

Docket Number: 23/13152

Appellants: Rachel Amrine, 12001 SE Vandalia Drive, Runnells, IA 50237 (Property Owner)

Representative: Scott Todd, 1st Choice Builders, 3425 Giles Street, West Des Moines, IA 50265 (Contractor)

Appeal: The appellants request a front yard setback Variance to allow a proposed accessory building to be located within the required front yard setback, and in front of the principal residence at a front yard setback of approximately 17.63 feet in lieu of the required 50-foot front yard setback for a property located in the “RR” Rural Residential District.

Background

The subject property is located at 12001 SE Vandalia Drive, Runnells, and is described as a portion of the Southwest ¼ of the Southwest ¼ of Section 36 of Township 78 North, Range 22 West of the 5th P.M. (Camp Township). The property is approximately 40,946 square feet (0.94 acres) in size and is zoned “RR” Rural Residential District. The corporate boundary of the City of Runnells abuts the western side of the subject property. The surrounding area consists of primarily existing single-family residences and developments, with Norfolk Southern Railroad tracks located directly to the south, and public lands associated with the Des Moines River located on the opposite side of the railroad tracks. Properties located north, east and south of the subject property are similarly zoned “RR” Rural Residential District, and adjacent properties to the west are located within the Runnells City Limits. See *Attachment A* for a vicinity map of the subject property and surrounding area.

The subject property is a unique wedge-shaped lot that has very limited depth. The subject property is 160.55 feet-deep along the western edge, the deepest portion of the property, and narrows to just 37.86 feet of depth at the far eastern edge. The limited depth allows the property a very limited buildable area despite over 500-feet of frontage along SE Vandalia Drive. The home and existing detached garage on the subject property were constructed in 2002, though Staff has been unable to locate any building permits for the subject buildings. The existing single-family dwelling is located approximately 30-feet from the front property line, and the existing detached garage (proposed to be removed) is located approximately 20-feet from the front property line.

Summary of Request

The Polk County Zoning Ordinance, *Article 6. Bulk and Use Standards, Division 2. Single-Family Residential Bulk Standards, Table 6.1 Table of Single-Family Bulk Standards (Standard & Cluster & Mobile Home)* establishes a front yard setback of 50-feet for a single-family residential structure in the “RR” Rural Residential District. *Article 4: Use Regulations, Division 6: Accessory Use Regulations: Section 1. Residential Accessory Buildings: (J)* states: “An accessory building may not be placed in front of the principal building unless said accessory building: (1) Is setback a minimum of 100 feet from front property lines; and (2) Has a maximum separation distance between the principal structure and accessory building of 150 feet.” The appellants propose to construct a new 30-foot by 60-foot (1,800 square feet) detached garage to be located in the central portion of the lot, east of the existing principal dwelling. A variance is requested to allow the accessory building in front of the principal residence, and within the required front yard setback. The proposed accessory structure will be located approximately 17.63 feet from the

front property line. The proposed accessory structure will be required to meet the side and rear yard setbacks, as well as required separation distances between the house and septic system. The submitted application is included as *Attachment B* and the site plan and building plans for this appeal can be found as *Attachment C*.

Staff mailed out 11 notices regarding this request, including the date and time of the public hearing, to surrounding property owners within the 250-foot notification boundary. To-date staff has received two (2) responses in support and zero (0) in opposition of this Appeal.

Natural Resources

The property primarily contains a steady slope from the high point of 834-feet above sea level near the driveway access onto SE Vandalia Drive to a low point of 806-feet at the southwest corner of the lot. Due to the elevation change of the lot, the north wall of the home was built into the hillside. The slope of the lot provides further difficulties on where an accessory structure could be built. Beyond the rear property line, the slope becomes more severe, dropping an additional 50-feet to the natural area surrounding the Des Moines River. The property is located outside any floodplain areas and contains no other environmental hazards or features. No mature woodlands will be impacted with the construction of the proposed accessory garage.

Roads & Utilities

The property has frontage to the north along SE Vandalia Drive, a two-lane local state Highway known as IA-316. The property takes access onto SE Vandalia Drive approximately 227-feet east/southeast of the intersection with SE 120th Street. No additional access points are proposed with this accessory building. The property is served by a private onsite septic system, which Polk County records indicate is located west of the dwelling. Water service is provided by Des Moines Water Works via an unmapped water main. Polk County Environmental Health regulations require that all structures maintain a minimum separation of ten (10) feet from all components of the wastewater treatment system.

Recommendation

The Board of Adjustment may grant a variance if items 1 through 5 are affirmed.

- 1.) Are there exceptional or extraordinary circumstances or special conditions applying only to the property in question and which do not exist generally on other properties in the same zoning district which makes it impossible to place a use permitted in the district on the property?

Yes. The geometry of the site and topographical constraints effectively prevent the location of an accessory building in a conforming location on the lot. The location of the septic system on the subject property further complicates where an accessory structure could be located.

- 2.) Is the variance necessary for the preservation and enjoyment of property rights possessed by other properties in the same zoning district in the same vicinity? (No variance can permit uses that are prohibited in a district)

Yes. Accessory structures are a permitted use on the subject property.

3.) Will the variance preserve adjacent property and support the purpose of the ordinance and the public interest?

Yes. The accessory building will have a minimal impact on traffic flow along SE Vandalia Drive due to the garage being situated lower than the roadway surface. No adjacent properties will be otherwise impacted by the construction of the accessory building.

4.) Is there a special condition or circumstance that did not result from the actions of the applicant?

Yes. The geometry and topography of the site create challenges that would render the property effectively unbuildable without the relief of variances.

5.) Does the variance support the intent of Article 7 Natural Resource Protection and Article 8 Stormwater and Erosion Control Management of the Polk County Zoning Ordinance?

Yes. The appellant is required to meet the environmental provisions of the Polk County Zoning Ordinance. The proposed building location minimizes the amount of grading disturbance and tree removals necessary for construction compared to other locations on the property.

The Board of Adjustment may grant a variance if items 1 through 5 are affirmed. Since items 1-5 were answered in the affirmative, staff recommends approval of the requested variance.

Attachment 'A'

SE 120th St

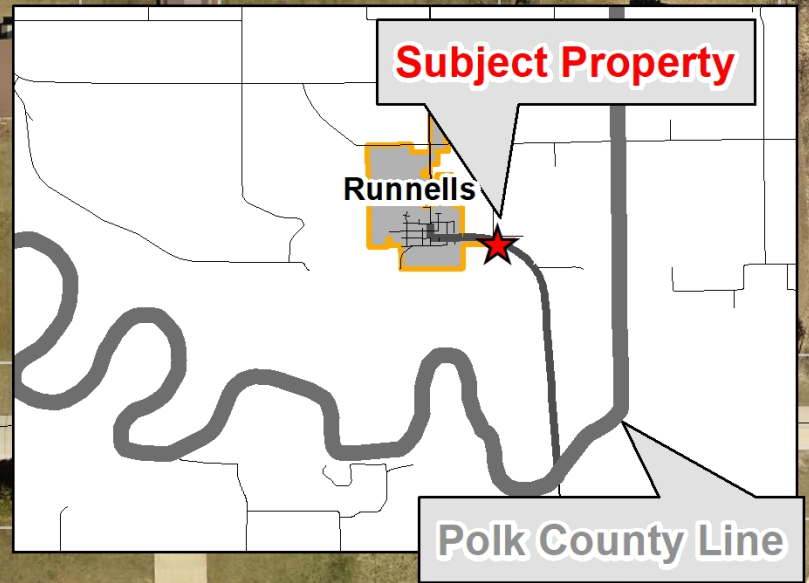
SE Vandalia Dr

Runnells

SE 124th St

Subject Property

0 62.5 125 250 Feet



Attachment 'B'

Variance Appeal Application



Board of Adjustment Authority

The Polk County Board of Adjustment is empowered by Iowa law and by the Zoning Ordinance of Polk County to hear requests and to make decisions on variance appeals to the Zoning Ordinance for individual properties where provisions of the Ordinance impose a unique and unnecessary hardship on the property owner and where the granting of a variance is not contrary to the intent of the Zoning Ordinance or to the public interest.

Each variance appeal is only a request to have a hearing before the Board of Adjustment. Notice of the hearing will be provided to all property owners located within 250 feet from the subject property. The Board of Adjustment will make a determination at a public hearing whether or not to approve or deny the request based on a staff report, applicant presentation, as well as public input. All appeals that are denied shall not come back to the Board of Adjustment for one year. Refunds will not be made once notice has been sent out to adjacent property owners.

Please complete the entire application and review the Variance Regulations on page 3.

1. The undersigned applicant requests that the Board of Adjustment consider this application for a variance appeal for the following general purpose. (Describe briefly the request)

We would like to have more space in the garage.

(time stamp)
Official Use Only

2. Subject Property Address: 12001 SE Vandalia Dr

3. Subject Property Zoning District: RR Rural Residential

4. District and Parcel Number: 160/0072-001-005

5. Subject Property Legal Description (attach if necessary):

— BEG 198.7F S & 213.12F ELY OF NW COR THN SELY 289.2F SW 37.86F TO N RR ROW NWLY 267.58F NE 88.65F TO POB & BEG 188F S OF NW COR THN SELY 219.45F SW 88.85F TO N RR ROW LN W 119.7F ALNG N RR ROW LN SLY 20F WLY 60.3F ALNG N RR ROW TO W LN N 160.55F TO POB SW 1/4 SW 1/4 SEC 36-78-22

6. Filing fee: \$300.00 per variance (each provision requested for a variance is considered a separate variance request!)

