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Cleveland Heights, OH 44118 • (845) 352-0086
License No. 0914970 Exp. 12/31/25



Drawn by	Job number
rf	2433

Additions and Renovations to

Tolchinsky Residence
3811 Bendemeer Road, Cleveland Heights, 44118

Planting Plan

Issued for

3/6/2025

Drawing number

SL1

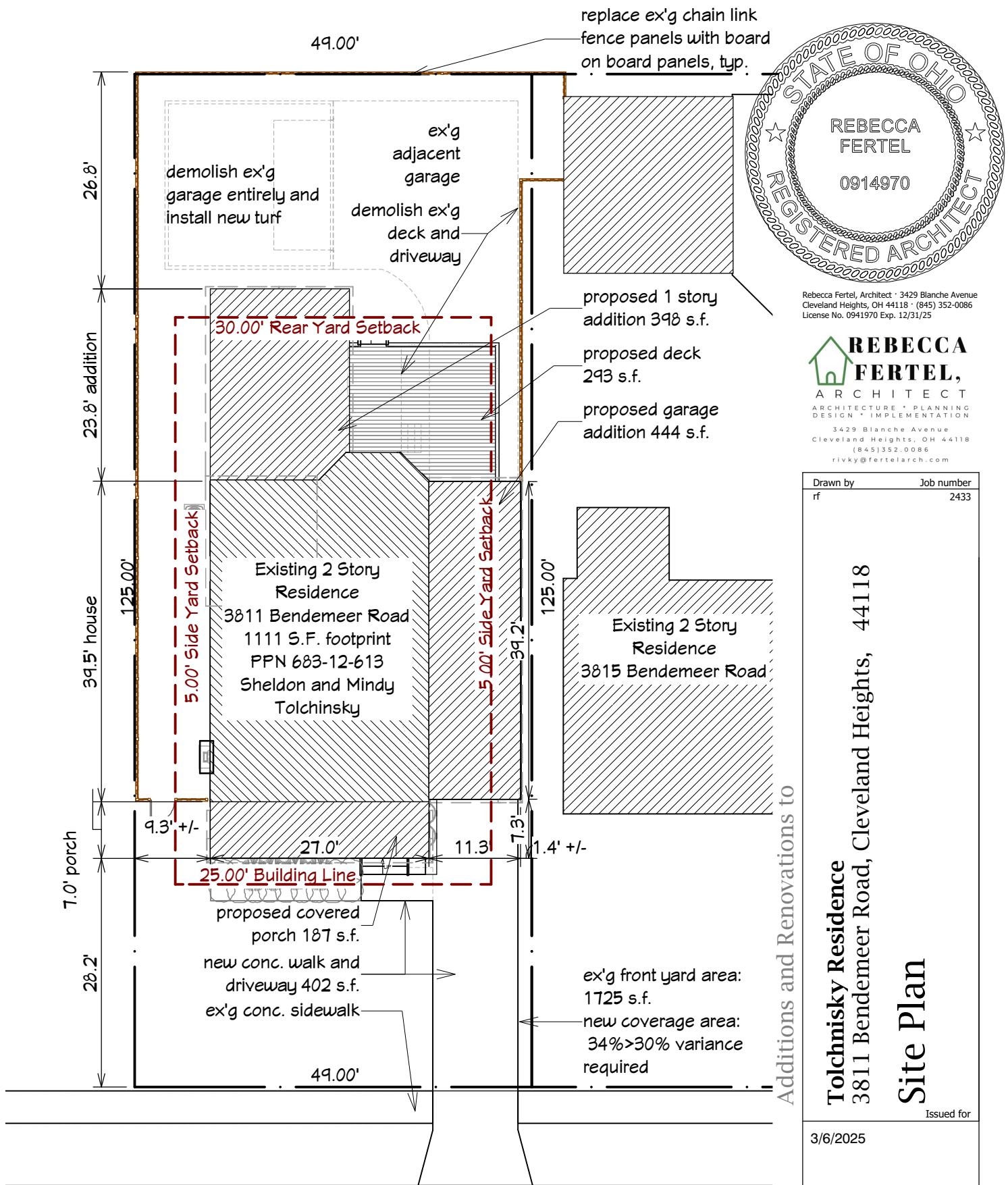
BENDEMEER ROAD 50'

1
SL1

Landscape Plan

1/16 in = 1 ft

N



BENDEMEER ROAD 50'

1 Site Plan
s1 1/16 in = 1 ft

N

s1

Drawing number

SPECIFICATIONS DIVISION 1- GENERAL REQUIREMENTS

BUILDING CODE: All work under this contract shall be subject to the **RESIDENTIAL CODE OF OHIO** for One-, Two- and Three-Family Dwellings, latest edition, and all municipal and local laws and regulations.

CONTRACT: The Owner will enter into a working relationship with the selected **General Contractor** based on an agreement format proposed by **General Contractor** and approved by **The Owner**. The Contract Documents, including The Drawings, Specifications, and General Conditions are complimentary and what is required by one shall be as if required by all.

Generally, the Specifications take precedence over the Drawings. Should conflicts occur within the Contract Documents, the Contractor is assumed to have based his cost on the more expensive method of performing the Work unless The Architect has issued clarification before submittal of the Bid Proposal or the Contractor has specifically clarified the issue within his proposal.

INSURANCE: Before beginning the Work, **The Contractor** shall provide to **The Owner** a Certificate of Insurance for an amount equal to the Contract Amount and shall also provide a copy of his current Worker's Compensation Certificate. He shall also provide proof of Builder's Risk and Liability Insurance. **The Owner** will obtain or increase existing Homeowner's Insurance to cover work incorporated into the job.

JOB SITE SECURITY/SAFETY/CONDITION: Barriers, barricades, signs or warning lights, and other safety devices shall be provided to ensure safety to **The Owner**, workers, and the general public from hazardous conditions which may arise as a result of the work. **The Contractor** shall utilize all means necessary during demolition and construction to ensure that all new construction and existing finished spaces are thoroughly protected from vandalism, theft, water and wind damage; and shall remedy/replace, at **The Contractor's** expense, any such damage that does occur.

Debris: On a daily basis **The Contractor** shall place all construction debris in a mobile refuse container, located where agreed with **The Owner**, to ensure a safe, orderly and clean construction site. All debris shall be removed at completion of the project. No burying or burning of construction debris shall be permitted unless approved in advance by **The Owner**.

The Contractor shall provide a portable toilet for use by all personnel, located where directed by **The Owner**, which shall be cleaned and serviced on a regular basis.

MATERIALS PROTECTION/ STORAGE: Construction materials stored outside shall be covered and protected with weatherproof tarps. Wood and similar materials shall not be stored in contact with the ground.

WARRANTY: **The Contractor** shall provide to **The Owner** a minimum one-year guarantee on materials, equipment and workmanship to commence at the point of substantial completion for all contract work. **The Contractor** shall furnish **The Owner** with copies of all equipment guarantees and Owner's Manuals.

WORK: Before submitting his Bid Proposal, **The Contractor** shall visit the Project Site and familiarize himself with existing conditions and shall carefully study and compare the **Contract Documents** with the existing conditions and report to **The Architect** any errors, discrepancies, inconsistencies or omissions, and materials, products, systems, procedures, and construction methods shown or specified which are incorrect, inadequate, obsolete, or unsuitable for actual field conditions discovered, or which **The Contractor** would not warrant as required by **The Contract Documents**.

Prior to ordering materials or doing work at the site, **The Contractor** shall verify dimensions and conditions affecting materials to be ordered or work to be done, to insure that information shown on **The Contract Documents** accurately reflects actual conditions, and shall not proceed without **The Architect's** instructions if there are omissions, errors, discrepancies or inconsistencies.

The Contractor shall provide all labor, material, equipment, apparatuses and accessories required to complete all work shown on these drawings, or reasonably implied and necessary for the completion of the project. **All materials and equipment to be installed following manufacturers' instructions and best construction methods and standards.**

The Contractor shall obtain and pay for all required permits, royalties, shipping charges, fees and licenses and shall arrange for all inspections necessary for the proper execution of the Work. Approval Certificates shall be posted in a prominent, central location and per local authority's requirements.

