

Approved
MRE 2/7/24

Record Detail * (This section is required.)

Permit Type Building/Residential/Alteration/SFD Permit Number B24000387 Opened Date 02/06/2024
Description of Work SFD/ kitchen renovation project ON 1ST FLOOR includes the removal of a load bearing wall - engineering construction plan, plumbing work, electrical wiring and duct work. APPROX 200 SQFT

Online BP
Assigned to MRE.

check spelling

gs 2/7/24

Address * (This section is required.)

Search Reset Clear Get Parcel & Owner
Street # 13383 Street Name PIPES Street Type LN
Unit Type --Select-- Unit # X Coordinate -76.97691 Y Coordinate 39.32028
City SYKESVILLE State MD Zip Code 21784 Primary Yes

Parcel * (This section is required.)

Search Reset Clear Get Address & Owner
GIS ID * 908658 Parcel 300 Parcel Area 40075 Land Value 200000 Improved Value 506600 Exemption Value 306600 Plan Area RURAL

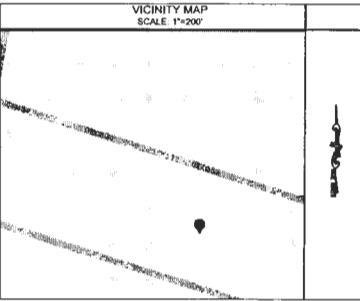
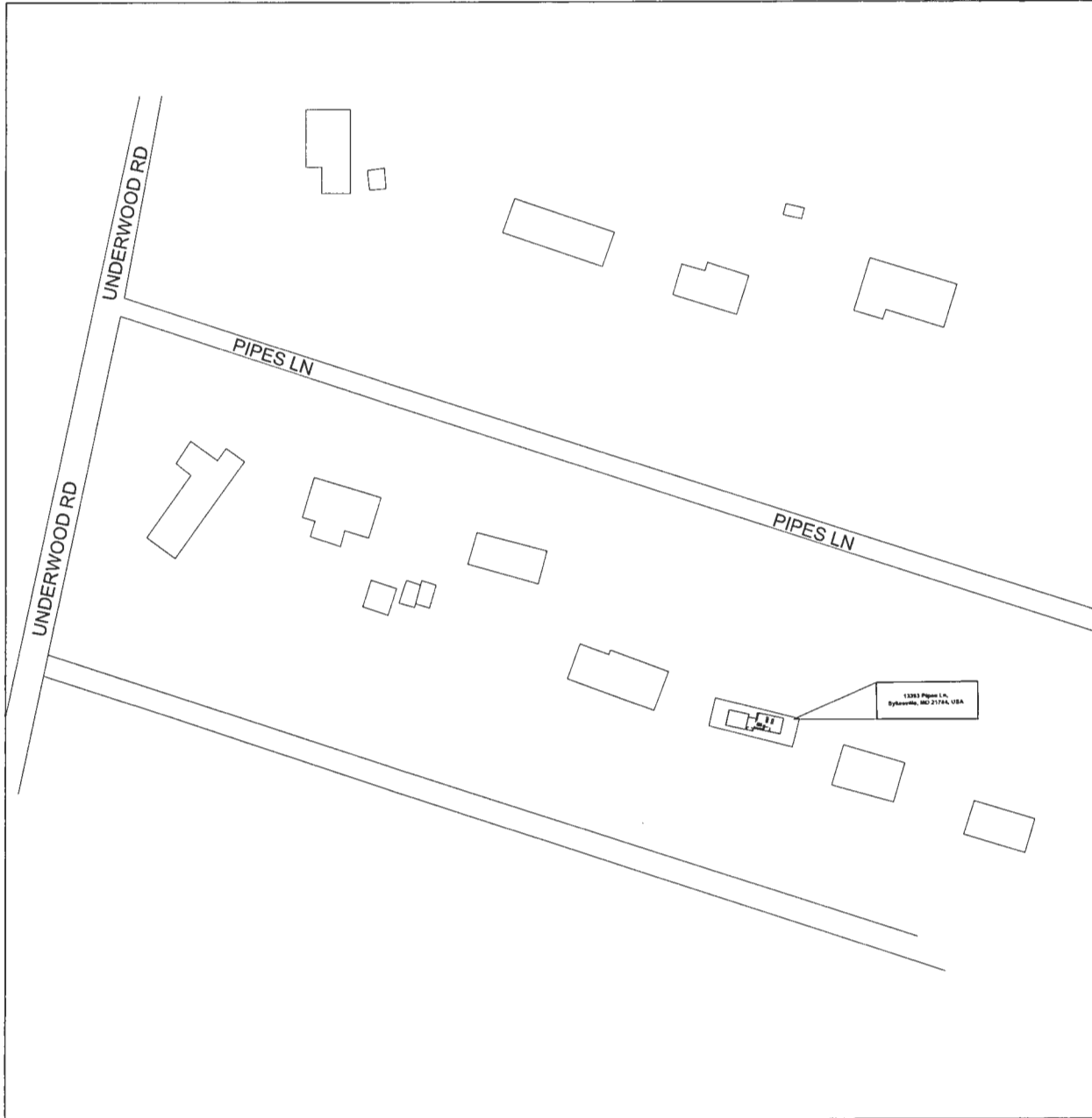
Legal Description
IMPSLOT 11 .920 AR S 1[]13383 PIPES LN[]ANNANDALE

check spelling

Block 11 Lot 11 Census Tract 603000 Council Dist 5 Inspection Dist Supervisor Dist Map # DAP Zone
Plan Area State Tax Id 1403304345 Subdivision Name
Section Area Tax Map 9
Grid 9-21 Zoning District RC-DEO ADC Map 4693-D9
SDP No. Final Plan No. WP File No.
Record Plat No. WS Contract No. FDP No. Primary Yes
Owner Occupied Year Built 1985 Historic District No
Historic District Registry No. Stat Area 3-01 Flood Plain No
Building No

Owner (This section is not required.)