7. Applicant(s) Information:

Rachel Amrine
Applicant (Print Name)

Rachel Amrine
Signature

8-22-23
date

Owner
Interest in Property (owner, renter, prospective buyer, etc.)

r.amrine@gmail.com
Email

12001 SE Vandalia Dr Runnells, IA 50237
Address, City, State and Zip

515-289-6424
Phone Fax

8. Applicant(s) Representative:

If the appeal is going to be represented by someone other than the applicant please provide that information below

Scott Todd
Applicant Representative (Print Name)

1st Choice Builders
Firm or Business Name

3425 Giles St west Des Moines IA
Address, City, State and Zip

Scott.Todd85@yahoo.com
Email

515-240-3496
Phone Fax

9. Property Owner Consent

The application must be signed by all the Titleholders, Contract Purchasers, or Option Purchasers of the subject property. The application may also be signed by the Registered Agent for a corporation or other person with similar legal authority to sign for a property owner. (if additional signatures are needed please attach)

<u>Rachel Amrine</u> (Print Name)	<u></u> Signature	<u>9-22-23</u> date
_____ (Print Name)	_____ Signature	_____ date
_____ (Print Name)	_____ Signature	_____ date
_____ (Print Name)	_____ Signature	_____ date

10. State the reason(s) the variance is necessary and why you cannot comply with the regulations of the Zoning Ordinance. Specifically explain the nature of the appeal.

— The shape of the lot is very limiting in build able area. The elevation of the road is —
 — significantly above the level of the lot, reducing the level of obstruction. Visibility for —
 — drivers will be minimally obstructed if at all. —

A completed application with site drawing and filing fee are required for a submittal. Incomplete submittals will not be processed and returned to the Applicant.

Return completed forms to: Polk County Public Works, Planning Division 5885 NE 14th Street, Des Moines, IA 50313
 Phone (515) 286-3705 • Fax (515) 286-3437 Email: PublicWorks@polkcountyia.gov
 Forms available online <http://www.polkcountyia.gov/PublicWorks/> BOA Calendar CALENDAR

OFFICIAL USE ONLY			
Received by		Docket Number	
Date Received		Reviewed by	
BOA meeting date		BOA Approved	Y / N

Required Information: (must be included prior to making submittal)

1. Complete Application including the description of requested variance(s) with specific information for the request and state the reason(s) the variance is necessary and why you cannot comply with the regulations of the Zoning Ordinance.
2. Submit site drawing as required see details below.

Site Drawing

All variance appeals must submit three (3) 11x17 copies of a site drawing with the application. The site drawing must be fully dimensioned and legible. All required information must be drawn to a scale. The Zoning Administrator may require a petitioner to submit a site plan drawn by an engineer or architect. The site plan shall include the following:

1. Boundary drawing of the lot or area involved.
2. Location, dimensions, height and setbacks of all existing and proposed buildings and structures and the uses of each.
3. Use of the proposed addition to building or structure.
4. Approximate location of the vehicle entrance to the site.
5. Show the approximate location of water and sewer (septic system) facilities, if applicable.
6. Location of parking area and number of stalls required, if applicable.
7. General location of landscaping, buffer areas and screening, if applicable.
8. If the appeal is for a **sign**, the appeal must be accompanied by both a fully dimensioned, to scale elevation and site plan drawing of the sign, showing the exact location and size of the sign.

Variance Regulations

No variance from the provisions or requirements of this ordinance shall be authorized by the Board of Adjustment unless the Board finds beyond reasonable doubt that all the following conditions and circumstances exist. These regulations are found in the Zoning Ordinance, Article 17. Variance. The conditions and circumstances will be addressed by the Polk County Planning Division staff in reviewing the variance(s) request.

1. There must be exceptional or extraordinary circumstances or special conditions applying to the property in question, and do not exist generally on other properties in the same zoning district. By virtue of the unique or special conditions, it is, therefore, exceptionally difficult to place a use permitted in said district on the property.
2. The variance is necessary for the preservation and enjoyment of substantial property rights possessed by other properties in the same zoning district and in the same vicinity and such variances will not permit uses that are prohibited in that district.
3. The authorization of such variance will not be of substantial detriment to adjacent property and will not be contrary to the purpose of this Ordinance and the public interest.
4. That the special conditions or circumstances did not result from the actions of the applicant.
5. The variance will not entirely void the natural resource protection requirements of this Ordinance.

The condition and/or situation of a property for which a variance is sought must be of an unusual nature. A variance shall not be authorized if the condition or situation is of a general or recurrent nature such that adopting a general regulation as an amendment to this Ordinance is a reasonably practicable solution.

The variance granted shall be the minimum necessary to permit a use of the property. A variance shall neither increase the number of permitted dwelling units by more than one (1), nor allow the minimum lot area required for a use to be decreased by more than ten (10) percent. If natural resources are involved, then mitigation for any damage to the environment shall be a condition of the variation.

General Information Drawings	
100	Cover Sheet
101	Specifications
Architectural	
A301	Foundation, Floor, Roof Plan
A302	Exterior Elevations

Attachment 'C'

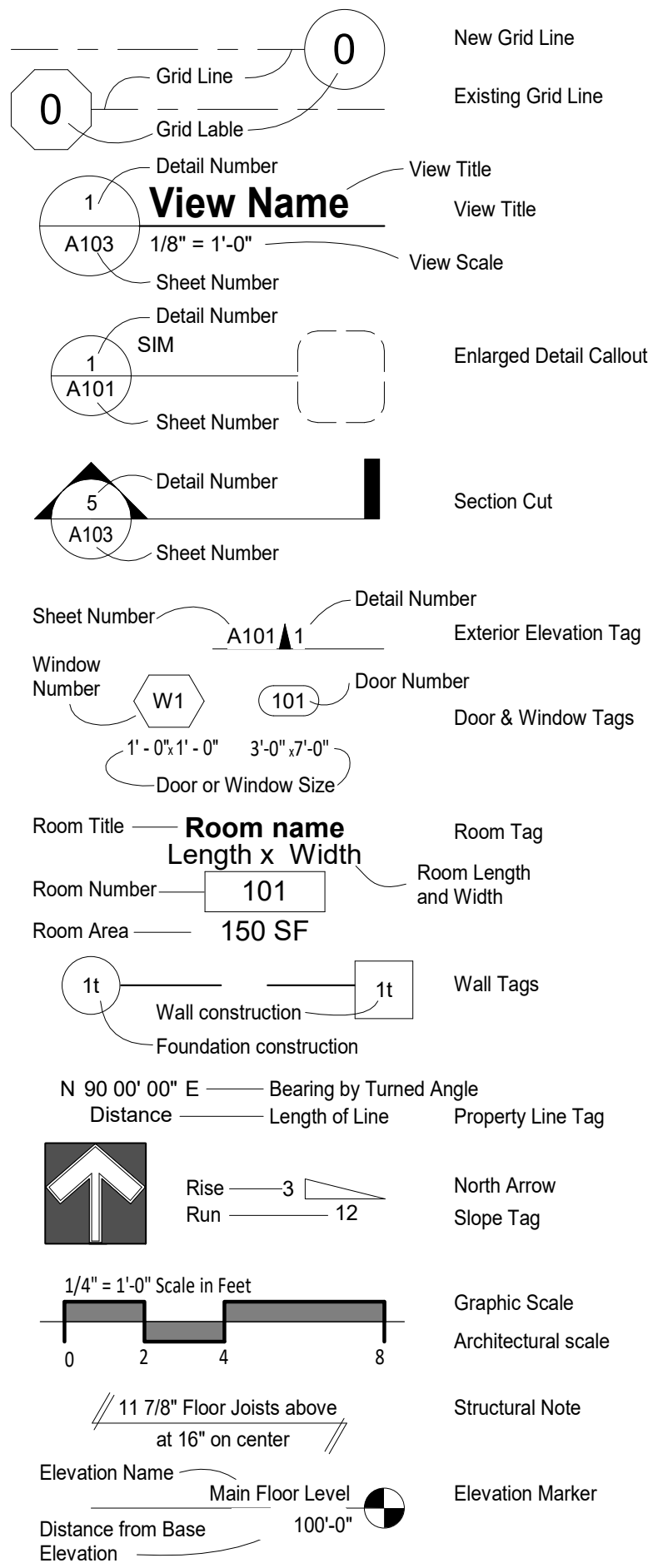
Rachel Amrine Residence Proposed 30X60 Garage