Substitutions for items herein specified, or shown on Drawings, must be approved by **The Architect**. The phrase "equal" in the **Drawings** or **Specifications** shall be interpreted as meaning equal in the opinion of **The Architect**, and must have his approval prior to ordering.

EXISTING CONDITIONS:

SELECTIVE DEMOLITION: Where any portion of an existing structure is to be removed, the remaining structure shall be shored, braced or underpinned as may be required prior to beginning the demolition. Temporary support shall remain in place until permanent support or construction is completed.

Contractor to include removal, termination, or relocation of all existing electrical, plumbing, HVAC, phone/TV antenna or cable/stereo wiring, central vacuum, electronic pet barriers, lawn irrigation systems, or other devices as required for demolition or new construction.

PROJECT CLEANING: At the completion of the project, and during the project as may be appropriate, **The Contractor** shall thoroughly clean all work, including, but not limited to, the following: removal of mortar spatters or stains from all interior and exterior masonry; removal of masonry waterproofing above finish grade; removal of any spatters or stains from exterior siding, roofing, or other exterior materials; removal of all stains from all exposed concrete work, except for Crawl Space concrete; removal of stains and cleaning of counter tops, ceramic tile, plumbing fixtures and fittings, etc.; thorough cleaning of faucet screens and plumbing traps; vacuuming of all floors, followed by wet mopping of hardwood, ceramic, stone or other hard surface floors; dusting of all walls, ceilings, trim, doors, windows, cabinets, etc., including the interiors of all cabinets; removal of all window and door stickers, paint or stain overlapping on glass, and other glass spatters; polishing of all windows, mirrors or other glass.

In addition, **The Contractor** shall be responsible for the removal, including final vacuuming, of all construction, or other, debris from joist, rafter, stud, or other cavities prior to concealing with flooring, drywall

A copy of the **Drawings and Specifications**, any **Addenda** issued before or during construction, and all detail drawings submitted during construction, shall be kept and maintained in a suitable condition on the site for use by **The Owner, Architect, General Contractor, and all tradesmen**.

SPECIFICATIONS DIVISION 2 - SITE AND EXISTING CONDITIONS

SITE ACCESS: **The Contractor** shall access the site, stockpile construction materials and park construction vehicles and equipment where agreed with **The Owner**. Work shall be executed in a manner to minimize damage to existing drives, walks, lawns, plantings, trees, house, utilities, etc. Any such items that are damaged by construction activities shall be repaired to their original condition at **The Contractor's** expense.

The Contractor shall remove topsoil in areas of new excavations, if any, and stockpile where agreed with **The Owner** for reuse as finish grading material. **The Contractor** shall limit site disturbance to minimum required for access and mobility.

SOIL EROSION PROTECTION: Slopes greater than 12% and open and exposed soil areas including any stockpiles of subsoil or topsoil shall be enclosed with straw wattles, fiber rolls, straw bale dams, or other recycled materials to prevent soil from washing onto adjacent property or into drainage paths. Such barriers shall be maintained during all construction phases of work, through final grading.

TREE PROTECTION: **The Contractor** shall actively protect all trees onsite unless requested otherwise by **The Owner** on the drawings. Before heavy equipment is employed on site, **PROTECTION FENCING** must be erected where required to prevent root damage by equipment travel within tree drip line. **The Contractor** shall obtain approval of the **Owner** prior to removal of any trees not directly within perimeter of new construction.

TREE PLANTINGS REMOVAL:

All trees to be removed will be handled directly by Owner, prior to the start of excavation work. **The Owner** shall remove all plantings in area of construction that are to be saved, prior to the start of excavation work.

EXCAVATION: Prior to beginning any excavation work, **The Contractor** shall ascertain the location of all underground utilities and services, using utility company location services if necessary, and carefully avoid damage to these items, or interruption of service, to include electric, phone, water, gas, sanitary/storm sewers, etc. The cost to repair and restore any damage to such services shall be paid for by **The Contractor**.

The **Contract Documents** have been prepared with an assumed soil bearing capacity of 2,000 psf. No sub-surface geotechnical report or soil bearing logs have been provided or reviewed prior to design of this work. **The Contractor** shall verify soil conditions and shall notify **The Architect** and **The Owner** of any suspected or unusual soil conditions that may affect the footing or foundation work, and shall not proceed until so directed. No new work shall bear on unusual or questionable soil. Excavate to depths as required to provide floor levels as shown on Drawings. Provide a minimum footing depth of 3'-6" below grade. If existing footings are shallower than new adjacent footings, DO NOT disturb soil, call Architect for further instructions BEFORE proceeding.

Minimize over-digging and do not allow water to stand in excavation (pump as required). Stockpile excavated subsoil needed for back-filling and grading where agreed with the Owner and dispose of any remaining soil off-site.

FOOTING DRAINS: Install 4" dia, Schedule 35 perforated footing drains, holes oriented down, at the interior and exterior of all footings, with minimum slope of 1/16" per L.F. Exterior footing drain system shall include a minimum of (2) flush ports, or clean-out risers to grade, with threaded PVC caps, and shall be wrapped in silt filter fabric. Filter fabric shall wrap an additional 6" radius of gravel around the pipe; fabric shall not be tightly wrapped to pipe itself. Layout and install where required to permit cleaning of all footing drains. Plug ends of downspout and footing drains when work is in progress to prevent clogging, and clean out before covering.

Note: existing invert heights must be low enough to allow for proper placement and slope of new footer drains, and **The Owner and The Architect must be notified immediately if the existing system is not of proper depth or is otherwise inadequate**. Any alternate drainage system must be approved by **The Architect**, **The Owner** and by **The Building Inspector**.

DOWNSPOUT DRAINS: **The Contractor** shall connect new boots to the existing downspout drainage system using 4" dia, Schedule 35 solid PVC with minimum slope of 1/8" per L.F. No connection with the footing drainage system is allowed, except downstream combination to storm main exit pipe.

BACK-FILLING: Foundations shall not be back-filled until Crawlspace or Basement floor slab and First Floor deck are in place or until walls are adequately braced to accommodate loading. Before backfilling, thoroughly clean all excavations around foundations and any retaining walls of all masonry and other construction debris. Backfill around foundation shall be washed gravel to within 6" of finished grade. Backfill top 6" with clean soil. Excavations for utilities under steps and/or terraces shall be filled with granular material.

GRADING: Prior to final grading, clean site of all construction debris. Rough grade with clean excavated subsoil in a fashion to continue natural contours and provide good drainage away from house. Provide drainage swales or yard drains connected to storm sewers for any low areas where surface water is likely to collect. **The Contractor** shall be responsible for ensuring that finish grades are a minimum of 8" below siding/sill plate, and that all surface water drains away from house. Finish grade with stockpiled topsoil and provide additional topsoil if necessary.

Project Description

THE PROJECT CONSISTS OF A REMODEL AND SECOND FLOOR EXPANSION

Project Area

EX'G LOT AREA: 6125 s.f.

EX'G FIRST FLOOR FOOTPRINT: 1111 s.f.

NEW FIRST FLOOR FOOTPRINT: 398 s.f.

TOTAL FIRST FLOOR AREA: 1509 s.f.

NEW DECK AREA: 293 s.f.

NEW GARAGE AREA: 444 s.f.

NEW PORCH AREA: 187 s.f.

Total Developed Area= House + Yard additions: 1325 s.f.
Less Demolished Driveway and Garage Area: (~1229 s.f.)