Search Reset Clear
Name * YEH WEI
Address Line 1 13383 PIPES LN
Address Line 2
Address Line 3
Mail City SYKESVILLE Mail State MD Mail Zip Code 21784
Phone 301-452-0952 Primary Yes
E-mail
Cell Number Fax Number



ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL PLUMBING CODE CB72 PLUMBING
- 2021 INTERNATIONAL RESIDENTIAL CODE CB71 IRC IRC
- 2021 NFPA 101, LIFE SAFETY CODE
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE SUPPLEMENTAL RESIDENTIAL ENERGY INFORMATION
- 2021 INTERNATIONAL MECHANICAL CODE

INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION OF DRAWINGS
SP-1	SITE PLAN
C-1	EXISTING FLOOR PLANS
C-2	PROPOSED FLOOR PLAN
S-1	STRUCTURAL DETAILS
S-2	PROPOSED FLOOR FRAMING PLAN

(OWNER)
DESIGN BATH AND KITCHEN
 13383 PIPES LN
 SYKESVILLE, MARYLAND

**13383 PIPES LN
 SYKESVILLE, MARYLAND**

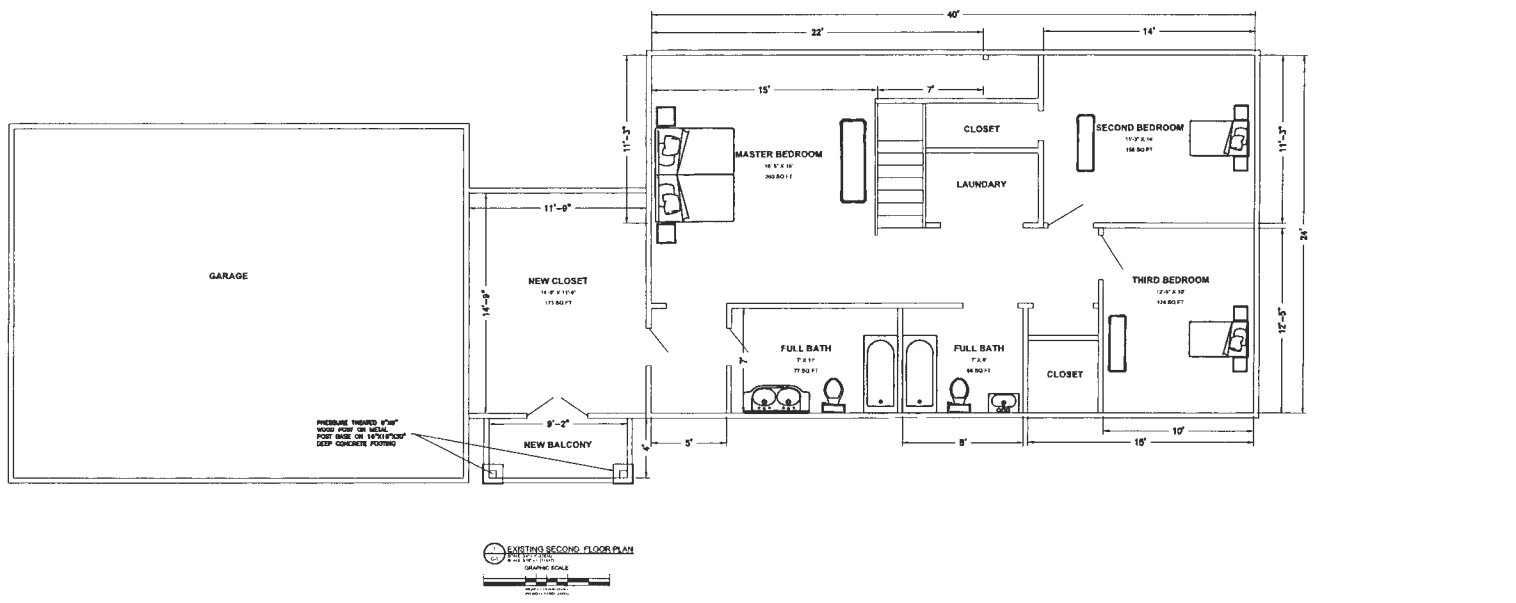
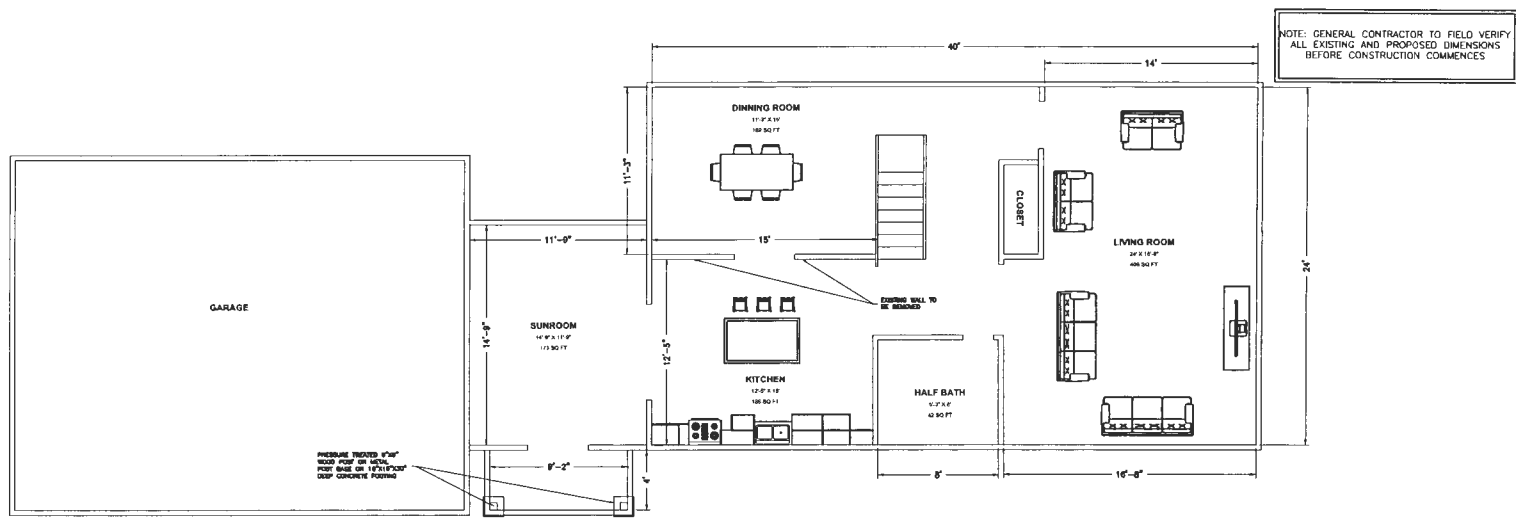
REVISIONS			
REV	DATE	DESCRIPTION	BY
0	03/01/24	PRELIMINARY	BM