12001 SE Vandalia Drive | Runnels, Iowa 50237

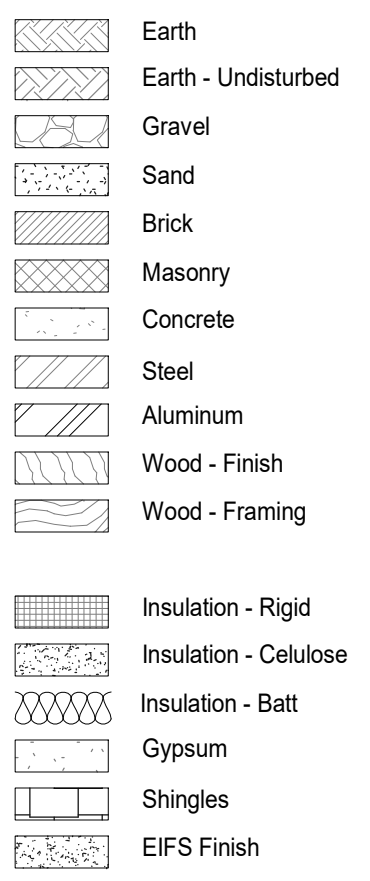
Project Notes

- These documents and the design they represent are the property of the Architect. No changes to these documents either in whole or in part may be made in any way without their prior knowledge and written consent.
- Refer to additional notes and legends on all other documents.
- Refer to civil, geotechnical, environmental, structural, mechanical, electrical, plumbing, fire and life-safety documents for additional information or requirements. Reference to other disciplines is conceptual for purposes of coordination with architectural design only.
- Before commencement of any work, the contractor shall give all notices and obtain all permits. Contractor shall comply with all applicable codes, laws, ordinances, rules, regulations, requirements of governing agencies and authorities, hazardous material application, and disposal requirements, etc.
- These drawings represent the completed project, at a time of substantial completion. The intent of the drawings is to include all items necessary for the proper execution and completion of the work. Unless otherwise noted, they do not represent the means and methods of construction. Sequencing and means and methods of construction shall be the sole responsibility of the general contractor.
- These drawings do not contain information with regard to construction safety procedures. The contractor is solely responsible for all construction safety and shall perform all work in accordance with governing authorities construction safety guidelines.
- Provide complete in place all labor, transportation, material, taxes, fees, permits, licenses, insurance, utilities, inspections, equipment, machinery, supervision, and other items necessary to complete the work in strict compliance with the plans, documents, and specifications prepared by the architect and approved by the owner.
- Verify existing conditions before fabrication and before proceeding with the work, and notify the architect immediately of significant discrepancies which may impact aesthetics, durability, cost, and schedules.
- Do not scale drawings to determine the intended layout or dimensions. If dimensions are in question, the contractor shall be responsible for obtaining clarification before continuing with work. Drawings are intended only as a graphically correct representation of work to be accomplished.
- Remove and replace materials damaged during construction to the satisfaction of the owner. Repair existing public facilities damaged during construction to the satisfaction of the governing authority.
- All work shall be of good quality, and all materials and equipment shall be new and free from defects for one year from the date of substantial completion of work. Any extended warranties obtained from suppliers or subcontractors shall be forwarded to the owner.
- All requirements not followed, including substitutions not properly approved and authorized, in writing, may be considered defective.
- Comply with all weather-related construction requirements. Do not build with or on frozen, saturated, contaminated, or inappropriate substrates or conditions.
- Provide positive drainage of surface water away from and off of all buildings without ponding or water adjacent to or on buildings or pavements.
- By submitting shop drawings, product data and samples, the general contractor and sub-contractor has verified and approved the information contained within. The general contractor's review and approval shall be shown on each submittal prior to the submission to the architect.
- Sprinkler system design and layout drawings, main lines and branches will be provided and installed by the building owner. Drops to ceiling penetration, heads and accessories provided by contractor.

Annotation Legend.



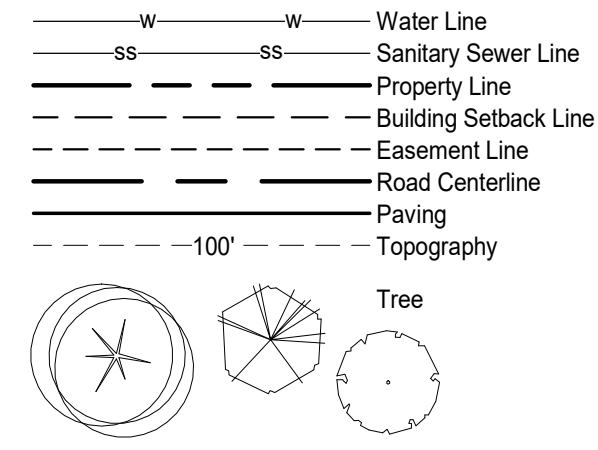
Material Legend



Site Notes

- Any changes or amendments to the project that do not meet what is shown on the plans needs to be approved with the permit and development center prior to installation or construction.
- All work in the city right-of-way shall be done in accordance with SUDAS and the City of Des Moines General Supplemental Specifications to SUDAS effective at the time of plan approval.
- All work in the city right-of-way requires a right-of-way permit.
- The required landscaping new and existing shall be maintained for the life of the certificate of occupancy or certificate of zoning.
- It is the responsibility of the owner or the contractor to follow all applicable codes and ordinances whether or not contained on these documents.
- All lighting shall consist of low glare cut-off type fixtures to reduce the glare of light pollution on surrounding properties.
- No mechanical or utility equipment over 3' tall allowed in any front yard setback. All utility equipment shall be screened from street view.
- All disturbed areas will be restored by seeding or sodding.
- Locations of elements traced from Polk county, Iowa Assessor's website imagery accessed on May 8, 2023.
- Site Dimensions by reference from the Polk County Building Setback requirements.

Site Legend



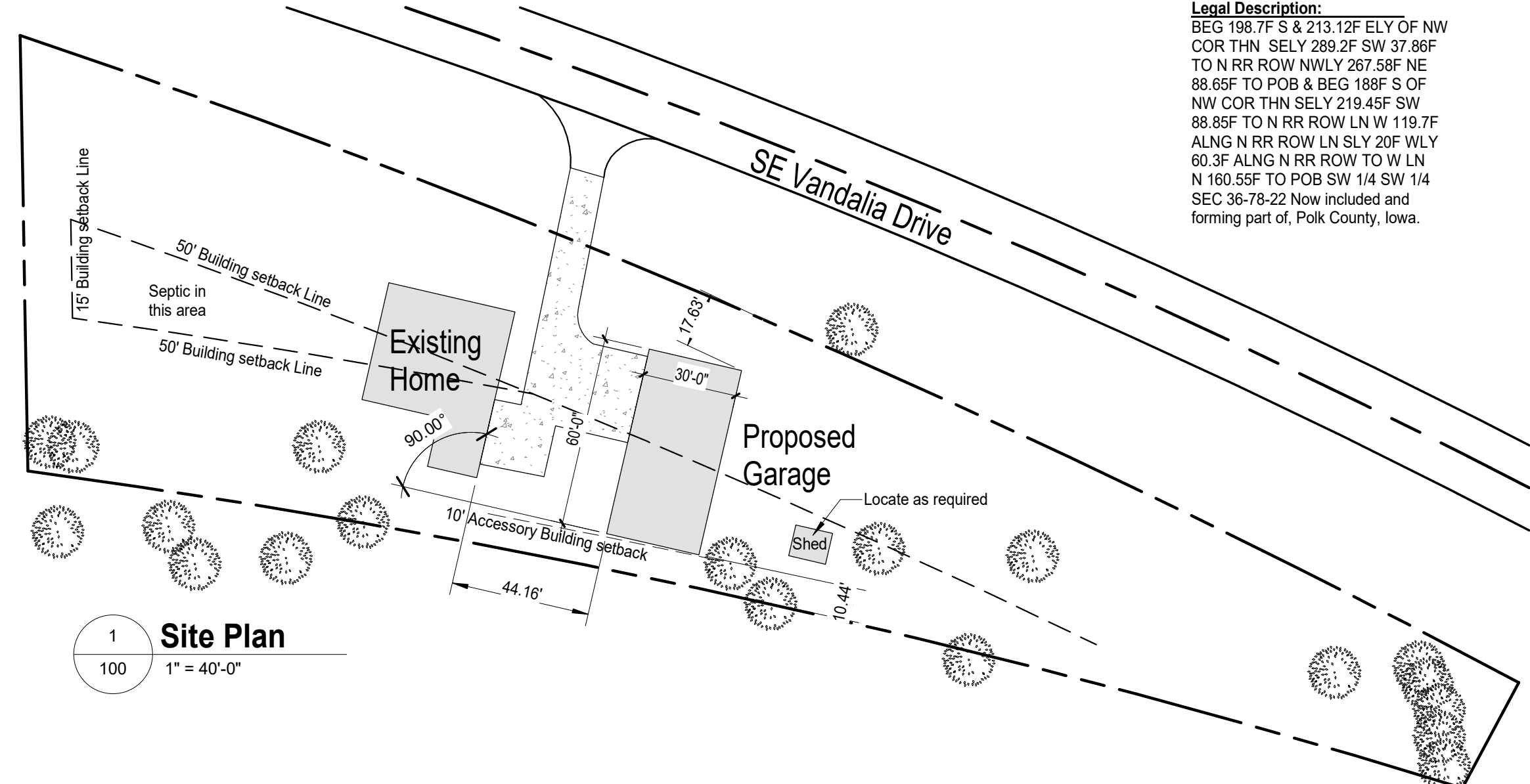
Zoning:
 RR Rural Residential District

Zoning Setbacks:
 50' Front setback
 50' Rear setback
 15' Side Setback

Property Owner:
 Rachel Amrine
 12001 SE Vandalia Drive
 Runnels, Iowa 50238

Property Address:
 12001 SE Vandalia Drive
 Runnels, Iowa 50238

Legal Description:
 BEG 198.7F S & 213.12F ELY OF NW
 COR THN SELY 289.2F SW 37.86F
 TO N RR ROW NWLY 267.58F NE
 88.65F TO POB & BEG 188F S OF
 NW COR THN SELY 219.45F SW
 88.85F TO N RR ROW LN W 119.7F
 ALNG N RR ROW LN SLY 20F WLY
 60.3F ALNG N RR ROW TO W LN
 N 160.55F TO POB SW 1/4 SW 1/4
 SEC 36-78-22 Now included and
 forming part of, Polk County, Iowa.