Design Loads

SEISMIC DESIGN CATEGORY: "B"

WIND SPEED (mph): 115

1. FLOOR LIVE LOADS:

FIRST FLOOR: 40 psf

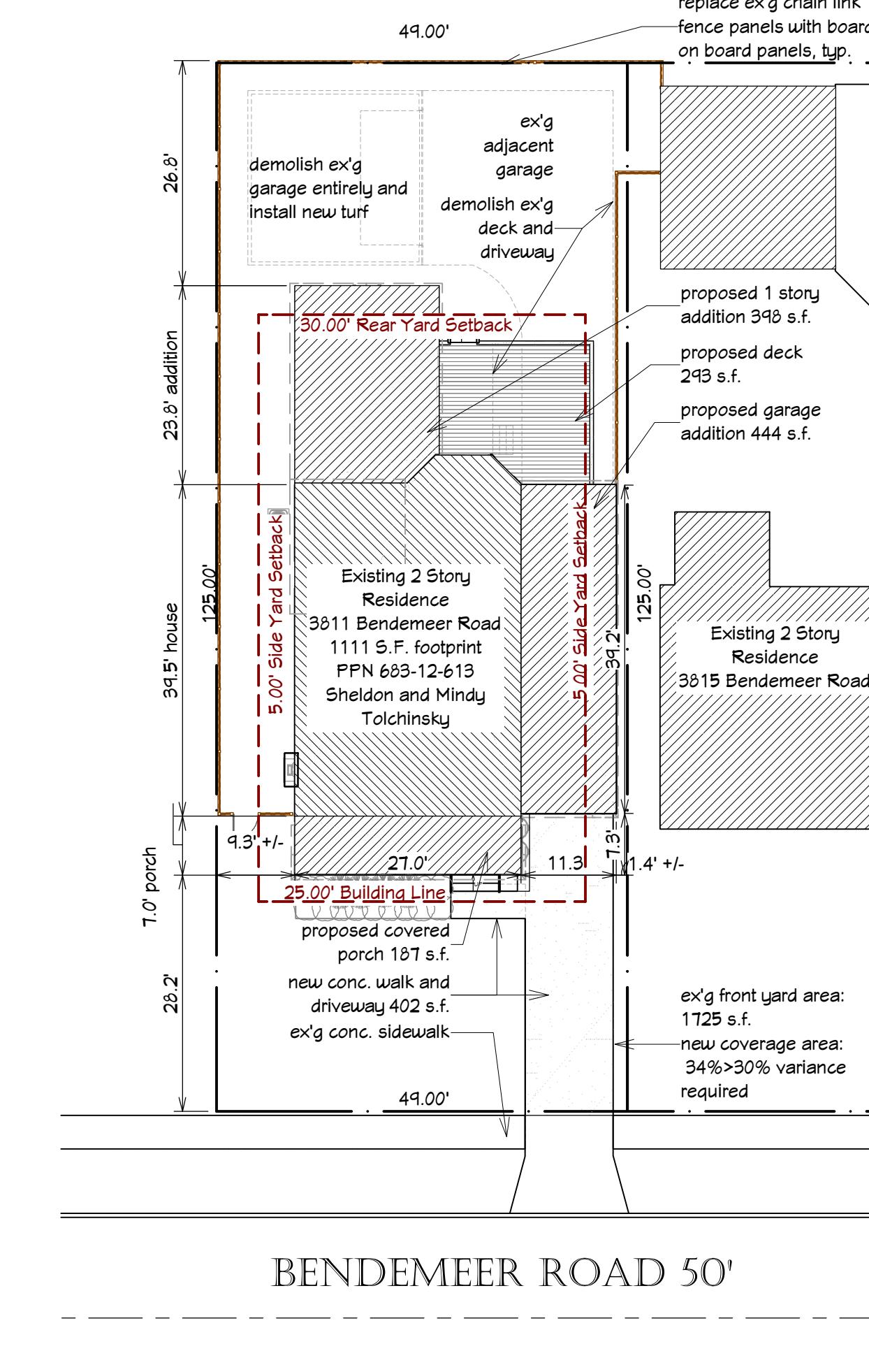
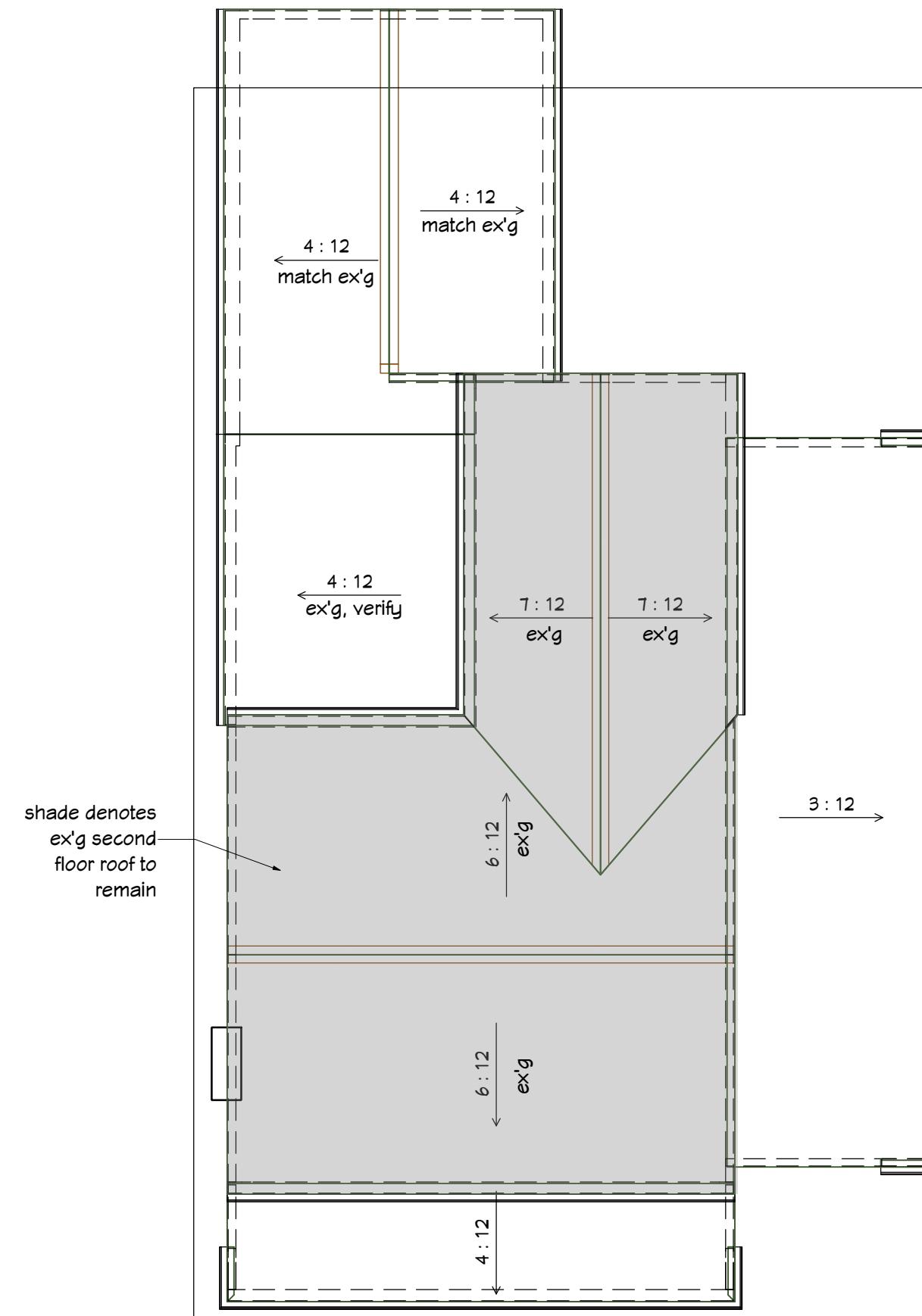
SECOND FLOOR: 30 psf

FLOOR DEAD LOADS: 10 psf

2. ROOF LIVE LOADS (SNOW): 30 psf

ROOF/CEILING DEAD LOAD: 12 psf

TOTAL ROOF LOADING: 42 psf



BENDMEER ROAD 50'