BROOK MESFIN, P.E.
 MD PROFESSIONAL ENGINEER LIC. #43595

SITE PLAN

SP-1



(OWNER)
DESIGN BATH AND KITCHEN
 1303 PIPES LN
 SYKESVILLE, MARYLAND

**13383 PIPES LN
 SYKESVILLE, MARYLAND**

REVISIONS

REV	DATE	DESCRIPTION	BY
0	02/01/24	PRELIMINARY	BM

PROFESSIONAL STAMP

Brook Mesfin
 No. 43595
 PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 LICENSE NO. 43595
 EXPIRES 12/31/2026

BROOK MESFIN, P.E.
 MD PROFESSIONAL ENGINEER LIC. #43595

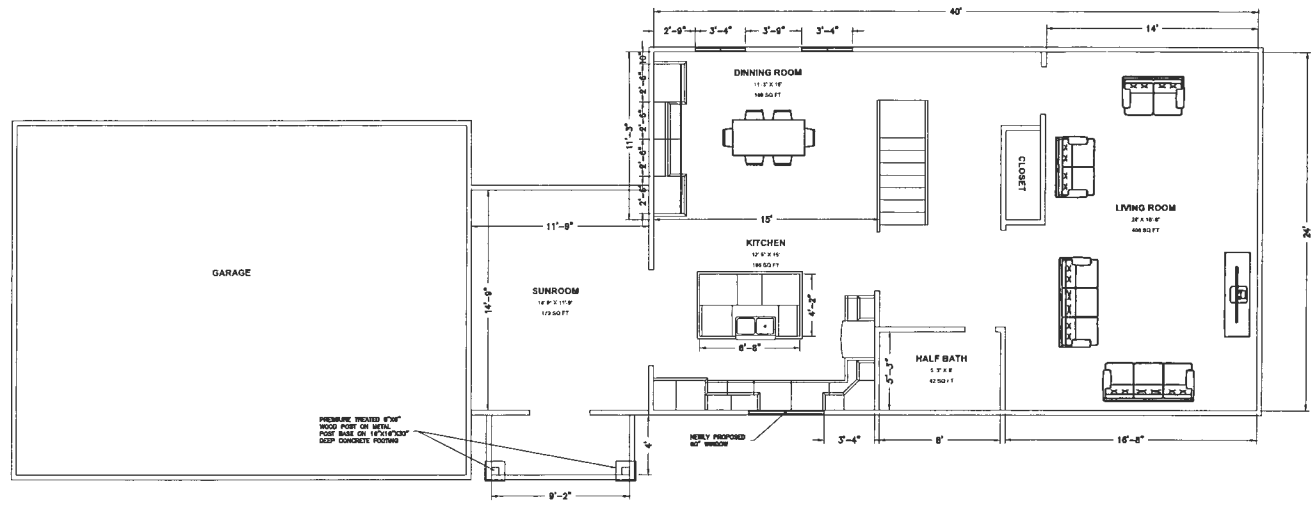
EXISTING FLOOR PLANS

C-1

NOTE: GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS BEFORE CONSTRUCTION COMMENCES

(OWNER)
DESIGN BATH AND KITCHEN
 13383 PIPES LN
 SYKESVILLE, MARYLAND

13383 PIPES LN
SYKESVILLE, MARYLAND



REVISIONS

REV	DATE	DESCRIPTION	BY
0	02/01/24	PRELIMINARY	EM

PROFESSIONAL STAMP

STATE OF MARYLAND
 BROOK MESFIN
 No. 43595
 PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER'S SEAL AND DOCUMENTS WERE PREPARED BY THE ENGINEER WHO IS FULLY LICENSED. PROFESSIONAL SOCIETY RIGHTS RESERVED BY THE STATE OF MARYLAND. LICENSE NO. 43595, EXPIRES 12/31/2024.

BROOK MESFIN, P.E.
 MD PROFESSIONAL ENGINEER L.I.C. #43595

PROPOSED FLOOR PLANS

C-2

PROPOSED FIRST FLOOR PLAN
 DATE: 12/17/23
 DRAWING SCALE
 1/8" = 1'-0"

STRUCTURAL NOTES

GENERAL

A. ALL CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE APPLICABLE CODE INDICATED IN THE BUILDING SUMMARY COLUMN AND ALL LOCAL CODES PRESENTLY IN EFFECT UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.

B. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS & CONDITIONS ON THE JOB SITE PRIOR TO THE BIDDING OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

C. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING CONSTRUCTION INDICATED TO REMAIN AND SHALL REPAIR AND/OR REPLACE ALL AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION AT A MINIMUM TO THE CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION.

1.1. DESIGN LOADS

A. THE STRUCTURE WAS DESIGNED FOR THE LIVE LOADS SHOWN BELOW AND DEAD LOADS AS REQUIRED BY CONSTRUCTION IN ACCORDANCE WITH IBC 2018. LOADS DUE TO SNOW LOAD BUILD-UP WERE CONSIDERED IN DESIGN OF STRUCTURAL COMPONENTS ADJACENT TO PARAPETS, HIGH BUILDING WALLS, ETC. INCREASE IN THESE LOADINGS DUE TO CHANGE IN FUNCTION, CONSTRUCTION MATERIALS, ETC., TO HAVE WRITTEN APPROVAL FROM THE DESIGNING STRUCTURAL ENGINEER.