1 Site Plan
 100 1" = 40'-0"

Creative Concepts and their consultants have completed these design documents to the level of detail requested by our client. The level of detail may range from schematic design document(s) mainly conveying programming information to fully detailed engineered documents and specifications. However, the clients intent and expectations are that these documents be used as the basis for design for an all-inclusive completed project based upon industry standards for all disciplines and governing authorities requirements.

The Contractor acknowledges by submission of their bid that they have a thorough understanding of the project and of the Owner/Landlord's & Tenant's expectations for a completed project. The Contractor also acknowledges that the Contractor has thoroughly reviewed these documents and has requested of the Owner, Tenant, Architect, Engineers or others any and all clarifications, and has received clear answers to said clarifications, required to resolve outstanding issues related to the completeness and accuracy of the design documents for estimating and construction purposes. The Contractor further acknowledges that the Contractor's bid includes all components of construction, including but not limited to: General Requirements, Concrete, Masonry, Metals, Wood, Plastics, Thermal, Moisture, Openings, Finishes, Fire Suppression, Plumbing, HVAC, Electrical, Communications, Safety, Security, Earthwork, Site, Utilities; for a completed project based upon industry standards for all disciplines and governing authorities requirements. Any and all components not included in this bid are identified on the bid submission as "not included in this contract." The design documents do not represent the means and methods of construction. The Contractor also acknowledges sequencing and means and methods of construction shall be the sole responsibility of the Contractor, and any and all costs associated with the means and methods of construction are included in the base bid.

Rachel Amrine Residence
 Proposed 30X60 Garage
 12001 SE Vandalia Drive | Runnels, Iowa 50237

#	Date	Description
1	08/25/23	For Construction

8/28/2023 10:50:46 AM
 PROJECT NUMBER:
2304N
 TITLE:
Cover Sheet

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1. GENERAL REQUIREMENTS

- A. Before final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by the Contractor or building official, and allowed to alter the drawings and specifications so as to comply with governing codes before construction begins.
- B. Upon written receipt of approval from the governing official, approved final Drawings and Specifications shall be submitted to the Contractor by the Architect.
- C. If code discrepancies are discovered during the construction process, the Architect shall be notified and allowed ample time to remedy said discrepancies.
- D. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- E. All contractors, suppliers, and fabricators shall be responsible for the content of the Drawings, and for the supply and design of appropriate materials and work performance.
- F. All manufactured articles, materials, and equipment shall be handled, applied, installed, erected, used, cleaned, and conditioned in strict accordance with the manufacturers' requirements.
- G. All alternates are at the option of the Owner and shall be at the Owner's request, constructed in addition to or in lieu of the typical construction, as indicated on the Drawings.
 - 1. Design Loads:
 - a. Roof: live load 30psf (maximum) dead load 15psf (10 psf top, 5psf bottom)
 - b. Floor: live load 40psf (maximum) dead load 10psf
 - c. Balconies and Decks: live load 60psf (maximum) dead load 15psf (10 psf top, 5psf bottom)
 - d. Soil Pressure: 2000 psf (minimum)
- H. Prior to start of construction, verify design loads with governing codes and site conditions. Check with local building agencies for wind, seismic, snow and other special loading conditions. If discrepancies are discovered, Architect shall be notified according to Section 1A1 above.

2. SITE WORK

- A. Perform excavation, according to good common construction practices, to the lines, grades, and elevations indicated on the Drawings.
- B. Provide consistent compaction of the top 8" of sub-grade, fill, and backfill material beneath structures, walks, and pavements to meet the stated soil pressure.
- C. Provide soil poisoning to control termites as required by governing codes.
- D. Provide and install ventilation for Radon Gas as required by local building agencies and governing codes.
- E. Top of foundation elevation is assumed to be 6" above the final grade at the overhead garage door opening. Changes in the foundation wall elevation relative to the final grade will result in changes to the foundation drawings as well as changes to the garage/house entry stair.

3. CONCRETE

- A. Provide concrete complying with ASTM C94. Unless otherwise noted, concrete shall have the following 28 day compressive strengths as minimums:
 - 1. Concrete footings and foundations: 3,000psi
 - 2. Concrete floor slabs, walks, drives, and patios: 3,500psi
 - 3. Provide construction joints so panel size does not exceed 400sf.
- B. Provide reinforcement of the size and spacing indicated on Drawings. Reinforcing shall comply with the following minimums:
 - 1. Bars: ASTM A615, grade 40, deformed bars.
 - 2. Welded Wire Fabric: ASTM A85.
- C. Unless noted otherwise, all slabs on grade shall be 4" thick, reinforced with 6x6 W4xW14 W.W.M., and placed over 4" minimum compacted sand or gravel fill. Interior slabs shall be placed over 6 ml. Stabilized polyethylene vapor barrier. Coordinate with radon removal procedures.
- D. Footing sizes shown are typical only for stated soil pressure and consistent compaction. Contractor shall be responsible for footings complying with the design requirements of specific soil conditions.
- E. Precast concrete lintels shall be installed and reinforced as per manufacturers' specifications. Architect shall not be responsible for design of precast concrete lintels.

4. MASONRY

- A. Provide standard weight hollow load-bearing concrete masonry units (CMU) complying with ASTM C90, grade N, type 1.
- B. Reinforcement shall comply with the following as minimums:
 - 1. Bars: ASTM A615, grade 40, formed bars.
 - 2. Wire Joint Reinforcement ASTM A82, galvanized.
- C. Provide mortar type "S" in accordance with ASTM C270.
- D. Provide grout in accordance with ASTM C476. Minimum compressive strength shall be 3000 psi unless noted otherwise.
- E. Provide reinforcement in vertical cells or concrete masonry units (fully embedded in grout) as follows:
 - 1. Typical reinforcement shall be one #5 at each corner, at both sides of openings and at maximum spacing of 48" o.c.
 - 2. Reinforce all vertical cells of concrete masonry units supporting concentrated load (beams, structural columns, etc.): At 8" CMU, reinforce each vertical cell with one #5 and solidly fill with grout.
- F. Beam pockets shall be provided for all beams supported by concrete and/or masonry, unless noted otherwise, and shall comply with the following:
 - 1. Minimum of 4" bearing.
 - 2. Height and width as required by beam.
 - 3. Treated lumber beneath all wood beams.
 - 4. Provide vertical reinforcing.

5. METALS

- A. All structural steel shall comply with appropriate ASTM Specifications as follows: ASTM A36, ASTM A53, ASTM A501, ASTM A307, and ASTM A325.
- B. All steel connections shall be designed according to AISC Manual of Steel Construction and shall be detailed by a qualified structural steel detailer. Contractor to submit steel shop drawings to designer or a licensed structural engineer prior to steel erection.

6. WOOD AND PLASTICS

- A. Lumber shall, in addition to complying with governing codes, comply with:
 - 1. "Product Use Manual" of the Western Wood Products Association for selection and use of products included in that manual.
 - 2. "Plywood Specification and Grade Guide" of the American Plywood Association.
 - 3. "Standard Specifications for Grades of California Redwood Lumber" of the Redwood Inspection Bureau for Redwood.
 - 4. American Wood Preservers Association standards and recommendations for fire-retardate and preservative pressure treated lumber and plywood.
 - 5. Western Red Cedar Lumber Association standards and recommendations for cedar.
- B. Provide lumber and materials meeting or exceeding the following standards of quality:
 - 1. Framing Members:
 - a. Studs: Douglas Fir - Larch, Stud Grade.
 - b. Headers and Beams: Douglas Fir - Larch, No. 2 and better.
 - 2. All headers and beams shall be free from splits, checks, and shakes.
 - 3. Sheathing:
 - a. Roof: 5/8" plywood APA RATED SHEATHING, EXP 1 (with clips)
 - b. Walls: 5/8" plywood APA RATED SHEATHING, EXP 1.
 - c. Floor: 23/32" plywood APA RATED SHEATHING, EXP 1 (glue and nail)
 - d. Under layment: 1/8" luan-underlayment grade. (at vinyl only)
 - e. Proper oriented strand board may be substituted for plywood.
 - 4. Rough Hardware:
 - a. Steel items: Comply with ASTM A36; use galvanized steel at exterior locations.
 - b. Install joist and beam hangers capable of supporting the maximum allowable load of joist or beam being supported.
- C. Provide "Micro-Lam" glue laminated veneer lumber beams (manufactured by Truss Joist Corporation) or equal, of the dimensions and number indicated on the drawings. Provide exterior grade Micro Lams for deck framing and other exterior applications. Unless noted otherwise, fasten multiple beams together in strict accordance with manufacturers' recommendations.
 - 1. Allowable stresses:
 - a. Modulus of elasticity: 2,000,000 psi
 - b. Flexural (I² depth): 2,900 psi
 - c. Horizontal shear: 285 psi
 - d. Bearing: 550 psi
 - 2. Use exterior grade Micro-Lam in all areas subject to moisture.
- D. Provide wood trusses able to sustain the stated loads for the spans, profiles, and arrangement shown on the Drawings. Truss layout is schematic only. Truss manufacturer and/or engineer shall be responsible for the design and spacing of all trusses. Contractor to submit truss drawings and/or roof framing drawings to designer for review prior to construction.
- E. All roof trusses shall be installed with metal truss seats as specified by the truss manufacturer.
- F. Unless noted otherwise, provide:
 - 1. Double header joists and trimmers at all floor openings.
 - 2. Double joists under all partitions parallel to joists.
 - 3. Double 2x12 headers with 1/2 plywood between at all door and window openings in 2x4 walls. Triple 2x10 headers with 1/2" plywood between at all door and window openings at 2x6 walls.
 - 4. One row of b3 cross-bridging or metal bridging for each 8'-0" of joist span.
- G. Stud spacing at all exterior and bearing walls shall be 16" o.c. minimum.