2 Roof Plan
A-1 1/8 in = 1 ft N

1 Site Plan
A-1 1/16 in = 1 ft N



Additions and Renovations to the
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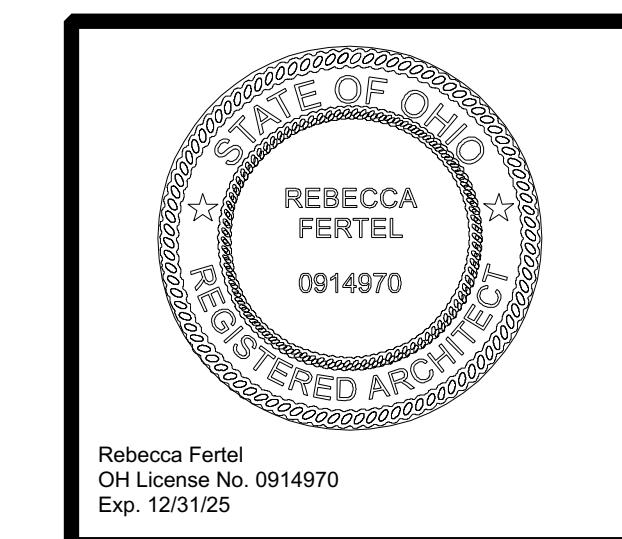
Title Sheet, Site Plan, Roof Plan, Spec's Div 1-2

1-2

Issued for
12/23/24 Preliminary
1/16/25 Revised
3/5/2025 BZA Garage

Drawing number

A-1



REBECCA
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ARCHITECT
ARCHITECTURE • PLANNING
DESIGN • IMPLEMENTATION
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Drawn by Job number
rf 2433

SPECIFICATIONS DIVISION 3 - CONCRETE

GENERAL: Cast-in-place concrete construction shall conform to the latest edition of American Concrete Institute ACI-301, 305, 306, 315, 318, and 347, unless noted otherwise. Slump for all classes of concrete to be between 4" and 5" (ASTM C-143).

Concrete shall be discharged at the site within 1 1/2 hours after water has been added to the cement and aggregates. Addition of water to the mix at the project site will not be permitted. CONCRETE WASTE and wash water should be returned with each concrete truck for disposal at the concrete batch plant. If this is not possible, operators can install prefabricated or built-on-site concrete washout area per *The Architect's* instructions. Contractor must not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not allow excess concrete to be dumped onsite, except in designated concrete washout areas. COMPRESSIVE STRENGTH: The compressive strength of concrete in 28 days shall be as follows:

- Grout: 2,500 psi minimum
- Footings and Interior slabs: 3,000 psi
- Exterior and Garage slabs-on-grade: 4,000 psi with 6% +/- 1% Air-entrainment

Water/Cement Ratio: The water/cement ratio shall not exceed the following:

Comp. Strength	Non Air-entrained	Air-entrained
3,000 psi	0.58	
4,000 psi	0.53	0.44

REINFORCING: Concrete steel reinforcing bars shall conform to ASTM A-615, Grade 60. Welded wire fabric (w.w.f.) shall conform to ASTM A-185-79 (60,000 psi yield). All detailing, fabrication, and placement of reinforcing steel shall conform to the Manual of Standard Practice for Detailing Reinforced Concrete Members.

For footings and concrete walls: Lap all reinforcing bar splices 45 bar diameters minimum. Bend all horizontal bars 36 bar diameters past each corner or provide equivalent corner bars matching horizontal reinforcing.

For slabs: Wire shall lap one full mesh 2" and be securely wired each side and end.

Reinforcing placed at 1/3 of slab thickness from top of slab, typical.

Properly support all reinforcing and wire mesh on chairs. Minimum coverage for concrete reinforcing shall be:

- 1. Concrete deposited against the ground: 3"
- 2. Concrete exposed to the weather: 2"
- 3. Slabs/wall not exposed to the weather: 3/4"
- 4. Beams/columns (over main reinforcing): 2"

FOOTING: Sizes and reinforcement shall be as detailed on the Drawings but shall not be less than 10" thick, 8" wider than the wall supported, and reinforced with (2) #5 bars, bot. Below masonry chimney construction, footings to be min. 12" thick, 12" wider than masonry above, with #5 bar @ 12" each way, bot. Carefully form all footings with 2x material staked and adequately supported. Verify that footing layout is square and the tops of all footings are level. Construction over footings shall not commence for 48 hours after casting minimum, or per local code. Footings to reach 3000 psi compressive strength at 28 days, water/cement ratio not to exceed 0.58.

CONCRETE FOUNDATION WALL:

INTERIOR SLAB: 4" thick, 3000 psi concrete with w.w.f. 6x6- W2.9xW2.9. Slab to reach 3000 psi compressive strength at 28 days, water/cement ratio not to exceed 0.58. Under floor slab construction, provide minimum 4" compacted #57 limestone fill down to undisturbed earth beneath a 10 mil concrete vapor barrier. Finish to be metal floated and steel troweled to a smooth, ridgeless, finish (no machine finishing will be permitted without approval from *The Owner and The Architect*), at a level to match adjacent concrete slabs as shown on Drawings. Slabs to be level to within 1/4" per 10' radius.

EXTERIOR/GARAGE SLAB: 4" thick, 4000 psi air-entrained concrete with w.w.f. 6x6- W2.9xW2.9. Driveway and garage slabs to be 4,000 psi with 6% (+/- 1%) air-entrainment over minimum 4" compacted #57 limestone base down to undisturbed earth (omit vapor barrier). Water/cement ratio not to exceed 0.44. Garage slab finish to be metal floated and steel troweled to a smooth, ridgeless, finish (no machine finishing will be permitted without approval from *The Owner and The Architect*), sloped toward floor drains or garage doors as shown on the drawings. Garage concrete floor to include: a 3" deep depression at overhead door; a 24" wide sloped apron at exterior; and be sprayed with a liquid sealing/hardening agent. Exterior concrete steps, walks and driveway to have a broom finish and concrete steps and curbs to receive tooled edges.

MUDSLAB: Crawlspace mudslabs to be 3" thick, unreinforced, over 10 mil vapor barrier and 4" sand or gravel base. Finish to be wood floated to a smooth finish.

CONTROL JOINTS: Exterior slabs shall have troweled control joints, and basement slabs shall have saw-cut control joints, dividing slabs into rectangular panels as nearly square as possible. The long side of any panel shall not be more than 1 1/2 times the short side and spacing of joints shall be 10' to 12' max. for 4" thick slabs. Control joints shall be a minimum of 1/4 the depth of the slab and shall be continuous to the edge of the slab. Isolation joints shall be cut-in around columns, piers, etc. and panels shall have no "inside" corners. Provide control joints in all slabs on grade within 8 hours of casting concrete.

WALLS: Exterior walls to be 4,000 psi with 6% (+/- 1%) air-entrainment over minimum 4" compacted #57 limestone base down to undisturbed earth (omit vapor barrier).

Water/cement ratio not to exceed 0.44. Garage slab finish to be metal floated and steel troweled to a smooth, ridgeless, finish (no machine finishing will be permitted without approval from *The Owner and The Architect*), sloped toward floor drains or garage doors as shown on the drawings. Garage concrete floor to include: a 3" deep depression at overhead door; a 24" wide sloped apron at exterior; and be sprayed with a liquid sealing/hardening agent. Exterior concrete steps, walks and driveway to have a broom finish and concrete steps and curbs to receive tooled edges.

MUDSLAB: Crawlspace mudslabs to be 3" thick, unreinforced, over 10 mil vapor barrier and 4" sand or gravel base. Finish to be wood floated to a smooth finish.

CONTROL JOINTS: Exterior slabs shall have troweled control joints, and basement slabs shall have saw-cut control joints, dividing slabs into rectangular panels as nearly square as possible.

The long side of any panel shall not be more than 1 1/2 times the short side and spacing of joints shall be 10' to 12' max. for 4" thick slabs. Control joints shall be a minimum of 1/4 the depth of the slab and shall be continuous to the edge of the slab. Isolation joints shall be cut-in around columns, piers, etc. and panels shall have no "inside" corners. Provide control joints in all slabs on grade within 8 hours of casting concrete.

