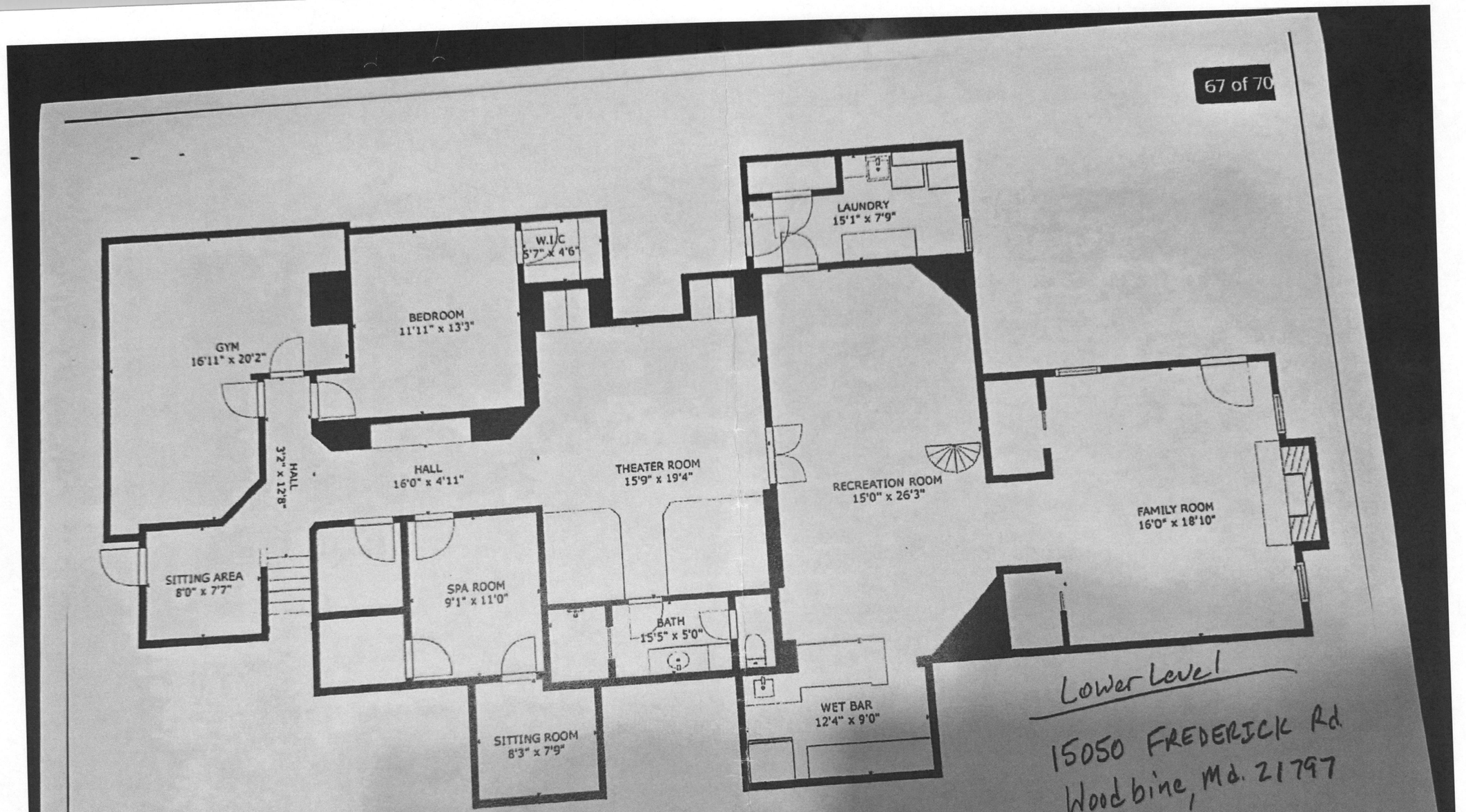


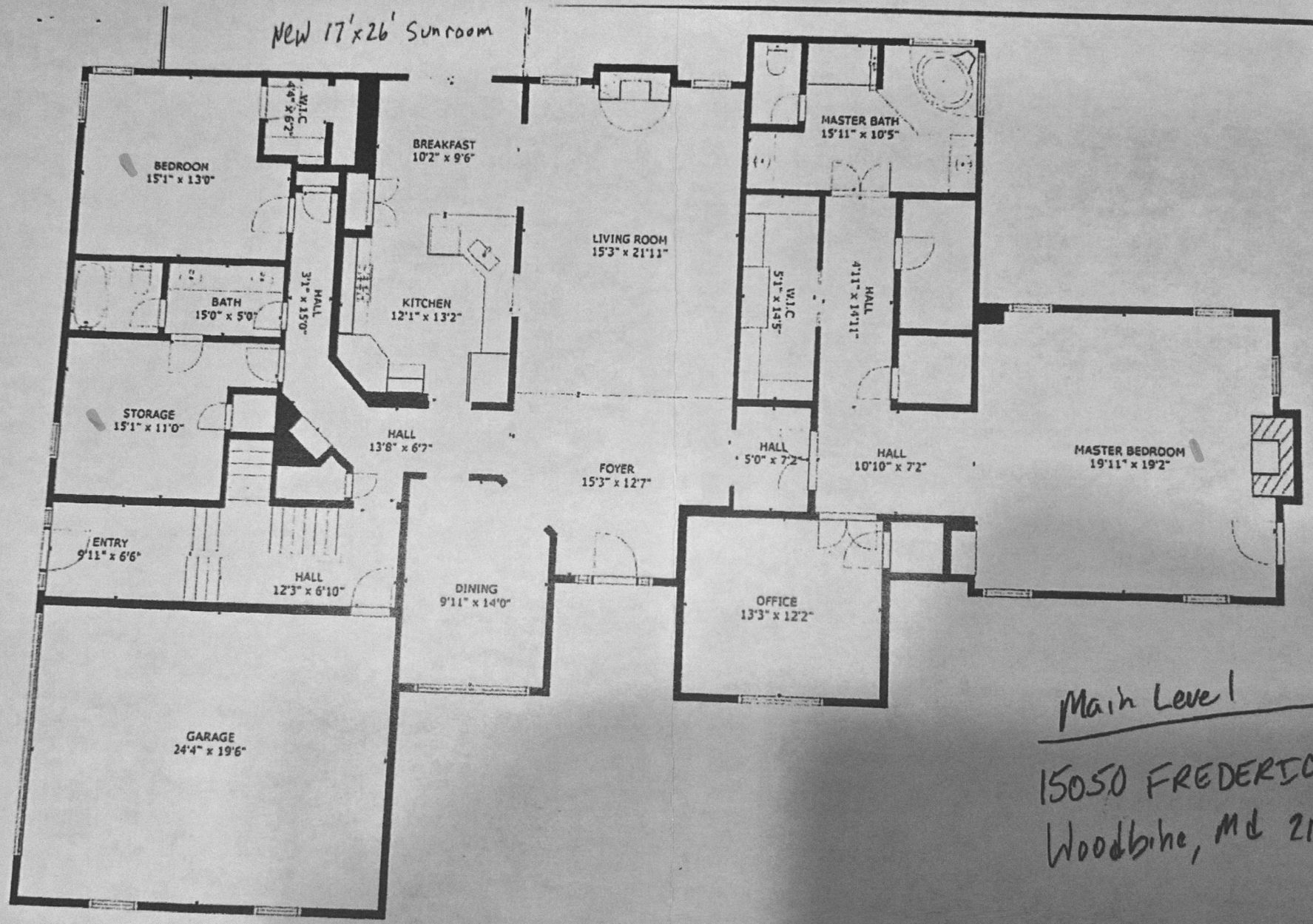
Lower Level

15050 FREDERICK Rd.
Woodbine, Md. 21797

GROSS INTERNAL AREA
LOWER LEVEL: 2432 sq ft, MAIN LEVEL: 2867 sq ft
GARAGE: 239 sq ft, GUEST HOUSE: 515 sq ft
EXCLUDED AREAS: , GARAGE: 1378 sq ft
TOTAL: 6053 sq ft