- H. Stud walls shall not exceed the following heights without continuous lateral support perpendicular to the plane of the wall at the stated height or less. Studs shall be continuous between points of lateral support.
 - 1. Bearing walls:
 - a. 2x4: 10'-0"
 - b. 2x6: 12'-0"
 - 2. Non-bearing walls:
 - a. 2x4: 14'-0"
 - b. 2x6: 20'-0"
- I. Unless noted otherwise, rafters, ceiling joists, collar ties, and purlins shall be sized and spaced in accordance with FHA requirements or governing codes, whichever is more restrictive.
- J. Stair construction shall consist of (3)2x12 stringers, 5/4" or 2x thick tread and 3/4" thick risers or, shall be fabricated by component manufacturer.
- K. All wood plates bearing on concrete or masonry shall be pressure treated. At exterior walls install plates over foam sill sealer.
- L. Provide 2" nominal pressure treated lumber over 6 ml. stabilized polyethylene beneath full bearing of wood beams bearing on concrete or masonry.
- M. Provide Simpson Strong Wall Garage Portal System around all overhead doors with a width greater than 8'. Install Garage Portal System per manufacturers recommended guidelines.

7. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation at assemblies adjacent to exterior or unheated spaces meeting the requirements of governing codes and, unless noted otherwise, meeting the following minimum requirements:
 - 1. Foundations: 1 1/2" extruded polystyrene (R-8.4)
 - 2. Walls: glass fiber batt (R-19)
 - 3. Floors: glass fiber batt (R-30)
 - 4. Ceilings: glass fiber batt (R-42)
 - 5. Install continuous blankets without holes for electrical boxes, lighting fixtures, or heating ductwork.
- B. Install 6 ml. stabilized polyethylene vapor barrier against interior face of all thermal insulation.
- C. Waterproof foundation walls at excavated areas from footing to finished grade with two coats of asphalt based waterproofing compound.
- D. Roofing shall be 240 lb. (minimum) composition shingles installed over 30 lb. roof felt on roof sheathing. Minimum slope, fasteners, under layment, and exposure according to manufacturers' recommendations.
- E. Provide flashing and sheet metal required to prevent penetration of water through the exterior shell of the building. In addition to complying with governing codes, comply with pertinent recommendations contained in the current edition of "Architectural Sheet Metal Manual" published by SMCNA. All iron sheet metal flashing shall be hot-dipped galvanized complying with ASTM A93.
- F. Provide gutters and downspouts to provide positive roof and site drainage.
- G. Provide attic and roof ventilation as required by governing codes and as shown on the Drawings. Provide appropriate soffit and roof vents.
- H. Skylights shall be selected by the Contractor and approved by the owner. Install skylights according to the manufactures' recommendations.
- I. Install water and ice barrier (Butthene or equal) over roof sheathing at all eaves and valleys. water & ice barrier to extend 24" past outside face of exterior wall below. And as shown on the roof plan.

8. DOORS AND WINDOWS

- A. Exterior doors shall be selected by the Owner.
- B. House-to-garage doors shall be fire rated doors approved by governing codes. Face design to be selected by the Owner.
- C. Interior doors shall be selected by the Owner.
- D. Exterior windows shall be aluminum or vinyl clad wood windows manufacturer by: Pella Corp.
- E. Glazing in all doors and windows shall comply with governing codes.
- F. Install egress window units in accordance with governing codes.
- G. Door and window sizes indicated or drawings are as follows: "30x6/8" represents a door or window 3'-0" wide x 6'-8" high. Jamb depth to be coordinated by the Contractor.
- H. Finish hardware shall be selected by the owner. Install hardware in accordance with governing codes.

9. FINISHES

- A. Gypsum wallboard, unless noted otherwise, shall be provided as follows:
 - 1. Exterior walls: One layer 5/8" regular wallboard to interior face.
 - 2. Interior walls: One layer 1/2" regular wallboard each face.
 - 3. Ceiling: One layer 5/8" regular wallboard.
 - 4. Garage/House common wall: One layer 5/8" type "X" wallboard each face.
 - 5. Baths: Water resistant wallboard at all walls and ceilings surrounding tubs and showers and as required by governing codes. Provide cement board as substrate for ceramic tile.
- B. Provide metal corner bead and trim at all locations recommended by the gypsum wallboard manufacturer.
- C. Tape, float, and sand joints and fasteners of gypsum wallboard with three coats of joint compound as required to obtain a uniformly smooth surface.
- D. Finishes shall be selected by the Owner.

10. PLUMBING, MECHANICAL, AND ELECTRICAL

- A. Plumbing, mechanical, and electrical information and layouts shown on the Drawings is schematic in design, and shall be reviewed by sub-contractors, suppliers, and building officials for compliance with governing codes and good common construction practices. The Architect shall be notified by the Contractor of any discrepancies prior to construction.
- B. Plumbing, mechanical, and electrical equipment shall be selected by the Owner.
- C. Design and installation of plumbing, mechanical, and electrical equipment shall be the responsibility of the appropriate licensed contractors and sub-contractors. Design shall be submitted for owner's review prior to ordering and installation of equipment.
- D. Service panels shall be selected by the electrical sub-contractor.
- E. All HVAC equipment shall be individually switched.
- F. All outdoor, bath, and garage and spa wall receptacles shall be provided with ground fault circuit protection in accordance with governing codes.
- G. Dryer and range hood vents shall be extended to the exterior.
- H. Provide plumbing vents in accordance with governing codes. Minimize number and locate for minimal visual impact.
- I. Install type and number of smoke detectors in accordance with governing codes & UL217. Connect water, gas, and electric services in accordance with governing codes

11. MISCELLANEOUS

- A. This set of construction drawings is intended for design intent only. Although many jurisdictions will accept these drawings as sufficient for a construction permit, these drawings are not intended, and should not be construed, as a complete set of construction drawings. These drawings will have to be adapted to meet local zoning and/or site conditions and additional detailing will need to be completed on site by the builder.
- B. Install prefabricated fireplace units as shown on Drawings.
 - 1. Fireplace units shall be "Heat-N-Glo" or as approved by Owner.
 - 2. Contractor shall be responsible for proper installation as recommended by the manufacturer and as required by governing codes, including mantel and hearth design and location. 3. Hearth shall be of non-combustible material.
- C. Room sizes shown on the plans indicate room dimensions prior to installation of gypsum wall board. Gypsum wall board thickness must be subtracted from room sizes indicated for actual room dimensions and are subject to change.

12. SUBMITTALS

- A. Submit roof truss and/or rafter layout plan as completed by the manufacturer for review prior to ordering roof trusses and/or roof lumber package. Allow designer five days for complete review.
- B. Submit floor truss layouts showing beam locations, joist layout, locations of continuous duct chases, and maximum duct size in each chase. Allow designer five days for complete review.
- C. Architect will not be responsible for any errors in the roof and/or floor framing without the opportunity to review the roof and/or floor framing layouts. Framing layouts, member sizes, and floor/roof penetrations indicated on the drawings are for design intent only. Final layouts shall be the responsibility of builder.



Creative Concepts
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Rachel Amrine Residence
Proposed 30X60 Garage