COLD WEATHER CONCRETE: Calcium Chloride shall not be used, nor shall any admixture that contains calcium chloride. All new work shall be protected from freezing or curing too rapidly. Cast-in-place concrete construction shall conform to the strictest version of American Concrete Institute ACI-301, 304, 308R, and ASTM C 494/C 494M. Euclid Chemical "Accelguard 80", BASF "Pozzolith NC 534", Sika "Sikaset NC" are all approved admixtures. Contractor to use heated aggregate and water as needed to obtain concrete temperatures at time of placement. Do not place concrete on frozen ground or any ground surface contaminated with organic materials. After placement protect concrete against temperatures below 40 degrees Fahrenheit for a minimum of 72 hours after placement. Protect concrete against freezing temperatures for 7 calendar days by the use of heated enclosures or thermal insulating blankets. If gas fired heaters are used, protect against fire and accumulation of carbon-dioxide gases.

SPECIFICATIONS DIVISION 4 - MASONRY

GENERAL: Construct all masonry walls in accordance with ACI 530.1 specifications (with requirements for Owner Inspection and Acceptance deleted), unless otherwise noted. Anti-freeze admixtures shall not be used and uncured walls shall be protected from freezing as may be required. The tops of walls under construction shall be covered at the end of each day and protected from rain or snow. The minimum Masonry Prism Strength (f'm) shall be 1500 p.s.i. at 28 days, unless noted otherwise.

MATERIALS (GENERAL): Masonry materials shall conform to the following ASTM specifications:

- Concrete Masonry Units ASTM C-90 (Grade N-1)
- Facing Brick ASTM C-216 (Type FBS, Grade SW)
- Mortar (Type M,S,N,O) ASTM C-270
- Grout ASTM C-476 (2,500 psi @ 28days)
- Reinforcing Steel Bars ASTM A-615 (Grade 60)

MORTAR: Mortar for use above and below grade shall be as follows:

- Exterior, below grade: Type S
- Exterior, above grade: Type S
- Interior, Non-load bearing: Type S

EXISTING WALLS: Irregular surfaces at new or enlarged openings in existing masonry walls shall be patched with cement mortar as required to achieve a smooth surface.

CLEANING: 3-7 days after masonry construction is complete; Masonry Work shall be cleaned with a stiff bristle brush and clean water. Larger particles should be removed with non-metallic scrapers. Prosooco Sun Kleen Products may be used with Architects approval.

MASONRY VENEER:

New adhered thin stone veneer applied to new foundation wall where exposed above grade and at front porch masonry piers. Contractor shall provide sample(s) of selected stone for approval by *The Owner and Architect* prior to ordering.

MORTAR TO BE custom color to match existing and as approved by Owner and Architect

REINFORCEMENT: Foundation wall reinforcement shall be as shown on the Drawings but in no case shall un-balanced fill against 8" masonry walls exceed 4'-0" (6 block courses) or 6'-0" (nine block courses) for 12" walls. When grade or other conditions require heights exceeding these figures the walls shall be reinforced full height of the wall and lapped 45 bar diameters min. with projecting bar cast into the footing. Cores shall be grouted solid at anchor bolts and reinforcing bars, and the bars shall be held 1" clear of the interior face of the core.

MASONRY FOUNDATION DAMPROOFING: The exterior of all foundation block and brick walls shall be parged with 3/8" cement with lime from coat to footings to a finish grade level to be approved by *The Owner or The Architect*. Fully dried parging shall be coated with 60 mil. wet thickness, two-coat application of Watchdog Waterproofing polymer-enhanced asphalt liquid-applied membrane or approved alternate. Both parging and waterproofing shall run continuous and uninterrupted around completed basement perimeter, installed prior to construction of intersecting masonry walls. Insulating (expanded polystyrene or equal) protection board shall be installed below grade, full depth to footing, prior to backfilling.

SPECIFICATIONS DIVISION 5 - METALS

STRUCTURAL STEEL: Structural steel shall be detailed, fabricated, and erected in accordance with the latest AISC Specification for Structural Steel Buildings, Allowable Stress Design, and Code of Standard Practice.

FITCH PLATES: Steel fitch plates shall be ASTM A-36 steel (Fy = 36 KSI). Fitch plates shall be connected to wood members with 1/2" dia. flush mounted through bolts. Minimum edge and end distance to be 2". See plans for size of plates and spacing of bolts.

Lintels for masonry openings: shall conform to the following schedule unless otherwise noted on the Drawings.

Clear span Lintel

- up to 4'-0" L 3 1/2" x 3 1/2" x 1/4"
- 4'-1" to 6'-0" L 4" x 3 1/2" x 5 1/16" LLV
- 6'-1" to 8'-0" L 5" x 3 1/2" x 5 1/16" LLV
- 8'-1" to 9'-0" L 6" x 3 1/2" x 5 1/16" LLV

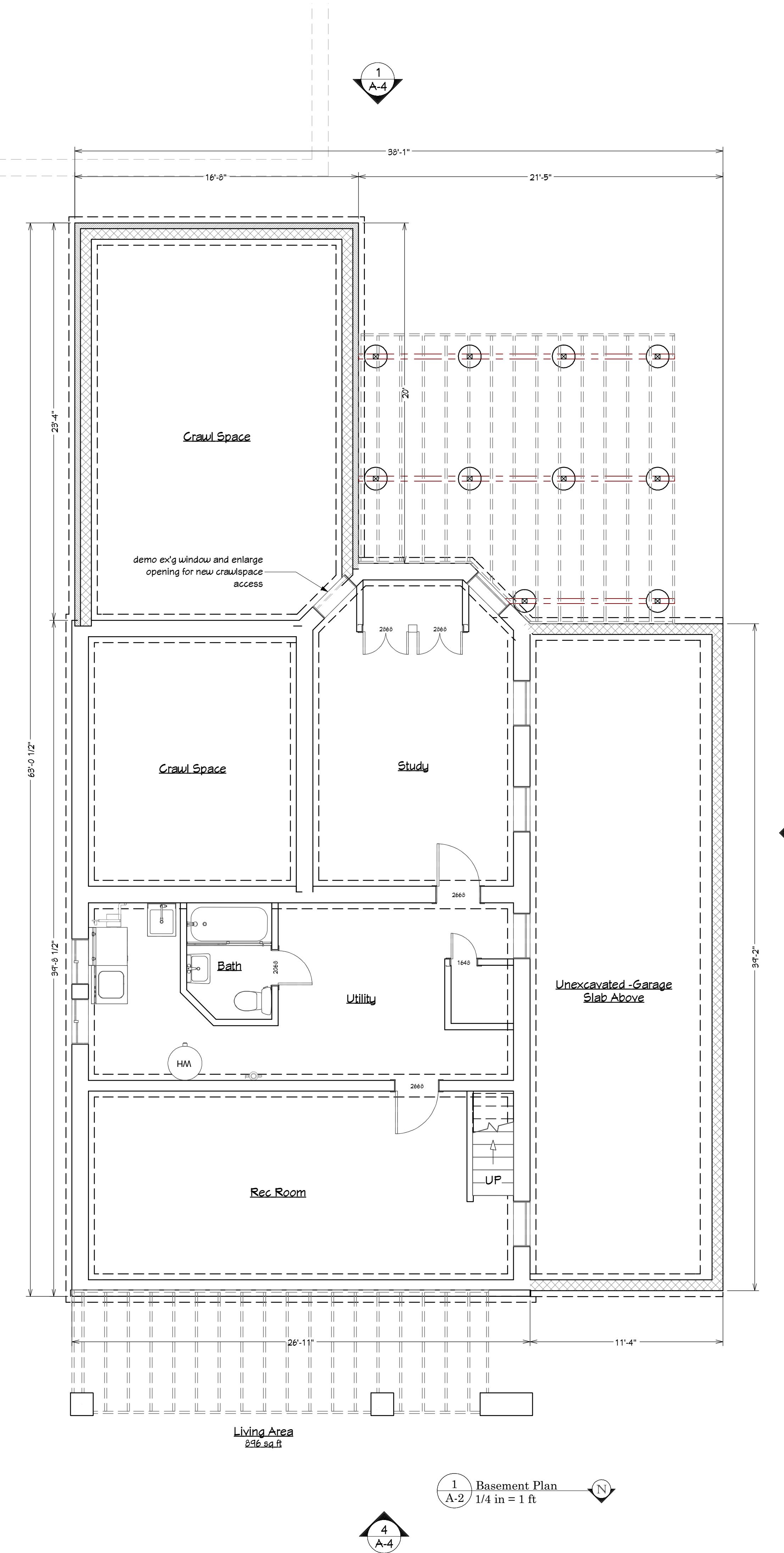
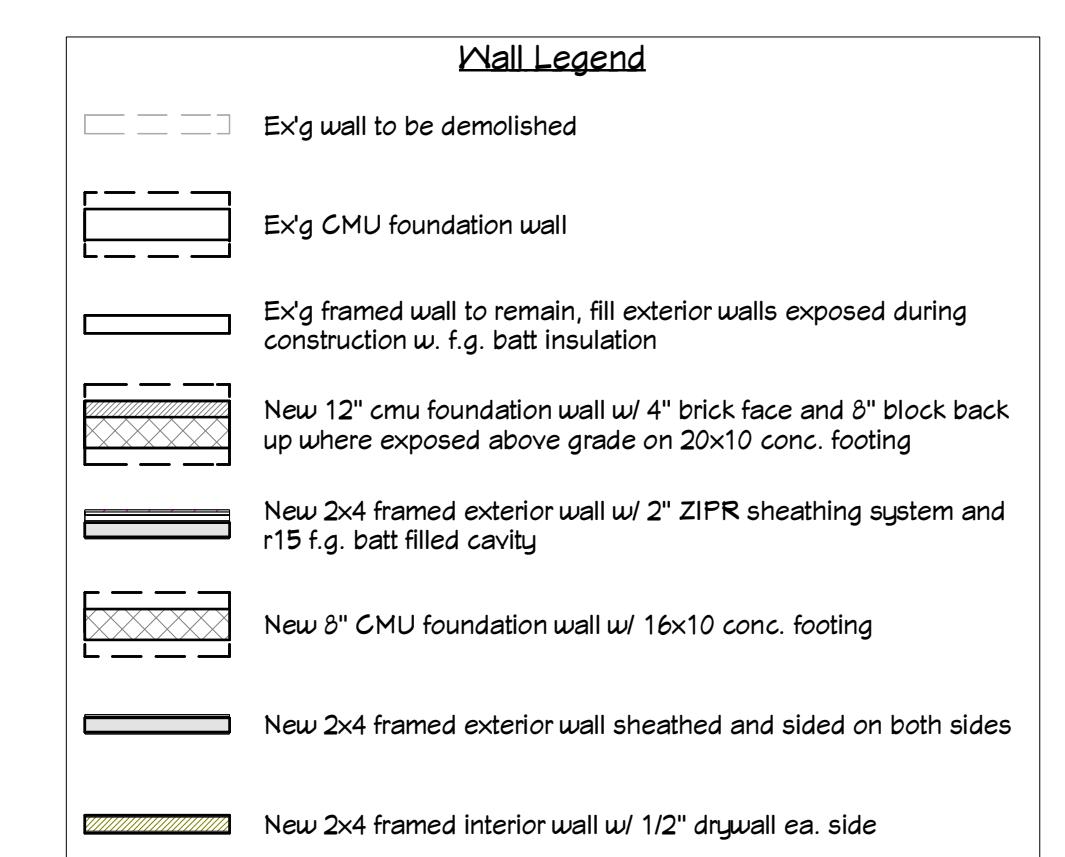
All lintels shall have 1" of bearing for each foot of span with a minimum of 6" at each end. All lintels at exterior walls shall be hot-dipped galvanized.