B. THE BASIC STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF FLOORS, WALLS, AND ROOF ACTING TOGETHER. PROVIDE RIGID BRACES, STRUTS, ETC., TO ACCOMMODATE LIVE, DEAD, AND WIND LOADS UNTIL FINAL CONNECTIONS BETWEEN THESE ELEMENTS ARE MADE.

C. LIVE LOADS SHOWN BELOW ARE IN POUNDS PER SQUARE FOOT (PSF). ROOF LIVE LOAD: 20 GROUND SNOW LOAD (PS): 30 GROUND SNOW LOAD: 30 FLAT ROOF SNOW LOAD: 20 STAIRS: 30 SNOW LOAD IMPORTANCE FACTOR: 1.0

D. WIND CRITERIA:

ULTIMATE DESIGN WIND SPEED: 115 MPH (3 SECOND GUST)
 NOMINAL DESIGN WIND SPEED: 90 MPH (3 SECOND GUST)
 RISK CATEGORY: II
 WIND EXPOSURE CATEGORY: B

1.2. SHORING:

A. PROVIDE SHORING AS REQUIRED TO MAINTAIN STABILITY OF THE STRUCTURE, ADJACENT UTILITIES, CONSTRUCTION, AND EMBANKMENTS DURING THE CONSTRUCTION PERIOD. STRENGTH AND PLACEMENT OF SHORING IS TOTALLY THE RESPONSIBILITY OF THE CONTRACTOR.

B. REMOVE FINISHES, SUCH AS PLASTER, STUCCO, ETC., SO THAT SHORING WILL BE IN DIRECT CONTACT WITH STRUCTURAL MEMBERS.

C. WHERE SPACES BETWEEN SHORING AND EXISTING MEMBERS EXIST, DRIVE HARDWOOD WEDGES SHAG AND TOE NAIL TO SHORING.

1.3. EXISTING CONDITIONS

A. EXPOSE EXISTING FRAMING AND NOTIFY ENGINEER PRIOR TO INSTALLATION OF NEW FRAMING.

B. CONTRACTOR MUST FIELD CHECK AND VERIFY DIMENSIONS AND ELEVATIONS OF EXISTING WORK PRIOR TO FABRICATION OF NEW MATERIALS.

C. USE NON-DESTRUCTIVE TESTING METHODS TO DETERMINE LOCATION OF REINFORCING. DO NOT CUT EXISTING REINFORCING. ADJUST LOCATIONS OF NEW HOLES TO MISS REINFORCING.

D. RELOCATE EXISTING PLUMBING AND HVAC AS REQUIRED TO ALLOW INSTALLATION OF NEW FRAMING.

2.1. DEMOLITION

A. DEMOLITION INCLUDES CONTROLLED DESTRUCTION OF STRUCTURES AND THE REMOVAL AND DISPOSAL OF DEMOLISHED MATERIALS AS SHOWN ON THE DRAWINGS AND INCLUDED IN THESE NOTES.

B. PERFORM DEMOLITION IN SECTIONS SMALL ENOUGH TO PREVENT DAMAGE OF MATERIALS AND FACILITIES AND FOR EMBANKMENTS TO REMAIN IN PLACE.

C. PROVIDE ADEQUATE SHORING, BRACING, AND PROTECTION TO PREVENT MOVEMENT, SETTLEMENT, COLLAPSE OR DAMAGE TO EXISTING MATERIALS AND FACILITIES AND FOR EMBANKMENTS TO REMAIN. SUBMIT COMPLETE DETAILS OF SHORING PROCEDURES SIGNED BY A PROFESSIONAL ENGINEER (REGISTERED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED) PRIOR TO BEGINNING WORK.

D. PROMPTLY REPAIR DAMAGES CAUSED BY THE DEMOLITION TO ADJACENT FACILITIES, MATERIALS, OR EMBANKMENTS AT NO COST TO THE OWNER.

E. PROMPTLY REMOVE FROM SITE AND PROPERLY DISPOSE OF DEBRIS, RUBBERISH, AND OTHER MATERIALS RESULTING FROM THE DEMOLITION.

2.3. FOUNDATIONS

A. A SOIL BEARING CAPACITY OF 2000 PSF WAS USED FOR FOOTING DESIGN. ENGAGE THE SERVICES OF A GEOTECHNICAL ENGINEER TO VERIFY EXCAVATIONS AND SOIL BEARING CAPACITY. IF SOIL OF THIS CAPACITY IS NOT ENCOUNTERED AT ELEVATIONS INDICATED, CONTACT ENGINEER OF RECORD (EOR).

3.1. CONCRETE

A. UNLESS COVERED BY BUILDING CODE OR LOCAL AMENDMENTS: CONCRETE WORK INCLUDING FORMING, MOULDING, PLACING, AND CURING SHALL BE IN ACCORDANCE WITH ACI 301. PLACEMENT OF REINFORCING SHALL BE IN ACCORDANCE WITH ACI 315 AND 318. WHEN THERE IS A CONFLICT, THE MOST STRINGENT IS TO APPLY.

B. SUBMIT COMPLETE SHOP AND ERECTION DRAWINGS FOR REVIEW PRIOR TO FABRICATION OR ERECTION. REPEATS OF CONTRACT DRAWINGS ARE NOT ACCEPTABLE. SUBMIT DESIGN MIXES FOR EACH CLASS OF CONCRETE PRIOR TO USE.

C. CONCRETE REINFORCING: ASTM A-615, GRADE 60.

D. WELDED WIRE REINFORCEMENT: ASTM A-1064.

E. PORTLAND CEMENT: ASTM C-150, TYPE I.

F. BLENDED HYDRAULIC CEMENT: ASTM C-595.

G. FLY ASH: ASTM C-618, CLASS F (MAXIMUM).

H. AGGREGATE: ASTM C-33. 1" (30MM) FOR FOOTINGS, WALLS, AND SLABS ON GRADE, 1/2" MAXIMUM FOR THIN SLABS, AND 3/8" FOR WALL FILL.

I. CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.

J. EXTERIOR CONCRETE TO BE AIR-ENTRAINED AND SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF: 4,000 PSI.

K. WATER CEMENT RATIO NOT TO EXCEED 0.54 FOR 3,000 PSI CONCRETE AND 0.45 FOR AIR ENTRAINED CONCRETE.

L. INSTALL WELDED WIRE REINFORCEMENT 2" BELOW UPPER SURFACE OF CONCRETE SLAB.

M. REINFORCING FOR FOOTINGS AND OTHER CONCRETE USING EARTH FORMS SHALL HAVE 3" CONCRETE COVER. REINFORCING FOR CONCRETE EXPOSED TO GROUND OR WEATHER AFTER REMOVAL OF FORMS SHALL HAVE 2" CONCRETE COVER. REINFORCING SHALL HAVE 3/4" CONCRETE COVER FOR SLABS AND WALLS AND 1 1/2" COVER FOR BEAMS, COLUMNS, AND COLLARS.

N. USE A WATER REDUCING ADMIXTURE IN ALL CONCRETE.

O. USE A MINIMUM OF 5 1/2 BAGS OF CEMENT AND A MAXIMUM OF 8 1/2 GALLONS OF WATER PER BAG FOR EACH CUBIC YARD OF CONCRETE.

P. SLUMP - AS REQUIRED BY ACI (211.1), EXCEPT THAT SLABS-ON-GRADE AND THIN-FRAMED SLABS SHALL HAVE A MAXIMUM SLUMP OF 5". SHOULD EXTRA WATER BE REQUIRED BEFORE DEPOSITING CONCRETE AND WATER/CEMENT RATIO OF ACCEPTED MIX DESIGN HAS NOT BEEN EXCEEDED, GENERAL CONTRACTOR'S SUPERINTENDENT SHALL HAVE SOLE AUTHORITY TO AUTHORIZE ADDITION OF WATER. ANY ADDITIONAL WATER ADDED TO MIX AFTER LEAVING BATCH PLANT SHALL BE INDICATED ON THE TRUCK TICKET AND SIGNED BY PERSON RESPONSIBLE. SUBMIT COPY OF TRUCK TICKET FOR REVIEW.

Q. AIR ENTRAINMENT EXTERIOR EXPOSED CONCRETE 5% +/- 1%.

R. NO CALCIUM CHLORIDE WILL BE PERMITTED IN CONCRETE.

3.1. WOOD FRAMING

A. WOOD FRAMING AND FASTENERS - COMPLY WITH THE RECOMMENDATIONS OF THE AMERICAN WOOD COUNCIL (AWC).

B. SPACING OF WALLS OR SCREWS FOR FLOOR OR ROOF PANELS: PANEL EDGES AT 12" O/C AND 16" O/C ON EACH INTERIOR SUPPORT.

C. SPACING OF WALLS OR SCREWS FOR WALL PANELS: PANEL EDGES AT 6" O/C AND 16" O/C ON EACH INTERIOR SUPPORT.

D. PROVIDE DOUBLE STUD AT VERTICAL PANEL JOINTS FOR WALL APPLICATIONS AND SPACE PANELS MINIMUM 1/8".

E. PLYWOOD: APA - THE ENGINEERED WOOD ASSOCIATION GRADE TRADE MARKED MEETING THE REQUIREMENTS OF THE LATEST EDITION, PER CODE OF U.S. PRODUCT STANDARD PS-1.

F. PANEL THICKNESS AND IDENTIFICATION INDEX SHALL BE AT LEAST EQUAL TO THAT SHOWN ON THE DRAWINGS. INSTALL AND CONNECT IN ACCORDANCE WITH THE RECOMMENDATIONS OF APA - THE ENGINEERED WOOD ASSOCIATION.

G. ATTACH PLYWOOD FLOOR SHEATHING USING GLUE AND NAILS.

H. UNLESS OTHERWISE NOTED ON DRAWINGS, ATTACH PLYWOOD TO FRAMING WITH MIN. 8d NAILS AT 6" O/C ON EDGES OF SHEET AND 12" O/C ON EACH INTERIOR SUPPORT.

I. FOR PLYWOOD 1/2" IN THICKNESS AND LESS, USE H CLIPS AT MIDPOINT FOR SPANS GREATER THAN 16" O/C. FOR PLYWOOD 5/8" AND THICKER, USE TONGUE AND GROOVE EDGES OR H CLIPS AT MIDPOINT FOR SPANS GREATER THAN 16" O/C. FOR 48" SPANS, PROVIDE 2-H CLIPS AT 1/3 POINTS OF SPAN OR PROVIDE TONGUE AND GROOVE PLYWOOD.

J. STRUCTURAL LUMBER (2"-4" THICK, EXCEPT NONBEARING STUDS AND PLATES) - Spruce Pine Fir No.1/Ng. 2 OR BETTER WITH 19% MAXIMUM MOISTURE CONTENT IN USE AND SHALL HAVE THE FOLLOWING MINIMUM UNFACTORED PROPERTIES:
 E = 1,400,000 PSI Fc = 425 PSI
 Fb = 450 PSI
 Ft (PARALLEL TO GRAIN) = 1,150 PSI
 Fv = 135 PSI
 STRUCTURAL LUMBER (5"x7" AND LARGER) - Spruce Pine Fir No. 1 OR BETTER WITH 19% MAXIMUM MOISTURE CONTENT IN USE AND SHALL HAVE THE FOLLOWING MINIMUM UNFACTORED PROPERTIES:
 E = 1,300,000 PSI Fc = 425 PSI
 Fb = 850 PSI
 Ft (PARALLEL TO GRAIN) = 700 PSI Fv = 125 PSI

K. PRESSURE TREATED LUMBER - SOUTHERN PINE #2 WITH THE FOLLOWING RETENTION LEVELS: FOR ABOVE GROUND USE - 0.4 PCF FOR PROCESSES USING ACQ AND CBA-A. 0.2 FOR PROCESSES USING CA-B.