12001 SE Vandalia Drive | Runnels, Iowa 50237

#	Date	Description
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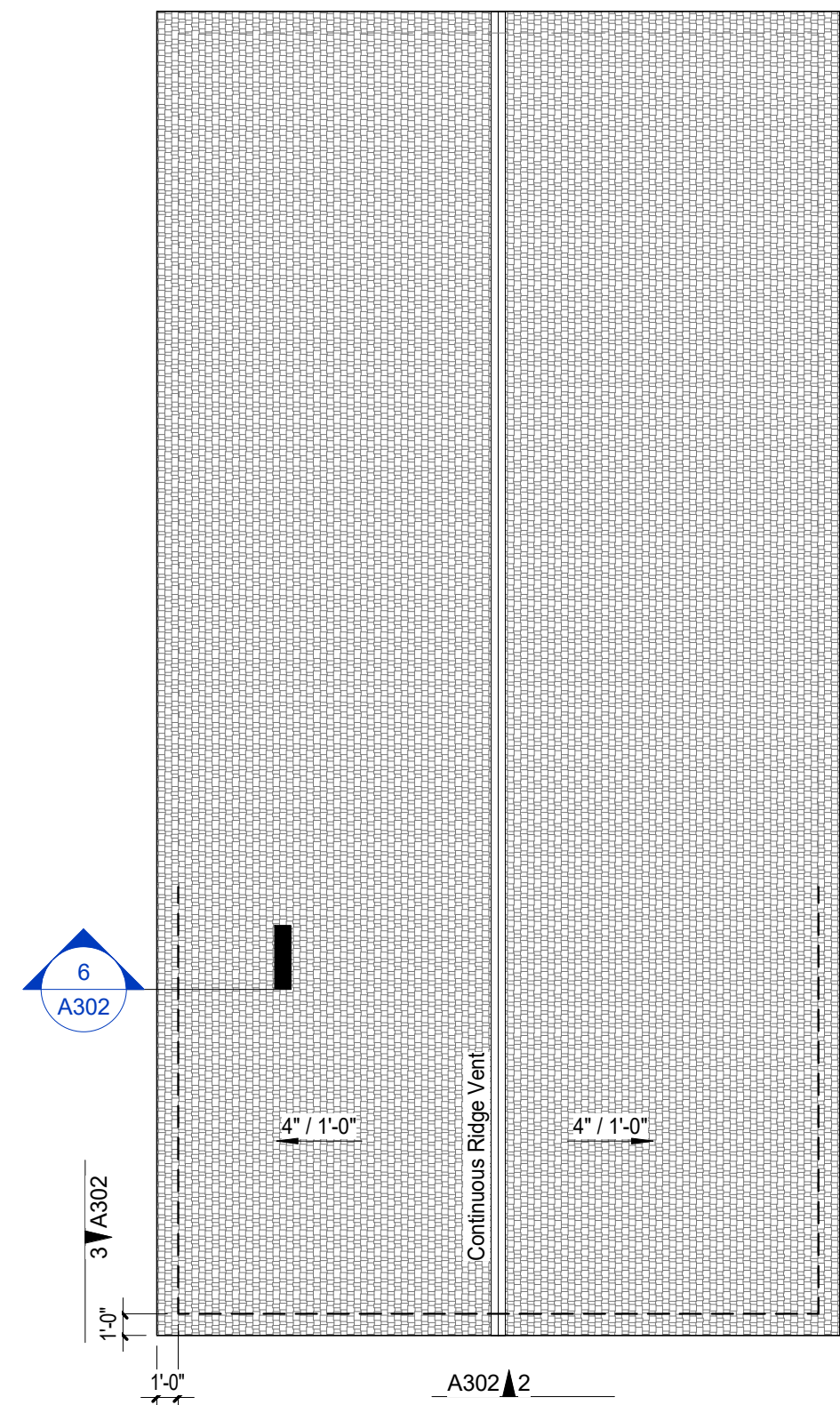
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2304N

TITLE:
Specifications

SHEET:

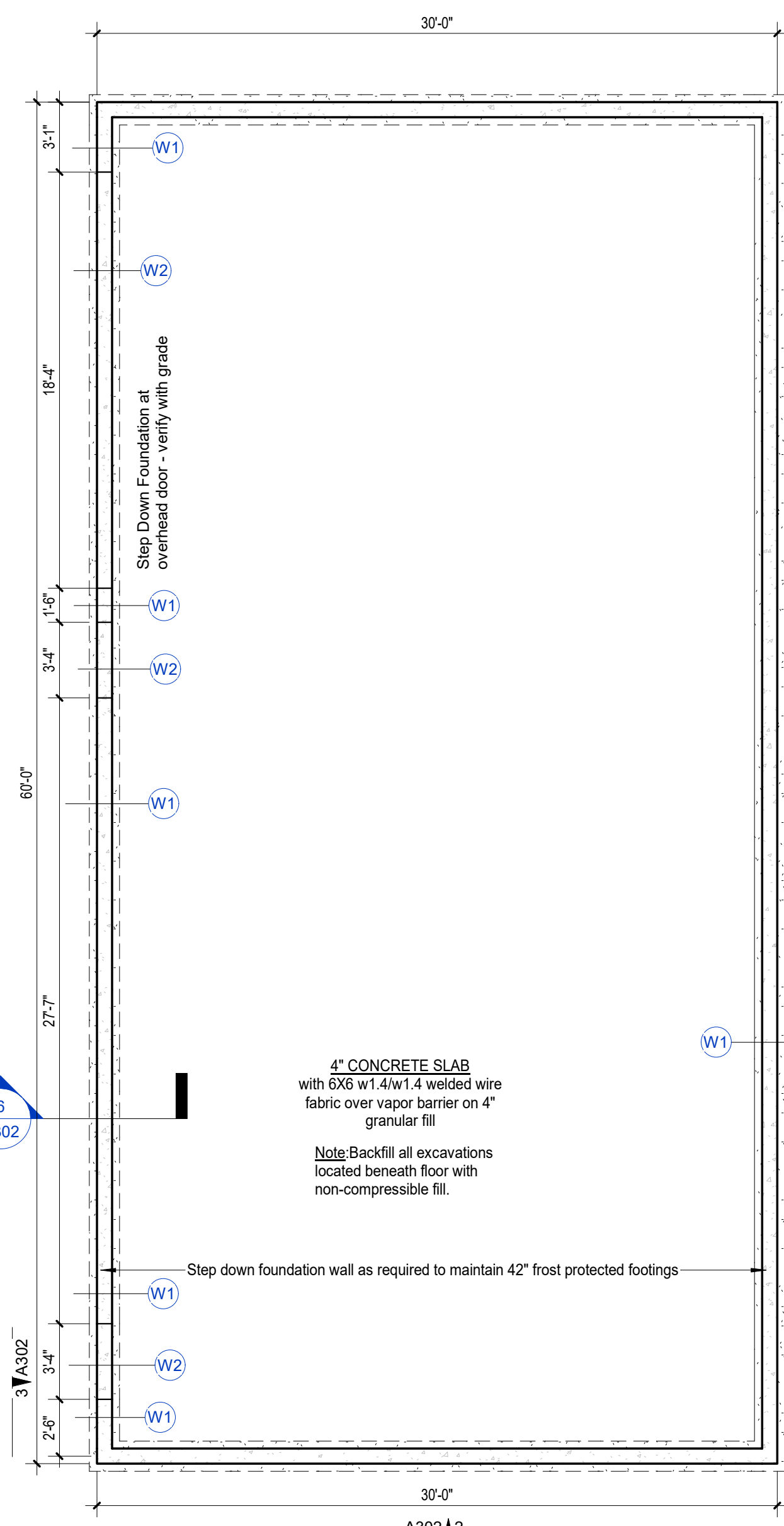
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#	Date	Description
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8/25/2023 10:54:20 AM		
PROJECT NUMBER: 2304N		
TITLE: Foundation, Floor, Roof Plan		
SHEET: A301		



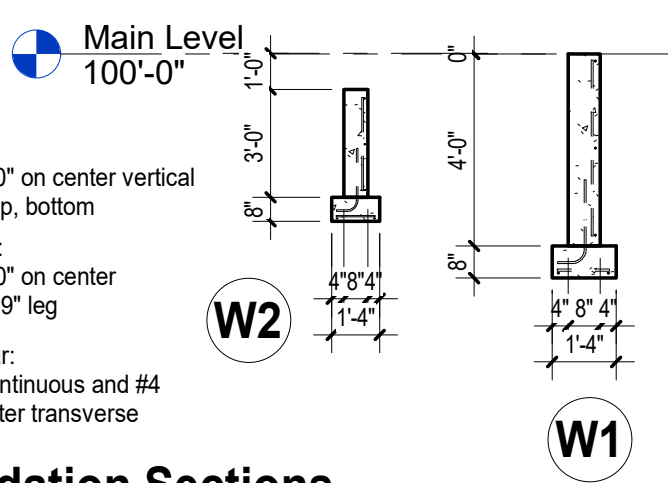
Roof Notes

- Refer to additional notes and requirements on all other documents and other disciplines documents.
- Failure to identify a requirement does not give anyone the right to violate any codes, governing authority, minimum quality or quantity, industry standards, manufacturer recommendations, etc.
- All mechanical, electrical and plumbing equipment shown on this sheet is considered conceptual and provided for coordination purposes only. Refer to mechanical and electrical documents for specific design information. Refer to structural drawings for roof opening structural framing.
- All roof penetrations for minor roof vents and similar items may not be indicated on the roof plan; however, all roof flashing work shall be provided by the roofing subcontractor so as to obtain full roofing warranties. Refer to all other construction documents for additional roof penetrations requiring roof flashing work.
- It should be the responsibility of the roof sub-contractor to provide all necessary details and systems to accommodate the expansion/contraction of the building and building components for a long-lasting roof.
- Contractor shall keep roof clean of all debris during all construction work.
- Design of roof drainage systems shall comply with the Int'l Plumbing Code. (IBC: 2015 Sec. 1503.4) Final detailed design of roof drainage systems to be by plumbing consultant or design-build plumbing subcontractor.
- Oversized roof drains, gutters and/or downspouts should be provided to eliminate any overflow or backup.
- A cricket or saddle shall be installed on the ridge side of any penetration greater than 30" wide as measured perpendicular to the slope. (IBC: 2015 Sec. 1503.6)
- All roof slopes, including flattened roof areas to obtain positive drainage, to be integrated into underlying roof support design. Provide tapered rigid insulation to maintain minimum 1/4" per foot slope at all flattened roof areas to ensure positive drainage all the way to roof drain from all penetrations and changes in roof slopes.
- Provide concrete splash blocks at all downspout locations.
- Roof ventilation intake & exhaust vents shall be provided in each & all enclosed attics &/or rafter spaces to create cross ventilation in accordance with codes & the manufactures installation instructions. (IBC 2015 sec. 1203.2, 1503.5)
- Insulate and seal to ensure adequate air infiltration barrier around all exterior penetrations to prevent water and sprinkler pipe freezing.
- Crawl spaces shall be provided with a minimum of one access opening not less than 18"x24". (IBC: 2015 Sec. 1209.1)
- An opening of not less than 20"x30" shall be provided to any attic area having a clear height of over 30". A 30" minimum clear headroom in the attic space shall be provided at or above the access opening. (IBC: 2015 Sec. 1209.2)
- Access to Mechanical appliances installed in underfloor areas, in attic spaces and on roofs or elevated structures shall be in accordance with the International Mechanical Code. (IBC: 2015 Sec. 1209.3)
- Roof trusses designed and-built by truss manufacturer.
- Pitched (slope >2:12) roof - Self-adhering ice membrane underlayment required from eave's edge to a point at least 24" inside the exterior wall line of the building. (IBC: 2015 Sec. 1507.2.8.2)