Beams: shall be ASTM A-992 steel (Fy = 50 ksi), sizes as shown on drawings, in continuous lengths between bearing points. Steel beams bearing on masonry walls shall bear on steel bearing plates (sizes shown on plans) and masonry grouted solid 16" wide by 8" deep.

Shop Painting: Structural steel to be finished with two shop coats of rust inhibitive paint.

Connectors: Connectors and Accessories to be included as required for complete structural support. All shop connections to be made with ASTM A307 bolts or welded using E70 electrodes and shall conform to the specification set forth in the AWS Structural Welding Code. All field connections to be ASTM A307 bolts, unless noted otherwise. Anchor bolts, nuts, washers, straps, framing anchors, hangers, masonry ties, and other accessories to be hot-dipped galvanized.

METAL RAILINGS, GENERAL: to be fabricated and installed per the National Association of Architectural Metal Manufacturers (NAAMM) and National Ornamental and Miscellaneous Metals Association (NOMMA) Metal Finishes Manual, Metal Stair Manual, and Pipe Railing Manual, current edition, as applicable to project.

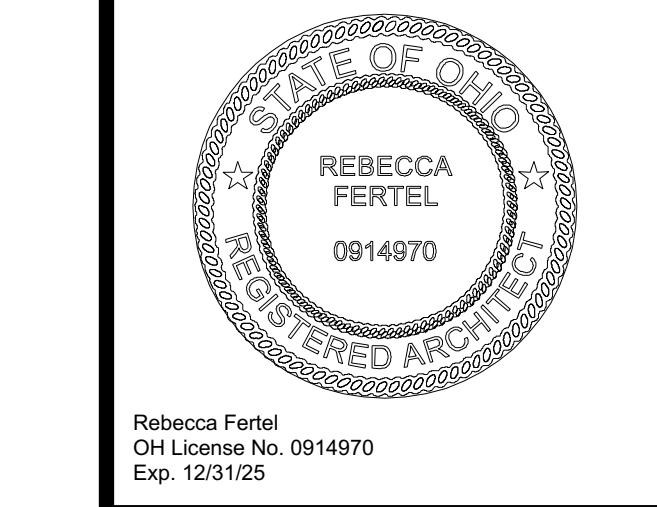


Tolchinsky Residence
3811 Bendemeer Road, Cleveland Heights, Ohio 44118
Foundation Plan, Spec's Div. 3-4

Additions and Renovations to the

Issued for	12/23/2024	Preliminary
	1/16/2025	Revised
	3/5/2025	BZA-Garage
Drawing number	A-2	

A-2



SPECIFICATIONS DIVISION 5 - METALS
STRUCTURAL STEEL: Structural steel shall be detailed, fabricated, and erected in accordance with the latest AISC Specification for Structural Steel Buildings, Allowable Stress Design, and Code of Standard Practice.

Flitch Plates: Steel flitch plates shall be ASTM A-36 steel ($F_y = 36$ ksi). Flitch plates shall be connected to wood members with 1/2" dia. flush mounted through bolts. Minimum edge and end distance to be 2". See plans for size of plates and spacing of bolts.

Lintels for masonry openings: shall conform to the following schedule unless otherwise noted on the Drawings.

Clear span	Lintel
• up to 4'-0"	$L = 3\frac{1}{2}'' \times 3\frac{1}{2}'' \times 1\frac{1}{4}''$
• 4'-1" to 6'-0"	$L = 4'' \times 3\frac{1}{2}'' \times 5\frac{1}{16}''$ LVL
• 6'-1" to 8'-0"	$L = 5'' \times 3\frac{1}{2}'' \times 5\frac{1}{16}''$ LVL
• 8'-1" to 9'-0"	$L = 6'' \times 3\frac{1}{2}'' \times 5\frac{1}{16}''$ LVL

All lintels shall have 1" of bearing for each foot of span with a minimum of 6" at each end. All lintels at exterior walls shall be hot-dipped galvanized.

Beams: shall be ASTM A-992 steel ($F_y = 50$ ksi), sizes as shown on drawings, in continuous lengths between bearing points. Steel beams bearing on masonry walls shall bear on steel bearing plates (sizes shown on plans) and masonry grouted solid 16" wide by 8" deep.

Shop Painting: Structural steel to be finished with two shop coats of rust inhibitive paint.

Connectors: Connectors and Accessories to be included as required for complete structural support. All shop connections to be made with ASTM A307 bolts or welded using E70 electrodes and shall conform to the specification set forth in the AWS Structural Welding Code. All field connections to be ASTM A307 bolts, unless noted otherwise. Anchor bolts, nuts, washers, straps, framing anchors, hangers, masonry ties, and other accessories to be hot-dipped galvanized.