L. INSTALL DOUBLE JOISTS UNDER PARTITIONS PARALLEL TO FRAMING.

M. ATTACH MULTIPLE MEMBERS TOGETHER AS FOLLOWS:
 (2) 2x2 2 ROWS 16d NAILS @ 16" O/C
 TOP LOADED WITH 3,2x2 2 ROWS 16d NAILS @ 16" O/C
 SIDE LOADED 3,2x12 3 ROWS - 6d NAILS @ 12" O/C

N. PROVIDE FLUSH FRAMED JOISTS AND HEADERS WITH A PREFABRICATED GALVANIZED (SADDLE TYPE) METAL CONNECTOR UNLESS NOTED OTHERWISE. HANGERS SHALL BE 1/8 GAGE MINIMUM THICK AND HAVE CAPACITY TO RESIST 100# MINIMUM FOR EACH 2X MEMBER IN SHEAR FOR SPECIES OF WOOD USED.

O. BRIDGING FOR WOOD JOISTS (ROOF AND FLOOR) TO BE DIAGONAL WOOD SPACED AS FOLLOWS: SPANS OVER 8'-0" - ONE ROW

P. EXPOSED STRUCTURAL FRAMING MEMBERS IN ABOVE GROUND USE AND WOOD PLATES IN CONTACT WITH SLABS ON GRADE TO BE PRESSURE TREATED. EACH CONNECTOR SHALL BE 1/8 GAGE MINIMUM THICK AND SHALL HAVE THE UPLIFT AND SHEAR CAPACITY AS REQUIRED BY THE TRUSS MANUFACTURER, BUT SHALL NOT BE LESS THAN 350# UPLIFT AND 130# SHEAR (EQUIVALENT TO 2 - 1/2 SA SBPSON ANCHORS) FOR THE SPECIES OF WOOD USED.

Q. STEEL MATERIALS IN CONTACT WITH PRESSED TREATED LUMBER TO BE HOT DIPPED GALVANIZED. MINIMUM GALVANIZED COATING FOR PREFABRICATED METAL CONNECTORS TO BE 6-185 PER ASTM A-653. CONNECTORS, HOT DIPPED GALVANIZED AFTER FABRICATION, IN ACCORDANCE WITH ASTM A-123. FASTENERS HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-153. MECHANICALLY GALVANIZED FASTENERS IN ACCORDANCE WITH ASTM B-695, CLASS 55.

R. PROVIDE SLOTTED (CONTINUOUS) BRIDGING AT BEARING POINTS.

S. INSTALL DOUBLE STUD EACH END OF WOOD BEAMS, UNLESS NOTED OTHERWISE.

T. ATTACH WOOD BLOCKING, WALLERS, ETC., TO STEEL OR CONCRETE FRAMING WITH POWER ACTUATED FASTENERS UNLESS NOTED OTHERWISE. SPACE FASTENERS AT 2'-0" MAXIMUM O/C, STAGGERED. MINIMUM CAPACITY OF EACH FASTENER SHALL BE 100 POUNDS IN SHEAR AND PULLOUT, UNLESS NOTED OTHERWISE.

U. EXTERIOR WALL SHEATHING - THERMO-PLY INSULATIVE SHEATHING AS MANUFACTURED BY SIMPLEX PRODUCTS DIVISION, ADRIAN, MICHIGAN 49221. USE STRUCTURAL GRADE (RED PINK) FOR STUD SPACING OF 16" O/C.

V. SHIP AND INSTALL THERMO-PLY SHEATHING IN COMPLIANCE WITH MANUFACTURERS RECOMMENDATIONS. INSTALL 48" X 96" SHEETS WITH 1/8" TO 1/16" GAP BETWEEN PANELS. INSTALL 48 3/4" X 96" SHEETS WITH A 3/4" OVERLAP. NAIL THROUGH THERMO-PLY INTO STUDS USING 11 GAUGE X 1 1/8" GALVANIZED ROOFING NAILS. FASTEN RED PINK THERMO-PLY AT 3" O/C AT PERIMETER (WHERE EDGE OF PANEL IS UNSUPPORTED BETWEEN STUDS, PROVIDE BLOCKING) AND 6" O/C TO INTERMEDIATE STUDS. FASTEN BLUE PRINT THERMO-PLY AT 3" O/C TO BOTH PERIMETER AND INTERMEDIATE STUDS AND TO BLOCKING AT PANEL EDGES.

3.1.A. WOOD LINTEL SCHEDULE

A. FOR STUD WALL OPENINGS NOT SPECIFICALLY SHOWN IN PLAN (OPENINGS FOR MECHANICAL TRADES, OPENINGS IN BEARING AND NON BEARING WALLS, ETC.) PROVIDE WL-1, WL-2, OR WL-3 AS DIRECTED BY THE ARCHITECT.

B. PROVIDE ONE BEARING STUD AND ONE FULL HEIGHT JAMB STUD EACH END OF WOOD LINTELS AND HEADERS, UNLESS NOTED OTHERWISE. FOR OPENINGS OVER 7'-0", PROVIDE TWO BEARING STUDS AND ONE FULL HEIGHT JAMB STUD, UNLESS NOTED OTHERWISE.

C. LOOSE ANGLE LINTELS SUPPORTING BRICK VENEER AND SPANNING 4'-0" OR MORE SHALL HAVE PRE-PUNCHED HOLES SPACED AT 2'-0" MAXIMUM O/C IN VERTICAL LEG OF ANGLE FOR 10d NAIL ATTACHMENT TO WOOD LINTEL.