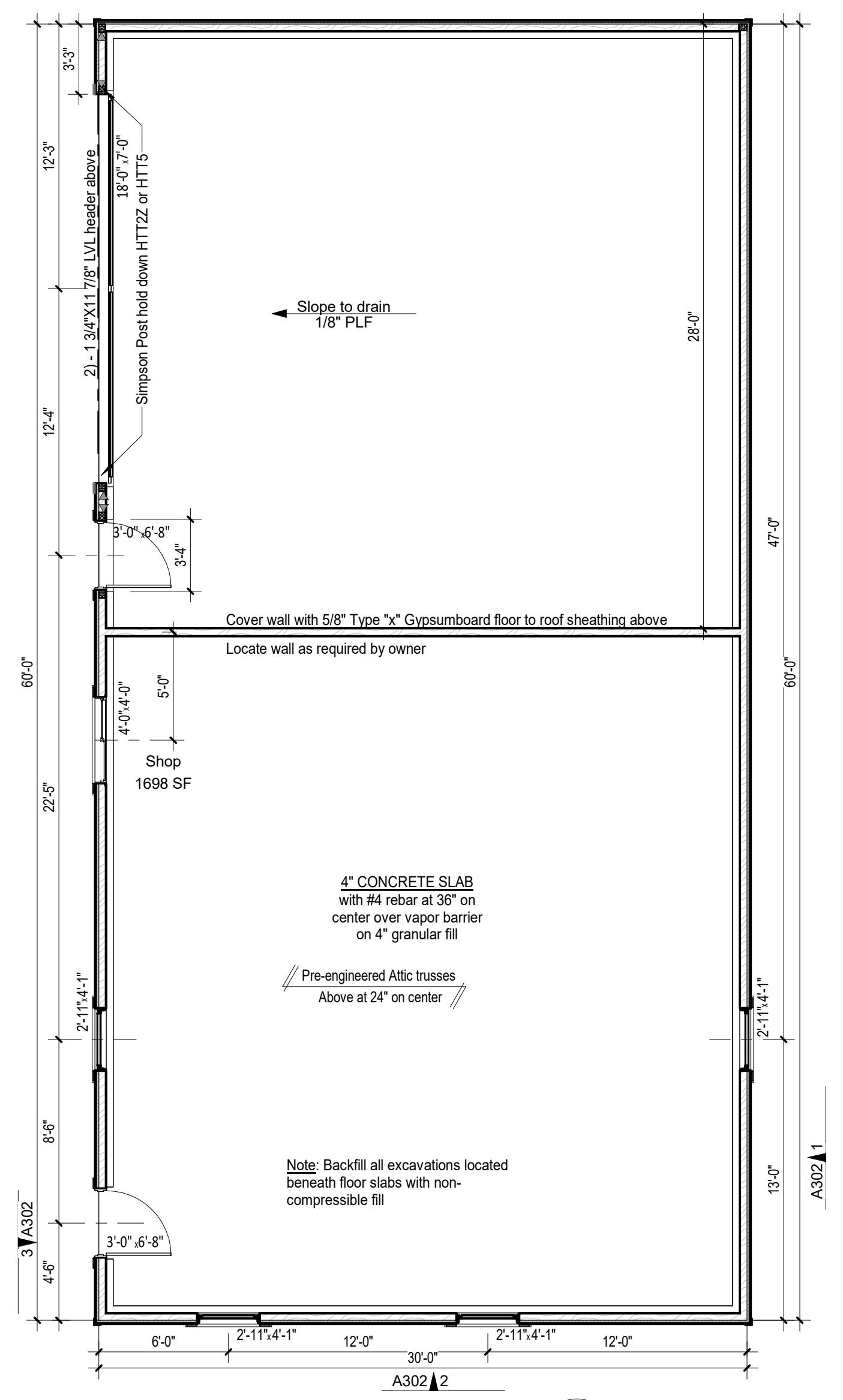


Foundation Notes

- All anchor bolts shall conform to ASTM F1554 - 36ksi
- Concrete foundations to be 3,000psi - Concrete slabs to be 4,000psi
- All reinforcing to be grade 60
- #4 bar lap = 2'-0" - #5 bar lap = 3'-4" - #6 bar lap = 4'-0"
- Foundation design base on 2,000psf soil bearing capacity
- All concrete shall be reinforced unless otherwise noted
- Concrete to be placed over dry sub-grade to prevent heaving in winter
- Forms where concrete is to be exposed shall be smooth and free from defects
- Changes in elevation for footings and foundation walls are for design intent only. Actual elevations shall be verified with final grade during construction. Maintain 42" minimum frost protection on all footings
- All concrete shall be saw cut. If saw cuts are not specified contact Architect or Engineer. If possible saw cut under demising walls
- Exterior paving to be 1 1/2" lower than interior finish floor sloping away from building. Where no paving, top of grade to be a minimum of 6" below finish floor
- Concrete slab shall be installed true to a plane with no deviations greater than 1/4" in 10'-0" in any direction and free from blemishes and trowel marks
- Apply trowel finish to monolithic slab surface exposed to view and slab surface to be covered with resilient flooring, carpet, ceramic or quarry tile, pain, or another thin film-finish coating system. grind smooth any surface defects that would telegraph through applied floor coverings system
- Apply a non-slip finish perpendicular to main traffic route to all exterior concrete platforms, steps, and ramps
- Prior to commencing work contractor to verify elevation of existing floor. Contractor to ensure alignment of new and existing floor elevations

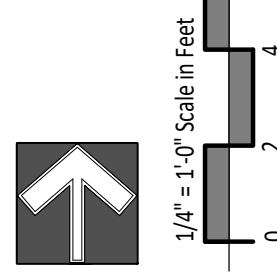


Foundation Sections



Framing Plan Notes

- Dimensions are to face of existing finish material, the face of new studs or centerline of the structure unless otherwise specified
- All site info, fixtures, and equipment shown are provided for coordination purposes only. The layout is considered conceptual. Refer to civil, mechanical, electrical, plumbing, fire, and life safety, etc. for specific design information.
- Provide adequate wood blocking for millwork, fixtures, equipment, plumbing fixtures and accessories, electric panels, roof access ladder, future or by owner items, etc.
- Provide positive drainage of surface water away from building without ponding of water adjacent to the building or on pavements.
- Contractor to coordinate all above ceiling attic work lighting, ductwork, or other systems to ensure interference conditions are avoided.
- Contractor to verify actual dimensions and existing conditions concerning the extent of interior demolition provided by the building owner prior commencement of this project. Notify the architect immediately of significant discrepancies which may impact aesthetics, durability, cost, and schedules.
- Pella windows are used as the basis of design. Verify rough opening sizes with the manufacturer's catalog. Verify the egress requirement and rough opening size when selecting alternative windows.
- Contractor to take measure to ensure new and existing floor levels align as required by owner.