METAL RAILINGS, GENERAL: to be fabricated and installed per the National Association of Architectural Metal Manufacturers (NAAMM) and National Ornamental and Miscellaneous Metals Association (NOMMA) Metal Finishes Manual, Metal Stair Manual, and Pipe Railing Manual, current edition, as applicable to project.

SPECIFICATIONS DIVISION 6 - WOOD, PLASTICS, COMPOSITES

A. ROUGH FRAMING: GENERAL

All structural framing shall be detailed, fabricated, and erected in accordance with the "National Design Specification" by the National Forest Products Association (N.F.P.A.), latest edition. Nail or spike members in accordance with the Residential Code of Ohio, latest edition, Chapter 5-9. All nails exposed to weather to be hot-dipped galvanized at minimum. Framing lumber shall be seasoned to a moisture content of 19% or less (S-DRY). Brace all walls, rafters, floor and roof joists as required to prevent shifting, racking or other movement both during construction and after completion of the work. Cut framing square on bearings, closely fitted, accurately set to required lines and levels and plumb. Do not use shims for leveling on wood or metal bearings.

LVL (Laminated Veneer Lumber) & Pre-Engineered Joists (TJI's): where indicated, shall be stored, installed, braced, and blocked per the manufacturer's directions. Notching, drilling or other cutouts shall be in accordance with manufacturer's published instructions. LVL beams over two members wide shall be assembled with 1/2" dia. flush-mounted through bolts 2 per row at 24" o.c. with (2) bolts at each end, all located 2" from edges and ends.

Framing: All structural framing members shall be single lengths between points of support.

1. Floor and ceiling joists shall have solid bridging at minimum 8'-0" intervals or at mid-spans, with minimum 2" bearing at ends. Floor joists to be doubled under partitions parallel to joist direction. Solid blocking required under partitions perpendicular to joist direction. Solid blocking required at 32" o.c. to tie first joist back to parallel foundation walls, where foundation walls run parallel to joist direction. Double joists below islands, tubs, around openings, and parallel to walls above.

2. Sill plates and wall plates on concrete block or slabs shall be pressure-treated wood and bear over 1/2" compressible sill sealer as manufactured by Dow, Celotex, or Amoco. Sill plates shall be anchored with 1/2" anchor bolts @ 6'-0" o.c. (max.) and 1'-0" from corners and openings.

3. Exterior stud framing to be spaced 16" o.c., doubled at openings, framed for solid backing at corners and angles for drywall. Inner trimmer/jack studs at window/door, etc., openings shall be cut to support the header over the opening and shall extend in one piece from header to bearing. Jack studs shall be doubled at openings exceeding 8'-0". Walls taller than 9'-0" shall receive solid, horizontal blocking at mid-height.

4. Wall opening headers shall be minimum (2) 2' x 8's with plywood spacers for spans less than 3'-6" and (2) 2x10's with 1/2" plywood for spans equal to or greater than 3'-6" unless indicated otherwise on Drawings.

5. Dormers: provide double rafters and headers at all dormers and skylights, unless noted otherwise. Connect doubled headers to rafters with galvanized hangers.

6. Hearth and other floor openings: Provide doubled joists as minimum at perimeter of hearths and all floor openings. Headered members to be hanger to doubled joists where interrupted.

ROUGH LUMBER: Unless otherwise noted on the Drawings, material shall be selected and warranted by The Contractor to satisfy the following minimum design stresses for sawn lumber and laminated veneer lumber:

• Framing Member	F _b (psi)	F _v (psi)	F _c (psi)	E (psi)
• Beams and Headers	1000	130	1000	1,400,000
• Floor Joists	1000	130	1000	1,400,000
• Rafters & Clg Jst's	1000	130	1000	1,400,000
• Studs & Misc. Fram'g	875	110	1000	1,400,000
• Microlam (LVL)	2600	285	2510	1,900,000

2x Rough Framing: shall be S4S #2 Southern pine, Hem-Fir, Spruce Pine Fir or better. Sill plates, all framing against masonry or concrete, and framing exposed to weather: shall be pressure-treated lumber.

EXTERIOR WALL STUD FRAMING: to be 2x6, unless noted otherwise on drawings for walls up to 9'-5" tall and 2x8 for walls over 9'-5". Gable walls with uninterrupted vertical studs over 14'-0" in height to be 2x8.

INTERIOR WALL STUD FRAMING: to be 2x4 , unless noted otherwise on drawings for walls up to 9'-5" tall, and 2x6 for walls over 9'-5". Gable walls with uninterrupted vertical studs over 14'-0" in height to be 2x8.

PRE-ENGINEERED TRUSSSES: Pre-engineered wood roof and floor trusses shall be designed, fabricated and created by a Licensed Professional Engineer in accordance with The Truss Plate Institute "Design Specification for Metal Plate Connected Wood Trusses". The Fabricator shall prepare and submit to the Architect, shop Drawings bearing the seal of an Ohio Licensed Professional Engineer.

FLOOR SHEATHING: shall be 1/4", APA rated exterior grade tongue-and-groove plywood, and span rated for the specified joist spacing. 7/8" Advantech floor sheathing is an approved alternate, installed per mfr's instructions. All joints parallel to joists to be fully supported by floor joists below. All plywood floor sheathing shall be installed with construction adhesive such as PL400 or equal, and nailed to framing. Prior to installation of finish flooring over new or existing floor sheathing, thoroughly inspect all sub-flooring for squeaks and, where located, install screws as required to stop such squeaking.

Openings in existing sheathing and underlayment, such as at abandoned HVAC floor diffusers, shall be filled with new plywood of the same thickness and shall be adequately blocked from beneath, nailed, and glued so no squeaking or discernible movement is apparent after installation of finish flooring or carpeting.

ROOF AND WALL SHEATHING: INSTALLATION: Install panels over two or more spans with the long dimension perpendicular to the floor framing. Space 4' panel ends a minimum of 1/8" at time of installation. End joints of adjacent panel runs should be staggered. Square edge panels should be installed with a minimum spacing of 1/8" on all panel edges at time of installation. Use 1/4" bead of polyurethane or solvent-based adhesives, which conforms to industry standards AFG-01 and follow manufacturers' recommendations. Joist to be clean and dry and apply only enough adhesive to lay one or two panels at a time. Fasteners 3/8" from panel edges. Space fasteners 6" o.c. on supported edges (4' ends) and 12" o.c. at intermediate support locations. Use 10d ring shank nails or screw shank nails. Cutouts for plumbing and electrical components should be oversized by at least 1/4".

to avoid a forced fit. All joints parallel to joists to be fully supported by floor joists below.

Sheathing unsupported more than 20" in either direction shall be reinforced or supported with edge blocking or "I" clips

NOTE: Allow for crown or moldings at fascia and rake, where detailed on drawings. Roof sheathing MUST overhang to accept details as drawn: insufficient overhang will be rejected and rebuilt.

MATERIAL: shall be 7/16" for walls, 5/8" for roofs, APA-rated exterior plywood or Oriented-Strand Board, span rated for the rafter or truss spacing shown. Sheathing for vertical batt or vertical licensing is to be exterior plywood, 5/8" nominal thickness. 5/8" Advantech sheathing is an approved alternate roof sheathing material.

CONNECTORS: Where shown on the Drawings or required herein metal connections shall be provided, designed for specific loading requirements, fabricated from galvanized sheet metal or painted steel plate, as manufactured by Simpson Strong-Tie or equal.

PRESERVATIVE PRESSURE TREATED WOOD shall meet the following AWPA standards for ACO Preservative retention rates:

- Above ground (decking & posts, etc.) 0.25 lb/cu.ft.
- Ground contact (posts) 0.40 lb/cu.ft.
- Permanent Foundations (poles) 0.60 lb/cu.ft.