bright MLS

New 17'x26' Sunroom



Main Level

15050 FREDERICK RD
Woodbine, Md 21797

GROSS INTERNAL AREA
LOWER LEVEL: 2432 sq ft, MAIN LEVEL: 2867 sq ft
GARAGE: 239 sq ft, GUEST HOUSE: 515 sq ft
EXCLUDED AREAS: , GARAGE: 1378 sq ft
TOTAL: 6053 sq ft

ghMLS

I STANDARDS AND CODES

A. DESIGN BUILDING CODE: 2021 IBC
B. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301, ACI 318 AND ACI 302 LATEST EDITIONS.
C. ALL MASONRY WORK SHALL BE IN ACCORDANCE TO: ACI 530/ASCE 5, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"; ACI 530.1/ASCE 6, "SPECIFICATIONS FOR MASONRY STRUCTURES"
D. STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION, EXCEPT CHAPTER 4.2.1, CODE OF STANDARD PRACTICE.
E. ALL LIGHT GAUGE FRAMING SHALL CONFORM TO "THE SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION, BY AISI.
F. ALL WOOD FRAMING SHALL CONFORM TO THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" LATEST EDITION, PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION,
G. IN ADDITION TO THE REQUIREMENTS INCLUDED IN THESE STRUCTURAL NOTES, ALL CONSTRUCTION AND MATERIALS SHALL FURTHER CONFORM TO THE APPLICABLE PROVISIONS OF THE FOLLOWING STANDARDS:
   1. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
   2. AMERICAN CONCRETE INSTITUTE (ACI)
   3. NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
   4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
   5. AMERICAN WELDING SOCIETY (AWS)
   6. AMERICAN IRON AND STEEL INSTITUTE (AISI)
   7. STEEL STRUCTURES PAINTING COUNCIL (SSPC)
   8. AMERICAN FOREST AND PAPER ASSOCIATION
   9. NATIONAL FOREST PRODUCTS ASSOCIATION (NFoPA)

II DESIGN LOADS

A. THESE NOTES/SPECIFICATIONS TAKE PRECEDENCE IF CONFLICTS EXIST WITH PROJECT SPECIFICATIONS OR ARCHITECTURAL NOTES.
B. ROOF LOADS
   1. LIVE LOAD:
      a. GROUND SNOW LOAD, Pg = 25 PSF
      b. FLAT ROOF SNOW LOAD, Pf = 0.7CeCtIPg = 18 PSF (+ DRIFT)
      c. SNOW EXPOSURE FACTOR, Ce = 0.9
      d. SNOW LOAD IMPORTANCE FACTOR, Is = 1.0
      e. THERMAL FACTOR, Ct = 1.1
      f. SLOPE FACTOR, Cs = 1.0
      g. SNOW DRIFT & SLIDING SURCHARGE (PER CODE): SEE TYP DTL
      h. MINIMUM ROOF LIVE LOAD (Lr) = 20 PSF
      i. ROOF RAINFALL RATE = 3.5 IN/HR
      j. RAIN LOAD = <21 PSF
         ROOF DRAINAGE DESIGN IS BY OTHERS. DESIGNER SHALL KEEP SECONDARY DRAIN ELEVATION PLUS HYRAULIC HEAD (ds+dh) UNDER 4".
   2. DEAD LOAD:
      a. SLOPED ROOF TRUSSES = 17 PSF
   3. LIVE LOAD:
      a. UNINHABITABLE ATTICS W/ STORAGE = 20 PSF
C. FLOOR LOADS (PSF)
   1. WOOD FRAMED FLOORS

	DEAD LOAD	LIVE LOAD	TOTAL LOAD
a. LIVING AREAS =	25	40	65

D. WIND LOADS
   1. WIND SPEED (ULTIMATE) = 115 MPH
   2. WIND SPEED (ASD) = 90 MPH
   3. RISK CATEGORY = II
   4. WIND EXPOSURE = B
   5. INTERNAL PRESSURE COEFFICIENT, GCpi = ± 0.18
   6. COMPONENTS AND CLADDING
      115 MPH. EXP. B. H=30'. ZONE 5, ULT. LOAD = +24 / -32 PSF
E. EARTHQUAKE LOADS
   1. SEISMIC IMPORTANCE FACTOR, Ie = 1.0
   2. RISK CATEGORY = II
   3. MAPPED SPECTRAL RESPONSE ACCELERATIONS
      Ss = 13.7% g
      S1 = 4.3% g
   4. SITE CLASS = D
   5. SPECTRAL RESPONSE ACCELERATIONS
      Sds = 14.7% g
      Sd1 = 6.9% g
   6. SEISMIC DESIGN CATEGORY = A
   7. BASIC SEISMIC- FORCE RESISTING SYSTEMS
      SYSTEM 1: BEARING WALL WITH LIGHT-FRAMED SHEAR WALL PANELS
      SYSTEM 2: BEARING WALL WITH ORDINARY REINFORCED MASONRY SHEAR WALLS
   8. DESIGN BASE SHEAR.
      BUILDING TYPE A = 2K
      BUILDING TYPE B = 7K
   9. SEISMIC RESPONSE COEFFICIENTS
      Cs FOR SYSTEM 1 = 0.022
      Cs FOR SYSTEM 2 = 0.073
   10. RESPONSE MODIFICATION FACTORS
      R FOR SYSTEM 1 = 6.5
      R FOR SYSTEM 2 = 2
   11. ANALYSIS PROCEDURE IS EQUIVALENT LATERAL FORCE PROCEDURE AS PER ASCE 7-16 SECTION 12.8
F. FOUNDATION
   1. FOOTING DESIGN IS BASED ON ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF.
   2. FOUNDATION WALLS ARE DESIGNED FOR ASSUMED BACK FILL MATERIAL EQUIVALENT AT REST FLUID PRESSURE OF 60 PSF/FT.
   3. ASSUMED SOIL FRICTION COEFFICIENT =0.3
   4. ASSUMED SOIL PASSIVE PRESSURE 300 PSF/FT
G. DEFLECTION LIMITS

	LIVE LOAD	TOTAL LOAD
1. FLOOR TRUSSES	SPAN/480	SPAN/240
2. ROOF TRUSSES	SPAN/360	SPAN/240

III GENERAL

A. DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.
B. THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION OF WORK ACCORDING TO THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AND SHORING, AS REQUIRED, TO ENSURE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION. THE DESIGN PROCEDURES SHALL CONFORM TO ALL GOVERNING CODES AND SAFETY REQUIREMENTS. TEMPORARY BRACING AND SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS.
D. IT IS RECOMMENDED THAT THE CONTRACTOR ARRANGE A PRECONSTRUCTION MEETING PRIOR TO CONSTRUCTION OF ELEVATED CONCRETE SLABS AND PRIOR TO CONSTRUCTION OF WOOD FRAMING. AT A MINIMUM, THE ENGINEER, GENERAL CONTRACTOR, FRAMING SUBCONTRACTOR OR CONCRETE SUBCONTRACTOR SHOULD BE IN ATTENDANCE.