MARK	MATERIAL	REMARKS
WL-1	2-2x8 FOR 4" STUD WALL 3-2x8 FOR 6" STUD WALL	FOR OPENINGS UP TO 4'-6"
WL-2	2-2x10 FOR 4" STUD WALL 3-2x8 FOR 6" STUD WALL	FOR OPENINGS 4'-7" TO 5'-6"
WL-3	2-2x12 FOR 4" STUD WALL 3-2x10 FOR 6" STUD WALL	FOR OPENINGS 5'-7" TO 7'-0"
WL-4	3-2x12 FOR 6" STUD WALL	FOR OPENINGS 7'-1" TO 8'-4"

3.3. PREFABRICATED WOOD TRUSSES

A. DESIGN AND INSTALL TRUSSES, BRACING, AND CONNECTORS FOR TRUSSES IN STRICT ACCORDANCE WITH APPLICABLE BUILDING CODE REQUIREMENTS AS WELL AS THE STRUCTURAL BUILDING COMMISSIONS ASSOCIATION (SBCA) AND BY THE TRUSS PLATE INSTITUTE (TPI), UNLESS NOTED OTHERWISE ON THE DRAWINGS.

B. DESIGN TRUSSES TO RESIST LOADS SHOWN ON THE DRAWINGS. ONLY THE OUTLINES OF THE TRUSSES HAVE BEEN SHOWN. WEB CONFIURATION SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER.

C. TRUSSES TO BE DESIGNED FOR DEFLECTIONS AS FOLLOWS:
 ROOF LIVE LOAD L/240, L/360 WITH PLASTER OR STUCCO CEILINGS.
 TOTAL LOAD - L/240.

D. PROVIDE TRUSSES WITH CAMBER IN ACCORDANCE WITH DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES," LATEST EDITION PER CODE, TPI-BSP AND PCI-65.

E. INSTALL BRACING OF WOOD TRUSSES IN ACCORDANCE WITH MANUFACTURERS DESIGN, SBCA, AND TPI, UNLESS NOTED OTHERWISE. THE MINIMUM BRACING ELEMENTS NOTED BELOW ARE TO REMAIN IN PLACE IN THE FINISHED STRUCTURE.

1. CONTINUOUS LATERAL BRACING REQUIRED BY TRUSS DESIGN INCLUDING DIAGONAL BRACING AT ENDS OF THE BUILDING AND AT 16'-0" MAXIMUM INTERVALS IN THE LENGTH OF THE BUILDING.
 2. WEB MEMBER PLANE BRACING.
 3. BOTTOM CHORD PLANE BRACING.

F. TRUSS SUPPLIER SHALL TAKE SPECIAL CARE TO DESIGN AND SUPPLY LATERAL BRACING FOR COMPRESSION MEMBERS OF TRUSSES SHIPPED IN MULTIPLE PIECES AND FIELD CONNECTED.

G. LUMBER SHALL CONFORM TO THE RECOMMENDATIONS OF THE "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION," LATEST EDITION PER CODE, AS PUBLISHED BY THE AMERICAN WOOD COUNCIL. EACH PIECE SHALL BE GRADE MARKED.

H. TRUSS MANUFACTURER SHALL COORDINATE PLATE MATERIAL WITH ANY SPECIAL TREATMENT PROCESS.

I. CONNECT ROOF TRUSSES AT EACH BEARING POINT WITH PREFABRICATED GALVANIZED METAL CONNECTORS AT EACH TRUSS, UNLESS OTHERWISE NOTED. EACH CONNECTOR SHALL BE 1/8 GAGE MINIMUM THICK AND SHALL HAVE THE UPLIFT AND SHEAR CAPACITY AS REQUIRED BY THE TRUSS MANUFACTURER, BUT SHALL NOT BE LESS THAN 350# UPLIFT AND 130# SHEAR (EQUIVALENT TO 2 - 1/2 SA SBPSON ANCHORS) FOR THE SPECIES OF WOOD USED.

J. TRUSS-TO-TRUSS AND TRUSS-TO-HEADER CONNECTIONS SHALL BE DESIGNED BY TRUSS MANUFACTURER.

K. THE BASIC STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF FLOORS, WALLS, AND ROOF ACTING TOGETHER. CONTRACTOR TO PROVIDE GUTS, BRACES, STRUTS, ETC., AS REQUIRED TO ACCOMMODATE LIVE, DEAD, AND WIND LOADS UNTIL FINAL CONNECTIONS BETWEEN THESE ELEMENTS ARE MADE. PERMANENT BRIDGING REQUIRED BY TRUSS DESIGN SHALL BE SIZED AND SUPPLIED BY TRUSS MANUFACTURER. SPECIAL CARE SHALL BE TAKEN TO SIZE AND SUPPLY LATERAL BRACING REQUIRED FOR COMPRESSION MEMBERS OF TRUSSES SHIPPED IN TWO PIECES AND FIELD CONNECTED.

L. BRIDGING, MEMBER BRACING, ETC., SHALL BE AS REQUIRED BY MANUFACTURERS DESIGN AND SHALL BE INSTALLED BY CONTRACTOR IN STRICT ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.

M. ENGAGE THE SERVICES OF AN INDEPENDENT INSPECTION AGENCY TO VISUALLY INSPECT TRUSSES BEFORE AND AFTER ERECTION. INSPECTION AGENCY SHALL CERTIFY THAT THE TRUSSES, CONNECTIONS, AND BRACING HAVE BEEN INSTALLED IN COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

3.4. LAMINATED VENEER LUMBER

A. LVL SHALL BE OF WIDTH, DEPTH, AND OF MULTIPLES AS SHOWN ON PLANS.

B. EACH LVL BEAM SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 E = 1,900,000 PSI
 Fb = 2,800 PSI
 Fc (PARALLEL TO GRAIN) = 2,500 PSI
 Ft = 750 PSI
 Fv = 1,550 PSI
 Iv = 285 PSI

C. WRAP EACH LVL BEAM WITH A WATERPROOF COVERING UNTIL AREA BEHIND BEAM IS PLACED IS PROTECTED FROM THE ELEMENTS.

D. ATTACH MULTIPLE MEMBERS TOGETHER AS FOLLOWS:
 SIDE LOADED: 3- 1/2" BOLTS @ 16" O/C.

E. HOLES, NOTCHES, ETC., SHALL BE APPROVED BY THE LVL MANUFACTURER.

3.6. WOOD STAIRS, GUARDRAILS, & HANDRAILS

A. STAIR SUPPLIER SHALL DESIGN STAIR FRAMING INCLUDING HANDRAILS AND GUARDRAILS TO SUPPORT THE FOLLOWING DESIGN LOADS:

STAIR:
 - DEAD LOAD - AS REQUIRED BY CONSTRUCTION.
 - LIVE LOAD - 100 PSF OR 300-POUND CONCENTRATED LOAD APPLIED ON A 4-SQUARE-INCH AREA AT CENTER OF TREAD OR AT ANY POINT ON A LANDING.