EXTERIOR TRIM: Unless noted otherwise on drawings, trim shall be aluminum-wrapped wood. Eave fascias, casings, ventilated soffits, gutter "boards", rakes and sub-rakes, and other aluminum trim as shown on The Drawings to be .019" coil-coated aluminum, job fabricated and installed in a fashion to approximate appearance of wood trim and to avoid "oil-canning", with concealed fastening. All work to be fitted to allow for expansion. Any required caulking shall be of minimal size and the same color as adjacent trim. Aluminum breaks and joints to be clean, tight, and unobtrusive. Exterior window and door casings, corner trim, frieze board, panel frames and belts shall be 5/4x (width shown on drawings). Add pre-fin. alum. drip cap over all head casing. Window sub-sills to be 1 1/2" thick, sloped to wash, with 2" projection. Fascia board to be 1x (width shown on drawings) over 2x backup. Use hot-dipped galvanized nails for exterior trim members with min. 1 1/2" penetration into framing lumber.

EXTERIOR SIDING: Vinyl siding: vinyl board and batten siding by certainteed or similar. To include starter strips, inside corners, "J" style trim, and 4" outside corners. Install siding per manufacturer specs. SOFFITS: perforated vinyl

INTERIOR TRIM, GENERAL: All wood interior trim material, including flooring, shall be delivered and acclimate in an interior, weather-tight, heated and conditioned environment for minimum one week. Upon delivery, flooring shall be broken into small lots and stored in the rooms where it is to be installed. All trim shall be carefully matched, mitered, coped, etc., finished nailed tight to surfaces, and sanded, ready for painting or staining. All horizontal trim shall be installed in continuous lengths wherever possible, or mitered when not, and coped at inside corners. Jamb at Door and Cased Openings shall be tightly shimmed in a minimum of three locations on each side at hinges and locksets. Wherever trim terminates and is not fully stopped by cabinets, casings, plinths, etc., repeat profile of trim at end by miter-returning, coping or molding as needed. Window casing to include molded stool, miter-returned at ends, and apron of casing material, inverted and miter-returned at ends. Doorways at end of Halls shall be centered in Hall, unless shown otherwise, and all doorways roughed-in and jamb so that no gap may be installed. When casings are within 1" of corner walls, fill gap between casing and wall with S4S wood trim 1/8" thinner than casing. Closet doors shall be fully jambled and case on both sides (Reach-in closets may have secondary casing type for interior, as approved by the Architect) Casing at bifold or bypassing doors shall be installed to conceal track and hardware above doors. Shower shall be installed at all new hardwood, ceramic tile, vinyl, or other hard surface flooring. Window casing to include molded stool, miter-returned at ends, and apron of casing material, inverted and miter-returned at ends. Foundation walls run parallel to joist direction. Double joists below islands, tubs, around openings, and parallel to walls above.

INTERIOR TRIM: All new woodwork shall be clear poplar, thoroughly seasoned and kiln dried, molded or S4S, no finger joints.

UNDERLAYMENT: At Carpet shall be 1/2" Plywood, or approved equal.

Underlayment at Ceramic Tile: Where ceramic tile is to be installed over thin-set mortar or epoxy, underlayment shall be 1/2" USG Dur-Rock waterproof cement-board.

CLOSET SHELVING: vertical supports to be constructed of 3/4" pre-fabricated A-A Birch plywood with 1/2" x 3/4" hardwood nosing, to include Pantry shelves. Interior melamine finish for shelving at The Owner's option only.

Where vertical shelving or closet rod supports are shown on plans, depth of such supports shall accommodate shelf depth shown or closet rod and ferrule. Shelf ledgers between vertical supports shall be 1/2" deep in all standard (24") deep reach in and walk in closets unless otherwise noted on drawings.

SPECIFICATIONS DIVISION 7 - THERMAL AND MOISTURE PROTECTION

INSULATION, GENERAL: Material specifications and R-value ratings calculated by installer to comply with the latest edition of the prevailing Dept. of Energy Building Energy Codes as adopted into the Ohio Residential Code for residential structures. In general, all heated living spaces shall be totally enveloped in insulation. The Work shall include corrugated rigid foam insulation baffles at sloped ceilings and rafter/sidewall intersections as shown on The Drawings.

WALL/CEILING INSULATION: Wall cavities r15 f.g. batts. Attic spaces: r49 f.g. batts.

ROOF INSULATION: 2x6 joists, r21 f.g. batts. Attic spaces: r49 f.g. batts.

TEMPERED/SAFETY GLAZING: Tempered or safety glazing shall be required for the following locations considered hazardous:

1) Glazing in a fixed or operable panel within 24 inches of an adjacent door and whose bottom edge is less than 60 inches above the floor or walking surface.

2) Glazing in a fixed or operable panel that is larger than 9 square feet and whose bottom edge is less than 18 inches above the walking surface.

3) Glazing in enclosures for walls facing hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom edge of the glazing is less than 60 inches measured vertically above any standing or walking surface.

4) Glazing adjacent to stairways, landings and ramps within 36 inches measured horizontally of a walking surface and whose bottom edge is less than 60 inches above the plane of the adjacent walking surface. Glazing adjacent to stairways within 60 inches measured horizontally from the bottom tread of the stairway and whose bottom edge is less than 60 inches above the nose of the top of the stairs.

MANUFACTURED WINDOWS to be vinyl

GENERAL: units to have nailing fins w/ corner waterproof closure; high-performance, 5/8" wide butyl-modified window tape included with order.

GLASS: to be double-pane glass with 272 Low-E Coating and argon gas, U= 0.28 or less.

SCREENS: to be Durex fiberglass mesh. Double-hung units to have half Screens

INTERIOR DOORS: to be solid masonite/MDF doors, finish shall be smooth (NO WOOD GRAIN). Set doors to provide maximum 1/4" clearance between bottom edge of doors and finish flooring, including carpeting. Jamb at Door and Cased Openings shall be tightly shimmed in a minimum of three locations on each side at hinges and locksets.

DOOR HARDWARE: Provide and install all finish hardware as selected by The Owner and Architect under allowance, and shall include all door latches/LEVERS and stops. Unless otherwise directed, door hardware shall be 2 3/4" backset latches. Doors shall be hung with three square hinges per door, 3 1/2" x 3 1/2" hinges for interior doors, and 4" x 4" for exterior doors. Shim all jambs, minimum 3 shims per side jamb.

DOOR TRIM: To be installed in a continuous fashion, matching the door height and width.

DOOR INSULATION: To be 1 1/2" thick, r15 f.g. batts.

DOOR SHEATHING: To be 5/4" x 3/4" x 1/4" exterior grade plywood.

DOOR FRAMING: To be 2x6 joists, r21 f.g. batts.

DOOR UNDERLAYMENT: To be 1/2" USG Dur-Rock waterproof cement-board.

DOOR INSULATION: To be 1 1/2" thick, r15 f.g. batts.

DOOR SHEATHING: To be 5/4" x 3/4" x 1/4" exterior grade plywood.

DOOR FRAMING: To be 2x6 joists, r21 f.g. batts.

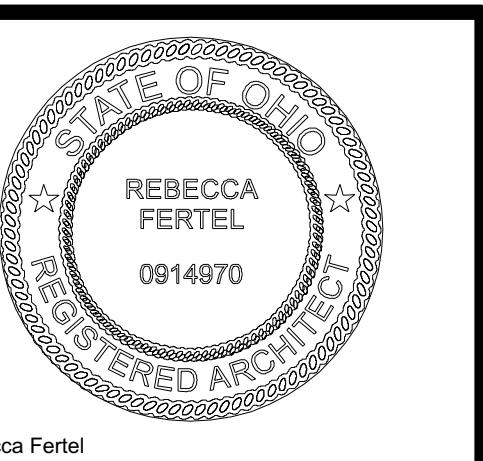
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Additions and Renovations to the
Tolchinsky Residence
3811 Bendemeer Road, Cleveland Heights, Ohio 44118

Elevations

Issued for

12/23/2024	Preliminary
1/16/2025	Revised
3/5/2025	BZA Garage

Drawing number

A-4



4 Front (South) Elevation
A-4 1/4 in = 1 ft



3 Left (West) Elevation
A-4 1/4 in = 1 ft



2 Right (East) Elevation
A-4 1/4 in = 1 ft



1 Rear (North) Elevation
A-4 1/4 in = 1 ft