IV SITE WORK

F. UN-BRACED EXCAVATIONS SHALL BE SLOPED NO GREATER THAN (2) HORIZONTAL TO (1) VERTICAL. OR PER OSHA STANDARDS
G. GENERAL
   1. SEE NOTE II. F.1 FOR THE DESIGN SOIL BEARING VALUE. BEARING VALUE SHALL BE VERIFIED BY THE ON SITE GEOTECHNICAL ENGINEER.
   2. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW EXTERIOR GRADE AND SHALL PROJECT 1'-0" INTO UNDISTURBED VIRGIN SOIL OR ENGINEERED FILL.
   3. ALL BEARING STRATA SHALL BE ADEQUATELY DRAINED PRIOR TO PLACING FOUNDATION CONCRETE.
   4. THE SIDES OF FOOTINGS MAY BE EARTH-FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE. OTHERWISE, FORMS MUST BE USED.
   5. NO EXCAVATION SHALL BE CLOSER THAN AT LEAST A SLOPE OF TWO HORIZONTAL TO ONE VERTICAL TO THE UNDERSIDE OF ANY FOOTING OR UNDERGROUND UTILITY (WET OR DRY) WITHOUT THE WRITTEN AND CERTIFIED PERMISSION OF THE GEOTECHNICAL ENGINEER. STEP FOOTINGS AT A RATIO OF TWO HORIZONTAL TO ONE VERTICAL TO AVOID ZONE OF INFLUENCE ON ADJACENT UNDERGROUND STRUCTURES OR UTILITY.
   6. FOUNDATION ELEMENTS THAT ARE TO SUPPORT FILL ON BOTH SIDES SHALL BE BACKFILLED SIMULTANEOUSLY AND UNIFORMLY ON BOTH SIDES.
   7. FOUNDATION ELEMENTS THAT ARE TO SUPPORT FILL ON ONE SIDE ONLY SHALL BE PROPERLY BRACED BY PERMANENT STRUCTURAL ELEMENTS PRIOR TO BACKFILLING. PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL PERMANENT BRACING IS IN PLACE.
   8. PROVIDE SHORING AND PROTECTION FOR EXCAVATION BANKS AS NECESSARY TO PREVENT CAVING.
   9. ENGINEERED FILL SHALL BE PLACED IN 8" MAXIMUM HEIGHT LOOSE LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS ESTABLISHED BY ASTM D-698.

V CONCRETE

A. STRUCTURAL CONCRETE
   1. ALL REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615 GRADE 60 AND DETAILED, FABRICATED, AND PLACED CONFORMING TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES. (ACI 315).
   2. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL MESH EDGES SHALL LAP A MINIMUM OF 2 SQUARES.
   3. CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS, Fc(PSI) SHALL BE:
      a. FOOTINGS AND FOUNDATION WALLS AT SLAB ON GRADE – 3000 PSI
   5. SLUMP:
      a. CONCRETE MIX SHALL BE PROPORTIONED TO PROVIDE ADEQUATE WORKABILITY AND CONTROL SEGREGATION OF AGGREGATE. SPECIFY A TARGET SLUMP IN CONCRETE SUBMITTAL.
      b. IN NO CASE SHALL SLUMP EXCEED 8 INCHES.
   6. CAST-IN-PLACE CONCRETE SHALL BE READY-MIX PER ASTM C94. THE MIX SHALL BE PROPORTIONED WITH:
      a. PORTLAND CEMENT – ASTM C150
      b. AGGREGATES – ASTM C33 WITH 0.75 INCH MAXIMUM DIAMETER
      c. NO CALCIUM CHLORIDE SHALL BE PERMITTED
      d. AIR ENTRAINMENT – ASTM C260
      e. WATER REDUCING ADMIXTURE – ASTM C494
      f. FLYASH – ASTM C618 CLASS F, 20% MAXIMUM BY WEIGHT
      g. BLAST SLAG –ASTM C989, MAX 50%
      h. SILICA FUME – ASTM C1240, MAX 10%
      i. WATER – CLEAN AND POTABLE
   7. CONCRETE COVER BETWEEN FACE OF REBAR AND FACE OF CONCRETE SHALL BE ACCORDING TO THE FOLLOWING DIMENSIONS UNLESS NOTED OTHERWISE. ACI 117 TOLERANCES APPLY (3/8" MORE COVER IS OK, BUT NO LESS COVER THAN SPECIFIED):
      a. FOOTING FACES CAST AGAINST EARTH – 3"
      b. WALLS AND TOPS OF FOOTINGS EXPOSED TO EARTH OR WEATHER –
         - #3 THRU #5 BARS – 1½"
         - #6 BARS AND LARGER – 2"
   8. ALL CONCRETE EXPOSED TO FREEZE/THAT SHALL HAVE A MINIMUM AIR ENTRAINMENT PER ACI 318 4.4.1
      a. 6% +/- 1% FOR SLABS
      b. 5% +/-1% FOR WALLS.
   9. STANDARD WEIGHT CONCRETE SHALL NOT EXCEED 150 PCF IN WEIGHT. LIGHTWEIGHT CONCRETE WHERE SPECIFIED SHALL NOT EXCEED 115 PCF IN WEIGHT.
   10. PROVIDE PROPERLY TIED SPACERS, CHAIRS, BOLSTERS, ETC, AS REQUIRED AND NECESSARY TO ASSEMBLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE. USE WIRE BAR TYPE SUPPORTS COMPLYING WITH CRSI RECOMMENDATIONS. USE PLASTIC TIP LEGS ON ALL EXPOSED SURFACES.
   11. REINFORCEMENT SPLICES SHALL BE LAP SPLICES PER ACI 318 CHAPTER 12.
   12. WHERE BAR LENGTHS ARE GIVEN ON DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED. INCREASE BAR LENGTHS WHERE REQUIRED TO MEET MINIMUM DEVELOPMENT LENGTH REQUIREMENTS.
   13. PROVIDE CORNER BARS AT ALL WALL, BEAM, AND FOOTING INTERSECTIONS. UNLESS NOTED OTHERWISE, MATCH CONTINUOUS REINFORCING.
   14. RESTRICT THE ADDITION OF MIX WATER AT THE JOB SITE. DO NOT ADD WATER WITHOUT THE APPROVAL OF THE INSPECTIONS ENGINEER AND DO NOT EXCEED SLUMP LIMITATIONS. USE COLD WATER FROM THE TRUCK TANK AND REMIX TO ACHIEVE CONSISTENCY. THE REPORTS SHALL INDICATE HOW MUCH WATER WAS ADDED AT THE JOB SITE.
   15. CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.
   16. ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATORS.
   17. ALL CONCRETE SHALL BE CURED IMMEDIATELY AFTER FINISHING OPERATIONS,
   18. REPAIR AND PATCH DEFECTIVE AREAS WITH CEMENT MORTAR IMMEDIATELY AFTER REMOVAL OF FORMS, EXCEPT WHERE REINFORCING IS VISIBLE. CONTACT STRUCTURAL ENGINEER FOR EVALUATION OF EXPOSED REINFORCING.
   19. ALL GROUT SHALL BE PRE-MIXED NON-SHRINKABLE, NON-METALLIC CONFORMING TO ASTM C827, AND SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI WITHIN 24 HOURS AND 6000 PSI AT 28 DAYS. PRE-GROUTING OF BASE PLATED WILL NOT BE PERMITTED..
   20. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, AND SLAB RECESSES AS REQUIRED BY OTHER TRADES BEFORE CONCRETE IS PLACED. NO SLEEVE, OPENING, OR INSERT MAY BE PLACED IN BEAMS, JOISTS, OR COLUMNS UNLESS APPROVED BY THE ENGINEER.
   21. CONTRACTOR SHALL VERIFY EMBEDDED ITEMS, INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, BOLT CLUSTERS, WELD PLATES, ETC., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.
   22. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER DESIGN AND CONSTRUCTION OF ALL FORMWORK, SHORING, AND RESHORING. .