HANDRAILS: A LIVE LOAD OF 20 POUNDS PER LINEAL FOOT OR 200-POUND CONCENTRATED LOAD, WHICHEVER IS GREATER, APPLIED AT ANY POINT AND IN ANY DIRECTION. THESE LIVE LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.

GUARDRAILS: A LIVE LOAD OF 200-POUND CONCENTRATED LOAD, APPLIED AT ANY POINT AND IN ANY DIRECTION TO TOP RAIL, AND 50-POUND CONCENTRATED LOAD APPLIED ON A 1-SQUARE-FOOT AREA AT ANY POINT FOR REMAINING GUARDRAIL METL COMPONENTS. THESE LIVE LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY. EXTERIOR GUARDRAILS SHALL BE DESIGNED TO RESIST APPLICABLE COMPONENTS & CLADDING WIND LOADS IN CONJUNCTION WITH THE LIVE LOADS LISTED ABOVE.

B. PROVIDE HANGERS, CLIP ANGLES, ETC., AS REQUIRED FOR CONNECTION OF STAIR FRAMING TO SURROUNDING FRAMING. SUBMIT SHOP AND ERECTION DRAWINGS INDICATING FRAMING SIZES AND WOOD GRADES AS WELL AS CONNECTIONS OF STAIR COMPONENTS.

	REQUIRED	PROVIDED
WALL	R-13	R-13
FLOOR	R-19	R-19
CEILING	R-49	R-49


STRUCTURAL NOTES

CONCRETE	
DESIGN SOIL BEARING PRESSURE	1500 PSF
DESIGN SOIL LATERAL PRESSURE	45 PCF
CONCRETE COMPRESSIVE STRENGTH	
BASMENT SLAB	2500 PSI
FOUNDATION	3000 PSI

(OWNER)
DESIGN BATH AND KITCHEN
 13363 PIPES LN
 SYKESVILLE, MARYLAND

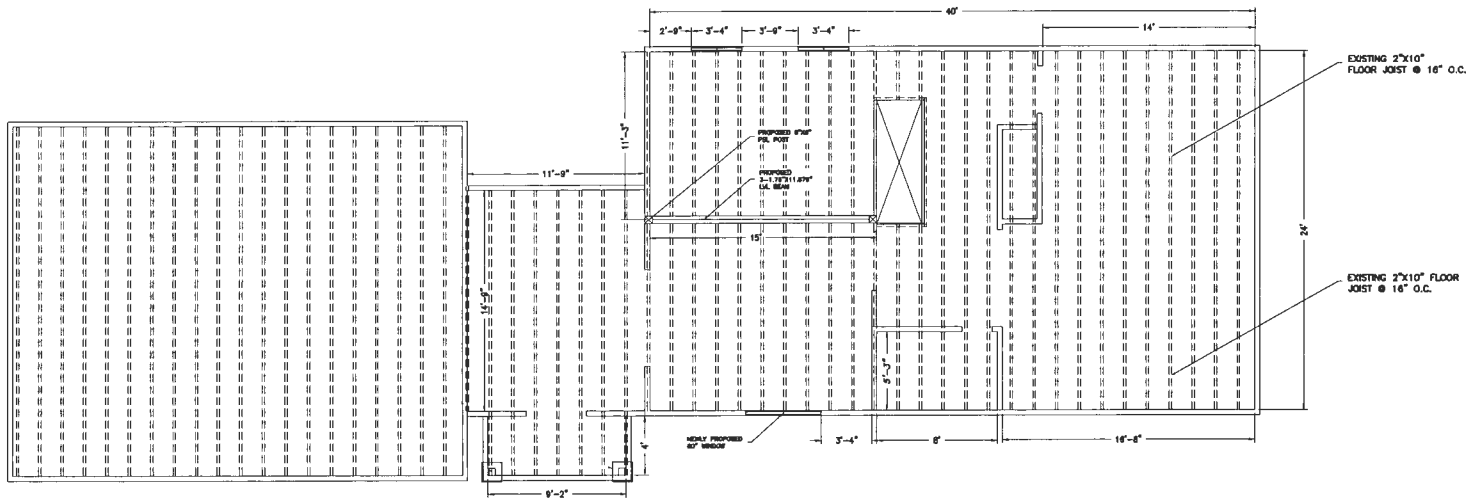
13363 PIPES LN
 SYKESVILLE, MARYLAND

REV	DATE	DESCRIPTION	BY
0	02/01/24	PRELIMINARY	BM

PROFESSIONAL STAMP

 BROOK MESSING, P.E.
 MD PROFESSIONAL ENGINEER L.C. #43595

STRUCTURAL NOTES
S-1

NOTE: GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS BEFORE CONSTRUCTION COMMENCES



PROPOSED SECOND FLOOR FRAMING PLAN
 GRAPHIC SCALE
 1" = 4'-0"

(OWNER)
DESIGN BATH AND KITCHEN
 1383 PIPES LN
 SYKESVILLE, MARYLAND

**13383 PIPES LN
 SYKESVILLE, MARYLAND**

REVISIONS

REV	DATE	DESCRIPTION	BY

0	02/01/24	PRELIMINARY	BM
REV	DATE	DESCRIPTION	BY



BROOK MESFIN, P.E.
 MD PROFESSIONAL ENGINEER LIC. #43595

PROPOSED FRAMING PLAN

S-2