1 king stud
7'–1" – 10'–0" opening	2 jack studs, 2 king studs

     Provide double studs at all corners and beneath all girder trusses and wood beams unless noted otherwise on plans. Wood beams, girder trusses and headers shall bear the full depth of posts and jack studs.
   - 5.6. All exterior stud walls and interior stud bearing walls shall have studs spaced at 16" o.c. maximum and shall have solid bridging at mid height of all studs unless noted otherwise.
   - 5.7. All posts (multiple studs or solid post) supporting beams, wall headers or girder trusses, shall be blocked solid for the full length and width of posts at all intersections with floors as required to provide continuous support to top of foundation walls or beams. Posts shown on upper levels floors shall also be installed on the lower levels in line with the post above down to foundation walls or beams.
   - 5.8. All fasteners used with pressure treated lumber are to be hot dip galvanized, stainless steel or 1.85 oz. of zinc per square foot of surface (G185).
   - 5.9. All flush wood connections shall have metal hangers. The supplier shall design all hangers for actual loads. Install all hangers in strict conformance to the manufactures instructions. Fill all nail or screw holes using the specified nails and screws only.
   - 5.10. Plywood, OSB and gypsum board sheathing panels shall be a minimum of 4'x8' sheets. Install roof and floor sheathing perpendicular to framing members with end joints of adjacent courses of sheathing not occurring over the same support. Sheathing shall be securely fastened ⅜" from the edge, not less than 6" on center at all edges, and not less than 12" on center for all intermediate supports. Framing members or blocking shall be provided at all sheathing edges for walls and ceilings. Use 8d nails for 7/16" and ½" wood sheathing, 10d nails for ¾" sheathing and #6 x 1¼" long screws for gypsum board sheathing. Floor sheathing shall also be glued to floor joists in accordance to APA specification AFG–01.
   - 5.11. Wall sheathing shall be 7/16" APA rated sheathing, 24/16 span rating, exposure 1. Roof sheathing shall be ½" APA rated sheathing, 32/16 span rating, exposure 1. Floor sheathing shall be ¾" APA rated sheathing, 48/24 span rating, exposure 1, tongue and groove.

605 Morgan Station Road
Woodbine, MD 21797

12.14.21 Permit Set



1 Roof over–hang detail at gable wall

Scale: ¾"=1'–0"

S-4 Structural Details

www.sweeneyengineering.net
pat@sweeneyengineering.net

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 14452, Expiration Date: May 31, 2021.

STATE OF MARYLAND · PATRICK WILLIAM SWEENEY · No. 14452 · PROFESSIONAL ENGINEER

Sweeney Engineering, PC Structural Engineers (410)719–7446	Project: Harry/Landsman Kitchen Addition	Title: Structural Details and General Notes	Sheet#: S2 Date: Dec 22, 2020 Job#: 20213