VI MASONRY

A. HOLLOW LOAD BEARING UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE II WITH A MINIMUM NET COMPRESSIVE UNIT STRENGTH OF 1900 PSI. (NET AREA COMPRESSIVE MASONRY STRENGTH fm=1500 PSI.
B. MORTAR SHALL BE TYPE S TYPICALLY AND TYPE M BELOW GRADE AND IN CONTACT WITH SOIL. MORTAR SHALL CONFORM TO ASTM C270 (PROPORTION OR PROPERTY SPECIFICATION).
C. FILLED CELLS SHALL BE FILLED WITH COARSE GROUT. COARSE GROUT SHALL CONFORM TO ASTM C476. PROPERTIES SHALL INCLUDE: 2500 PSI AT 28 DAYS, 3/8" MAXIMUM AGGREGATE, AND 8" – 11" SLUMP. FILLED CELLS MAY ALTERNATIVELY BE FILLED WITH A 3000 PSI PEA GRAVEL MIX CONCRETE. THE PEA GRAVEL MIX SHALL BE PROPORTIONED WITH A MAXIMUM AGGREGATE SIZE OF 3/8 INCH DIAMETER TO PROVIDE A MINIMUM OF 1/2 INCH CLEARANCE. ADDITIONALLY, THE PEA GRAVEL MIX SHALL PROVIDE AN 8 TO 11- INCH SLUMP.
D. A REINFORCED CMU BOND BEAM SHALL BE PROVIDED IN ALL WALLS SHOWN ON THE STRUCTURAL DRAWINGS AT EACH FLOOR, THE ROOF, AND AT THE TOP OF ANY PARAPET WALL. UNLESS NOTED OTHERWISE. BOND BEAMS SHALL BE AS FOLLOWS: AT THE FLOOR LEVELS PROVIDE 8" X 8" MINIMUM WITH (2) CONTINUOUS #4 BARS.
E. WHERE EXPANSION ANCHORS ARE SHOWN, MASONRY CELLS SHALL BE FULLY GROUTED AT MINIMUM 8" ABOVE AND BELOW EACH EXPANSION ANCHOR OR OTHER ANCHORS UNLESS NOTED OTHERWISE.
F. UNLESS NOTED OTHERWISE ON PLAN, PROVIDE A MINIMUM OF (2) FULLY GROUTED COURSES BY 32" LENGTH AT ALL STRUCTURAL STEEL BEARING.
G. VERTICAL REINFORCING BARS SHALL BE HELD IN POSITION, WITH BAR POSITIONERS, AT THE TOP AND BOTTOM OF BAR AND AT 8'-0" O.C. MAXIMUM WITH A MINIMUM CLEARANCE OF 1/2" FROM MASONRY. THE CLEAR DISTANCE BETWEEN BARS SHALL NOT BE LESS THAN ONE BAR DIAMETER, NOR LESS THAN 1". CENTER BARS IN WALLS U.N.O.
H. PROVIDE ACI 90 DEGREE STANDARD HOOKS INTO FOOTINGS AND ROOF TIE BEAM. MAINTAIN VERTICAL REINFORCING SHOWN ON DRAWINGS ABOVE AND BELOW MASONRY OPENINGS EXCEEDING 10'-0" CLEAR. CONTINUE FOUNDATION DOWELS BELOW ALL MASONRY OPENINGS.
I. REINFORCING BARS SHALL BE STRAIGHT EXCEPT FOR BENDS AROUND CORNERS AND WHERE BENDS OR HOOKS ARE DETAILED ON THE PLANS.
J. MINIMUM LAP SPLICE SHALL BE 36 BAR DIAMETERS. WIRE TIE LAP SPLICES.
K. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICALS. DOWELS SHALL BE GROUTED INTO A CORE IN VERTICAL ALIGNMENT, EVEN IF IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCEMENT.
L. HORIZONTAL WALL REINFORCING SHALL BE ZINC COATED COLD DRAWN "HB-120" TRUSS MESH (OR EQUIVALENT) CONFORMING TO ASTM A82 SPACED AT 16" O.C. MAXIMUM, HORIZONTAL JOINT REINFORCING SHALL CONSIST OF (2) 9 GA OR LARGER HORIZONTAL BARS WELD CONNECTED WITH 9 GA OR LARGER CROSS-WIRES. ZINC COATING CONFORM TO ASTM A116-73. LAP SPLICE JOINT REINFORCEMENT 12-INCHES MINIMUM.
M. PROVIDE HORIZONTAL JOINT REINFORCEMENT AT MASONRY OPENINGS SUCH AS DOORS AND WINDOWS. CONTINUE JOINT REINFORCING FOR THE FIRST AND SECOND BLOCK COURSE ABOVE AND BELOW MASONRY OPENING. EXTEND JOINT REINFORCING A MINIMUM OF TWO FEET BEYOND OPENINGS.
N. CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF MASONRY IN EACH GROUT POUR WHEN THE POUR HEIGHT EXCEEDS 5'. CLEANOUTS SHALL BE SAW-CUT 4" X 4".
O. GROUT POUR HEIGHT SHALL NOT EXCEED 24'. PLACE GROUT IN 5' MAX. LIFTS HEIGHTS.
P. CONSOLIDATE GROUT POURS AT THE TIME OF PLACEMENT BY MECHANICAL MEANS AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT.
Q. STORE BLOCKS ON PALLETS AND COVER WITH VISQUEEN.
R. PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE FACE SHELL MORTAR BEDDING HORIZONTAL AND VERTICAL FULLY MORTAR WEBS IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS AND ADJACENT TO GROUTED CELLS.
S. MASONRY CONTROL JOINTS SHALL BE INSTALLED AT LOCATIONS INDICATED ON THE DRAWINGS. ADDITIONALLY, INSTALL MASONRY CONTROL JOINTS SPACED AT 24'-0" O.C. UNLESS NOTED OTHERWISE.
T. MASONRY INSPECTION SHALL BE PROVIDED BY A QUALIFIED AGENT IN ACCORDANCE WITH ACI 530-1.5. INSPECTION SERVICES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE WORK IN PROGRESS AS WELL AS MATERIALS, EQUIPMENT, AND PROCEDURES.
U. LINTELS: PROVIDE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. LINTELS SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING METHODS:
V. PRECAST CONCRETE U-LINTEL: PROVIDE 8 INCH DEEP PRECAST, PRE-STRESSED REINFORCED CONCRETE U-LINTEL. MINIMUM END BEARING SHALL BE 8 INCHES.
W. STEEL ANGLES: PROVIDE ONE STEEL ANGLE (LONG LEG VERTICAL) FOR EACH 4 INCHES OF MASONRY WALL THICKNESS ACCORDING TO THE LOOSE LINTEL SCHEDULE.
X. PRECAST CONCRETE: PROVIDE REINFORCED CONCRETE LINTEL FOR EACH 4 INCHES OF WALL THICKNESS ACCORDING TO THE FOLLOWING: 2'-8" OR LESS (3-5/8"X7- 5/8" WITH 1#4 BOTTOM), 2'-9" TO 6'-0" (3-5/8"X7-5/8" WITH 1#4 TOP AND BOTTOM), 6'-1" TO 8'-0" (3-5/8"X7-5/8" WITH 1#4 TOP AND 1#5 BOTTOM). PRECAST LINTELS SHALL BE MARKED TO INDICATE TOP OR BOTTOM.
Y. BRICK VENEER WALL TO HAVE NON-CORROSIVE METAL TIES AT 24" O.C. VERTICALLY AND 16" O.C. HORIZONTALLY, AND WEEP HOLES AT 24" O.C. AT BASE FLASHING. FOR WALL HEIGHTS EXCEEDING 30'-0" ABOVE FOUNDATIONS, PROVIDE ADJUSTABLE BRICK TIES @ 16" O.C. VERTICALLY & HORIZ. (DW-10 BY HOHMANN & BARNARD OR EQUAL) TIES TO BE SCREWED TO STUDS W/ APPROVED SCREWS.

VII WOOD

A. GENERAL
   1. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED. IN ACCORDANCE W/ AWPA U1. SEE NOTE #5 FOR ADDITIONAL INFORMATION.
   2. DIMENSIONED LUMBER SHALL BE DRESSED S4S, AND SHALL BEAR THE GRADE STAMP OF THE MANUFACTURER'S ASSOCIATION. ALL LUMBER SHALL BE SOUND, SEASONED, AND FREE FROM WARP.
   3. MINIMUM GRADES, FOR DIMENSIONED LUMBER SHALL BE AS NOTED BELOW AS DEFINED BY THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, BY NFoPA. ALL WOOD MEMBERS SHALL BE MANUFACTURED TO COMPLY WITH PS20 OF "AMERICAN SOFTWOOD LUMBER STANDARDS" AND SHALL HAVE 19% MAXIMUM MOISTURE CONTENT.
   4. THE FOLLOWING MINIMUM PROPERTIES SHALL APPLY FOR ALL WOOD FRAMING:
      a. WALL STUDS, BEAMS, HEADERS, AND JOISTS SHALL BE MINIMUM SPRUCE PINE FIR #2 (NORTH PRODUCT) (SPF#2) GRADE HAVING THE FOLLOWING REFERENCE DESIGN VALUES UNLESS NOTED OTHERWISE:
         Fb = 875 PSI
         Fc PAR. = 1150 PSI
         E = 1,400,000 PSI
         SEE PLANS FOR SPACING AND SPECIAL REQUIREMENTS.
      b. ALL WALL TOP AND BOTTOM (SILL) PLATES FOR LOAD BEARING WALLS SHALL BE NON-P.T. SOUTHERN PINE #1 (SP#1) FOR 2x4 AND SP#2 FOR 2x6 HAVING THE FOLLOWING REFERENCE DESIGN VALUES UNLESS NOTED OTHERWISE (REVISED PER 2013 SPIB SUPPLEMENT #13).

		2x4 STUDS (SP#1)	2x6 STUDS (SP#2)
Fb	=	1500 PSI	1000 PSI
Fv	=	175 PSI	175 PSI
Fc PERP.	=	565 PSI	565 PSI
E	=	1,600,000 PSI	1,400,000 PSI

      c. ALL LUMBER USED IN DECKS AND BALCONIES, EXPOSED TO WEATHER, OR OTHERWISE REQUIRED TO BE TREATED SHALL BE SOUTHERN PINE #2 (SP#2) PRESSURE TREATED IN ACCORDANCE WITH AWPA C2. ENSURE COMPATIBILITY OF HARDWARE WITH PRESSURE TREATMENT USED. LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES (REVISED PER 2013 SPIB SUPPLEMENT #13):

		2x6	2x8	2x10	2x12
Fb	=	1000 PSI	925 PSI	800 PSI	750 PSI
Fv	=	175 PSI	175 PSI	175 PSI	175 PSI
Fc PERP.	=	565 PSI	565 PSI	565 PSI	565 PSI
E	=	1,400,000 PSI	1,400,000 PSI	1,400,000 PSI	1,400,000 PSI

      d. ALL 5x5 AND LARGER POSTS SHALL BE PRESSURE TREATED SP#2 GRADE HAVING THE FOLLOWING REFERENCE DESIGN VALUES UNLESS NOTED OTHERWISE (WET SERVICE CONDITIONS):
         Fb = 850 PSI
         Fc PERP. = 375 PSI
         Fc PAR. = 525 PSI
         E = 1,200,000 PSI
      e. LVL'S (LAMINATED VENEER LUMBER) SHALL BE 1 3/4" WIDE, OF THE DEPTH SPECIFIED ON THE PLANS, AND SHALL BE SECURED TOGETHER AS DIRECTED BY THE MANUFACTURER. LVL SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUE (100% LOAD DURATION):
         Fb = 2600 PSI (FOR 12" DEPTH)
         Fc PERP = 750 PSI
         Fv = 285 PSI
         E = 2,000,000 PSI\
      f. WOLMANIZED OR "PSL PLUS" PARALLAM PSL HEADERS AND BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUE; (100% LOAD DURATION)

		DRY CONDITION	EXPOSED TO WEATHER
Fb	=	2117 PSI	1827 PSI (FOR 12" DEPTH)
Fc PERP.	=	533 PSI	368 PSI
E	=	1,660,000 PSI	1460,000 PSI
Fv	=	241 PSI	197 PSI

      g. 2.0E PARALLAM PSL HEADERS AND BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUE; (100% LOAD DURATION)
         Fb = 2,900 PSI (FOR 12" DEPTH)
         Fc PERP. = 750 PSI
         Fv = 290 PSI
         E = 2,000,000 PSI
      h. 1.8E PARALLAM PSL COLUMNS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUE.(100% LOAD DURATION)
         Fb = 2,400 PSI (FOR 12" DEPTH)
         Fc PAR. = 2,500 PSI
         E = 1,800,000 PSII
      i. THE DESIGN LOADS FOR THE CROSS SECTION AREA OF WOOD STUDS IN FIRE RATED ASSEMBLIES DOES NOT EXCEED THE MAXIMUM ALLOWABLE STRESS OF 385PSI. THIS IS IN ACCORDANCE WITH THE UL FIRE RESISTANCE DIRECTORY.
   5. PRESSURE TREATED LUMBER:
      a. ALL EXTERIOR WOOD MEMBERS SHALL BE ACQ/MCA TREATED WOOD. ALL HANGERS, ANCHORS, FASTENERS, AND ANY STEEL IN CONTACT WITH ACQ TREATED WOOD SHALL BE HOT DIP GALVANIZED WITH MIN. 185 COATING OR STAINLESS STEEL.
      b. ALL INTERIOR WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE SODIUM BORATE TREATED WOOD. IF ACQ LUMBER IS USED FOR INTERIOR, REQUIREMENTS IN NOTE VIII.5.a SHALL BE MET.

B. FASTENERS AND CONNECTORS
   1. ALL CONNECTION HARDWARE SHALL BE GALVANIZED AND SUPPLIED BY SIMPSON STRONG-TIE, HILTI, OR BY AN APPROVED EQUIVALENT MANUFACTURER.
   2. BOLT AND LAG SCREW DIMENSIONS SHALL COMPLY WITH ANSI/ANSI B18.2.1. WOOD SCREWS DIMENSIONS SHALL COMPLY WITH ANSI/ASME B18.6.1. NAIL DIMENSIONS SHALL COMPLY WITH ASTM F1667.
   3. MINIMUM BENDING STRESS Fyb FOR FASTENERS SHALL BE AS FOLLOWS:
      a. BOLTS
         Fyb = 45,000 PSI
      b. LAG SCREWS
         1/4"ø Fyb= 70,000 PSI
         5/16"ø Fyb = 60,000 PSI
         3/8"ø AND LARGER Fyb = 45,000 PSI
      c. NAILS AND WOOD SCREWS
         0.099" ≤ D ≤ 0.142" Fyb = 100,000 PSI
         0.142" ≤ D ≤ 0.177" Fyb = 90,000 PSI
         0.177" ≤ D ≤ 0.236" Fyb = 80,000 PSI
         0.236" ≤ D ≤ 0.273" Fyb = 70,000 PSI
   3. THRU BOLTS SHALL BE INSTALLED AS FOLLOWS:
      a. BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER.
      b. CAREFUL CENTERING OF HOLES IN MAIN MEMBERS AND SPLICE PLATES IS REQUIRED. TIGHT FIT REQUIRING FORCIBLE DRIVING OF BOLTS SHALL NOT BE DONE.
      c. A METAL PLATE OR WASHER NOT LESS THAN A STANDARD OVERSIZED CUT WASHER SHALL BE BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT.
      d. ALL BOLTS SHALL BE SNUGLY TIGHTENED. CONNECTIONS, WHICH HAVE LOOSENED DUE TO SHRINKAGE OF THE WOOD MEMBERS, SHALL BE RE-TIGHTENED.
      e. BOLTS SHALL BE INSTALLED SUCH THAT THE THREADED PORTIONS OF THE BOLTS ARE EXCLUDED FROM THE SHEAR PLANES.
      f. CARRIAGE BOLTS ARE NOT PERMITTED
   3. LAG SCREWS AND WOOD SCREWS SHALL BE INSTALLED AS FOLLOWS:
      a. LAG SCREWS SHALL BE INSTALLED IN PRE-DRILLED HOLES.
      b. THE CLEARANCE HOLE FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH OF PENETRATION AS THE LENGTH OF THE SHANK.
      c. THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 75% FOR SO. PINE, 70 % FOR OTHER SPECIES, OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION.
      d. THE THREADED PORTION OF THE LAG SCREW SHALL BE INSERTED IN ITS LEAD HOLE BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER.
      e. SOAP OR OTHER LUBRICANT SHALL BE USED ON THE LAG SCREWS OR IN THE LEAD HOLES TO FACILITATE INSERTION AND PREVENT DAMAGE TO THE LAG SCREW.
   4. WHERE SPECIFIED, "SDS" SCREWS REFER TO "SIMPSON STRONG DRIVE" SHALL BE MANUFACTURED BY SIMPSON STRONG. ESR REPORT # 2236. 1/4" DIAMETER UNLESS NOTED OTHERWISE. SCREW THREADS SHALL BE FULLY PENETRATED INTO THE MAIN MEMBER. ALTERNATE FASTENERS MAY SUBMITTED FOR APPROVAL. 1/4" LAG SCREWS ARE NOT AN ACCEPTABLE REPLACEMENT.

C. ROUGH CARPENTRY
   1. PROVIDE SOLID BLOCKING CONTINUOUS TO FOUNDATIONS UNDER ALL BEARING WALLS AND POSTS.
   2. PROVIDE DOUBLE JOISTS OR SPECIAL TRUSS UNDER ALL WALLS/PARTITIONS THAT EXTEND ONE-HALF OR MORE OF THE FLOOR FRAMING SPAN.
   3. PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL BEARING POINTS AND AT A MINIMUM OF EIGHT-FOOT CENTERS ALONG JOIST AND RAFTER SPANS.
   4. ALL ROOF SHEATHING SHALL BE 5/8" FOR SLOPED ROOFS AND 3/4" FOR SLOPES LESS THAN 3:12. WOOD SHEATHING SHALL BE OSB OR PLYWOOD C-C, C-D, OR STRUCTURAL II PER THE "AMERICAN PLYWOOD ASSOCIATION." MINIMUM NAILING PATTERN SHALL BE 8d COMMON NAILS SPACED AT 6" CENTERS AT EDGE SUPPORTS AND 12" CENTERS AT INTERMEDIATE SUPPORTS U.N.O. UNLESS TONGUE AND GROOVE SHEATHING IS USED, PLYWOOD CLIPS ARE REQUIRED AT PLYWOOD EDGES BETWEEN EACH FRAMING MEMBER.
   5. ALL PLYWOOD/OSB SUB-FLOORING SHALL BE 23/32" T&G APA RATED 48/24 SHEATHING OR STURD-I-FLOOR 24" O.C. RATED. SHEATHING SHALL BE GLUED AND NAILED. INSTALL 100 PERCENT GLUE-LINE AND A MINIMUM-NAILING PATTERN OF 8d COMMON NAILS (0.131"ø) SPACED AT 6" CENTERS AT EDGE SUPPORTS AND 12" CENTERS AT INTERMEDIATE SUPPORTS SHALL BE USED. U.N.O. 8d SINKER NAILS (0.113"ø) SHALL BE SPACED AT 4" EDGE AND 12" FIELD. #8 SCREWS MAY BE USED IN LIEU OF NAILS AND ARE ENCOURAGED.
   6. ALL EXTERIOR STUD WALL SHEATHING SHALL BE 7/16" APA RATED OSB/PLYWOOD SHEATHING NAILED W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT ALL INTERMEDIATE SUPPORTS. UNLESS NOTED OTHERWISE ON SHEAR WALL SCHEDULES AND DETAILS.
   7. PROVIDE 1/8" GAP BETWEEN WALL AND FLOOR SHEATHING PANELS TO ALLOW FOR SHRINKAGE AND SWELLING.
   8. PROVIDE 3 1/2 INCH MINIMUM BEARING FOR STANDARD LUMBER BEAMS.
   9. ALL WOOD TOP PLATE SPLICES SHALL BE STAGGERED 4'-0" MINIMUM.
   10. ALL WALL SHEATHING SHALL BE CONTINUOUS BETWEEN TOP PLATES AND BOTTOM PLATE OF WALL ABOVE.
   11. ALL MULTIPLE MEMBERS ARE TO BE FASTENED TOGETHER WITH 10d NAILS AT 12" O.C. 2 ROWS FOR BEAMS 9"-12" DEEP, 3 ROWS FOR BEAMS 14"-18" DEEP (STAGGERED).
   12. STUDS SHALL BE DOUBLED AT ALL ANGLES AND AROUND ALL OPENINGS WITH TRIPLE STUDS AT CORNERS. UNLESS NOTED OTHERWISE ON PLANS AND OR DETAILS.
   13. PROVIDE MID-HEIGHT BLOCKING AT STUDS TO PREVENT BUCKLING UNDER CONSTRUCTION LOADING. WHERE WALL SHEATHING IS REQUIRED TO HAVE BLOCKED PANEL EDGES, COORDINATE MID-HEIGHT BLOCKING LOCATION WITH SHEATHING SPACING.
   14. SHRINKAGE: THE WOOD STRUCTURE OF THE BUILDING WILL SETTLE DUE TO NATURAL SHRINKAGE OF THE WOOD MEMBERS. OVER- BORE STUDS 1/4" AT PLUMBING PENETRATIONS BUT NOT MORE THAN ALLOWED BY CODE (40% MAX FOR STUDS, 60% MAX IF STUDS ARE DOUBLED), SEE TYPICAL DETAILS FOR MORE INFORMATION. OTHER SYSTEMS INCLUDING BUT NOT LIMITED TO PLUMBING, HVAC, GAS, ELECTRICAL, ETC. SHALL BE INSTALLED TO ACCOMMODATE 1/4" SHRINKAGE PER FLOOR.
   15. TO MINIMIZE SHRINKAGE, WOOD FRAMING SHALL BE SHIPPED AND KEPT DRY. WOOD BLOCKING SHALL BE INSTALLED VERTICALLY, NOT FLAT. FLAT WOOD MEMBERS SHALL BE KEPT TO A MINIMUM.
   16. CONTRACTOR SHALL REVIEW TYPICAL DETAILS FOR ALLOWABLE HOLE SIZES IN WOOD STUDS. CONTRACTOR SHALL AVOID DRILLING THROUGH MULTIPLE WOOD STUDS AND MAKE HORIZONTAL CONNECTIONS IN THE FLOOR SYSTEM WHEN POSSIBLE. OVER DRILLED STUDS WILL NEED TO BE REPAIRED OR REPLACED. PLEASE NOTIFY SER OF LOCATION FOR HOLES IN WOOD STUDS PRIOR TO DRILLING.

D. ENGINEERED LUMBER
   1. ALL ENGINEERED LUMBER SHALL CONFORM TO THE MINIMUM PRODUCT SPECIFICATIONS AND INSTALLATION REQUIREMENTS AS PROVIDED BY TRUSS JOIST MACMILLAN/ ILEVEL MANUFACTURED PRODUCTS.
   2. PROVIDE INSTALLATION AND MINIMUM FASTENING AS REQUIRED BY THE MANUFACTURER, UNLESS NOTED OTHERWISE.

VIII ABBREVIATIONS

ADD'L. = ADDITIONAL	INFO. = INFORMATION
A.F.F. = ABOVE FINISHED FLOOR	MAX. = MAXIMUM
ARCH. = ARCHITECTURAL	MIN. = MINIMUM
B.E.W. = BOTTOM EACH WAY	MFR. = MANUFACTURER
BM. = BEAM	N.T.S. = NOT TO SCALE
BOTT. = BOTTOM	O.C. = ON CENTER
BRG. = BEARING	P# = POST/COLUMN NUMBER
CLR. = CLEAR	PL. = PLATE
CONC. = CONCRETE	PLYWD. = PLYWOOD
CONT. = CONTINUOUS	SECT. = SECTION
DWGS. = DRAWINGS	STL. = STEEL
EA. = EACH	SUBFL. = SUBFLOOR
ELEV. = ELEVATION	T.O. = TOP OF
EQUIV. = EQUIVALENT	TSB. = TIMBER STRAND BOARD
EXP. = EXPANSION	TYP. = TYPICAL
EXT. = EXTERIOR	U.N.O. = UNLESS NOTED OTHERWISE
E.W. = EACH WAY	W/ = WITH
FL. = FLOOR	WD. = WOOD
F.S. = FOOTING STEP	
FTG. = FOOTING	

DRAWINGS INDEX

Project Name:	15050 FREDRICK RD.
Project Number:	25-001
Project Location:	WOODBINE, MD 21797

SCOPE OF WORK

1. HOME OFFICE INTERIOR REMODELING.
2. ADD A NEW 1ST FLOOR, 2ND FLOOR AND ROOF TO EXISTING HOME OFFICE
3. NEW INTERIOR FINISH AND INSULATION.

NO.	ISSUE/REVISION	DATE

Drawing: GENERAL NOTES

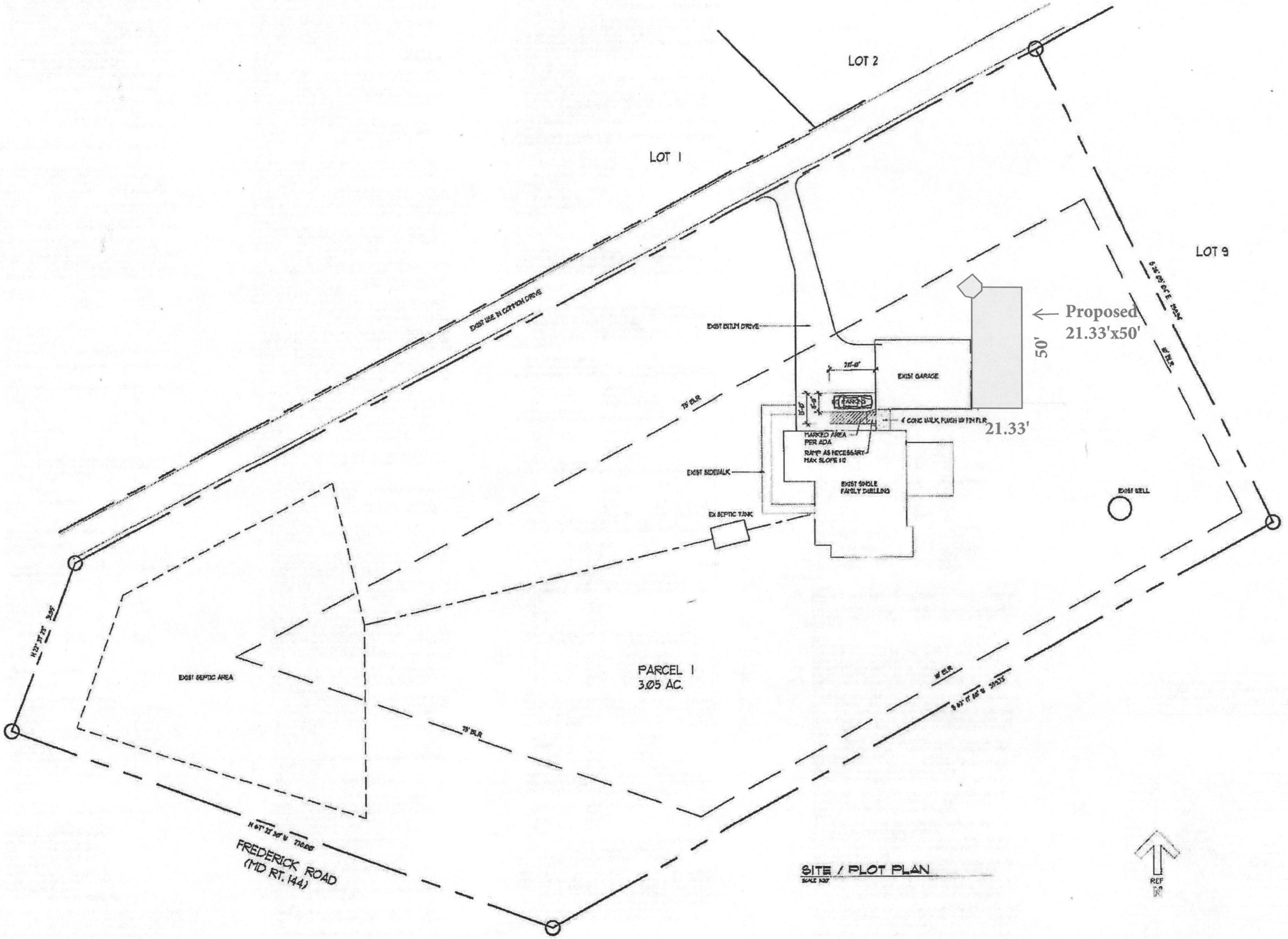
Project: KATHURIA GARAGE AT 15050 FREDRICK ROAD
WOODBINE, MD 21797

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.27311, EXPIRATION DATE 04/22/2026

Nader Elhajj
2025.05.12
20:08:22-04'00'

STATE OF MARYLAND · NADER R. ELHAJJ · 27311 · PROFESSIONAL ENGINEER

Date: 05/12/2025	Project No.: 25-001
Drawn: R.A.A.	Scale: SEE PLANS
Designed: R.A.A.	Drawing No.:
Checked: R.A.A.	S-001



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2025.05.12
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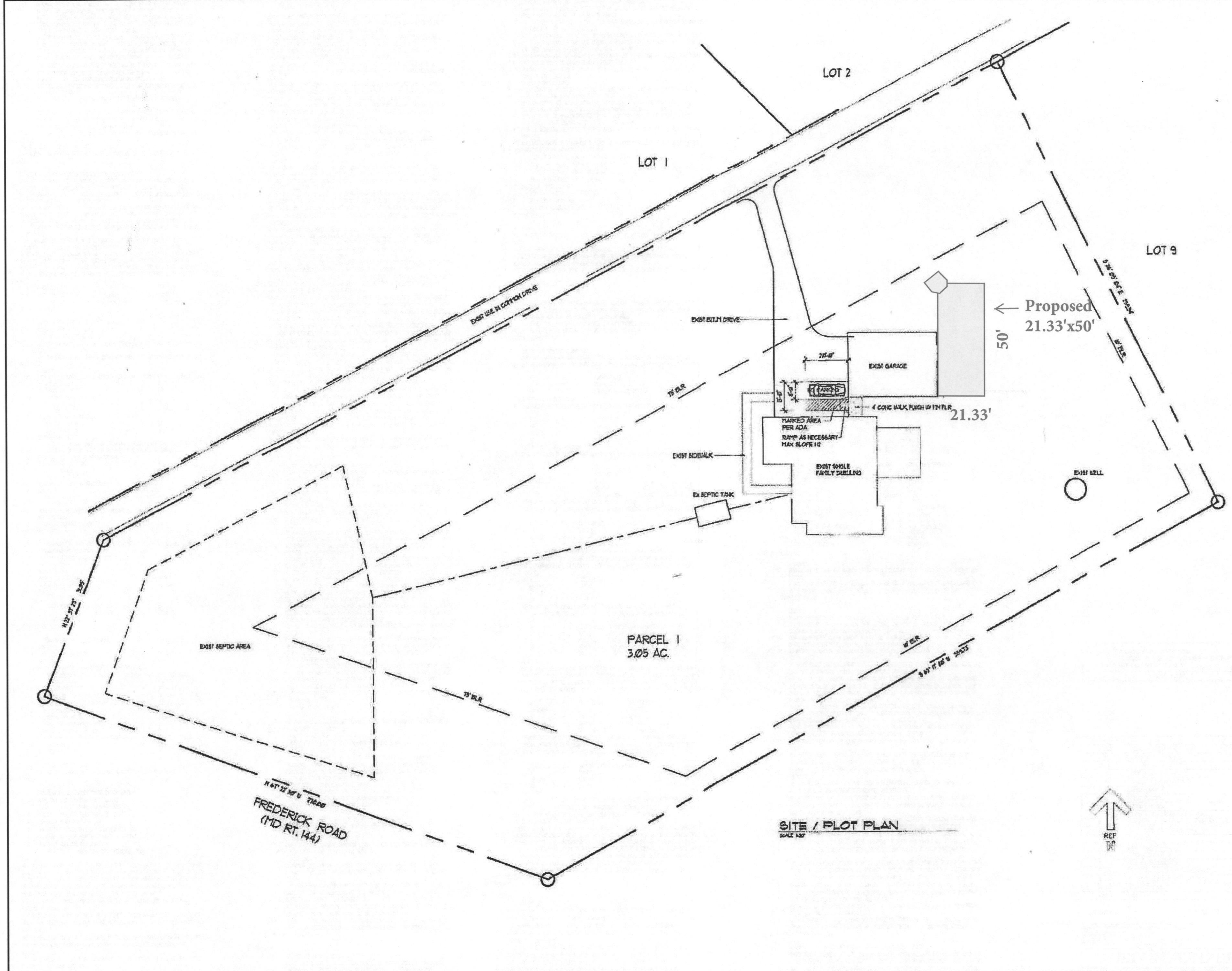
STATE OF MARYLAND — NADER R. ELHAJJ — 27311 — PROFESSIONAL ENGINEER

NO.	ISSUE/REVISION	DATE

Drawing: **SITE PLAN**

Project: **KATHURIA GARAGE AT 15050 FREDRICK ROAD**
WOODBINE, MD 21797

Date: 05/12/2025	Project No.: 25–001
Drawn: R.A.A.	Scale: SEE PLANS
Designed: R.A.A.	Drawing No.:
Checked: R.A.A.	C-001



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