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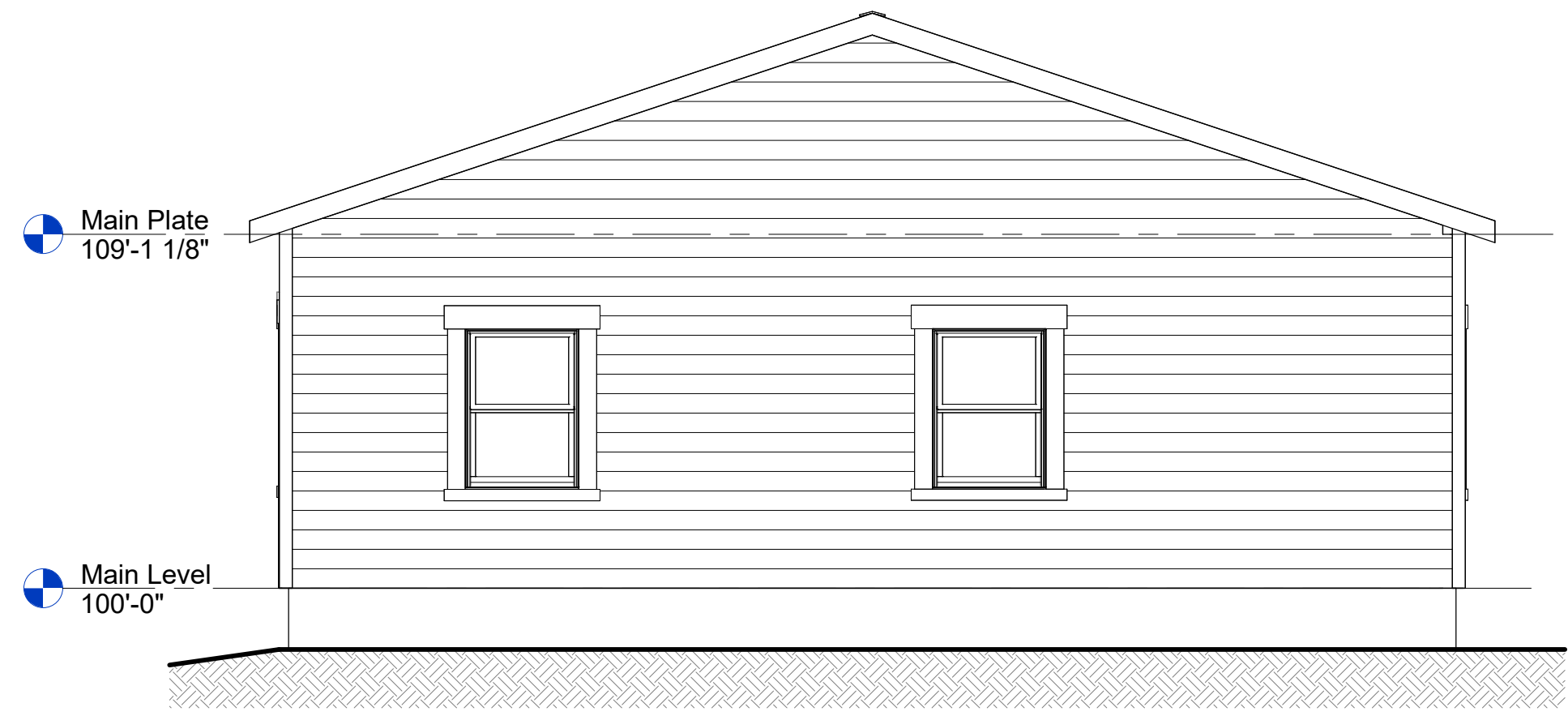
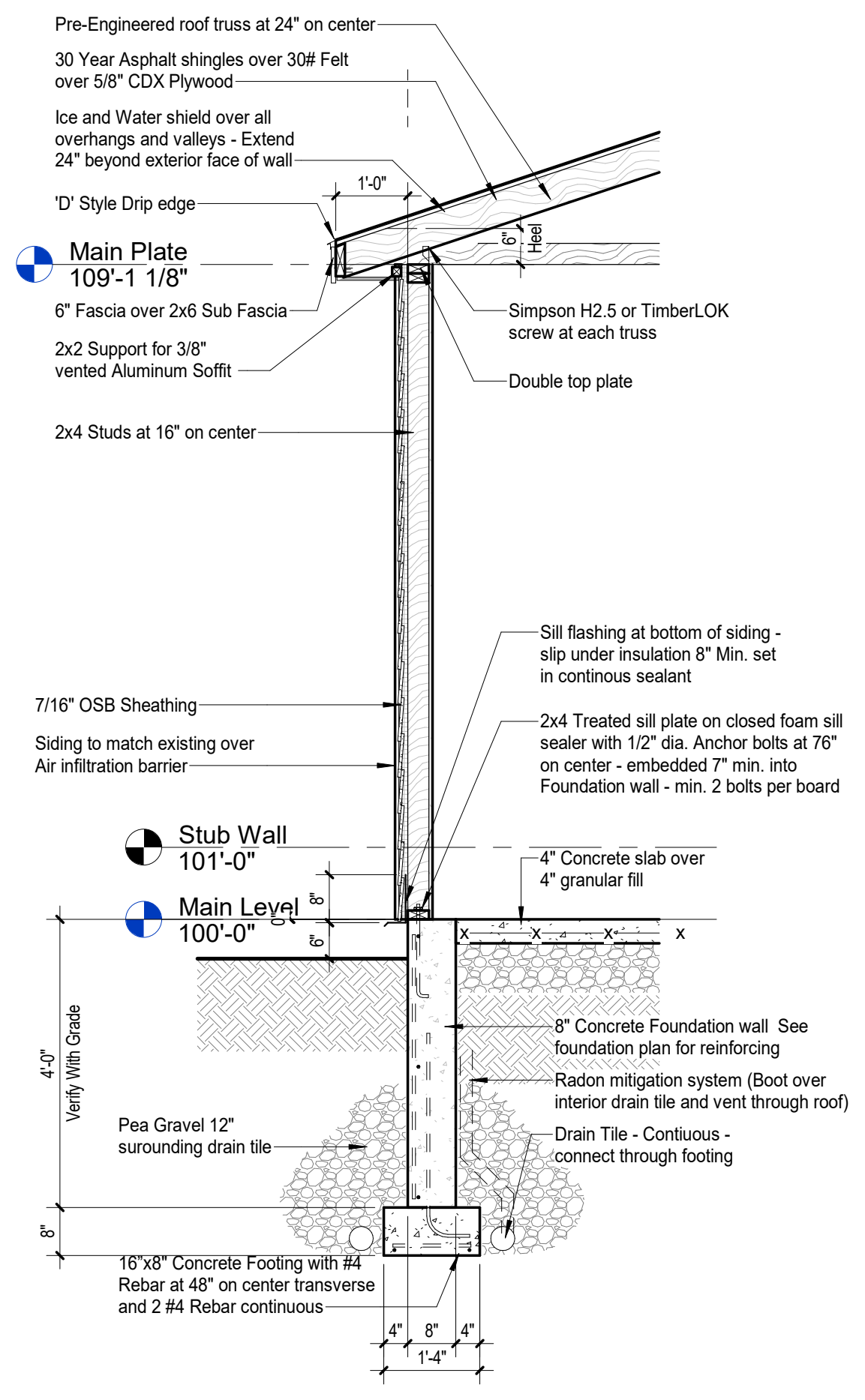
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TITLE:
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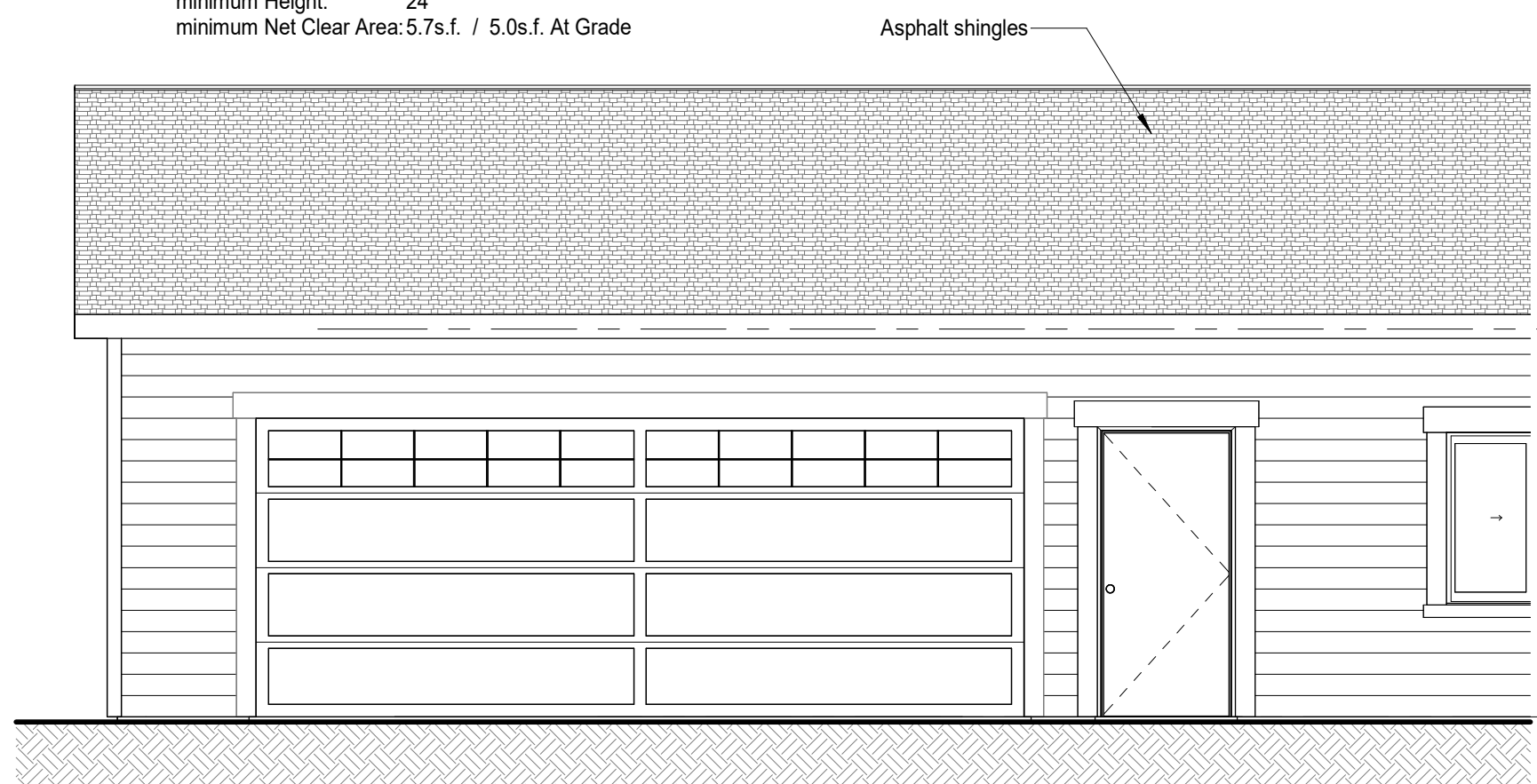
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A302

Elevation Notes

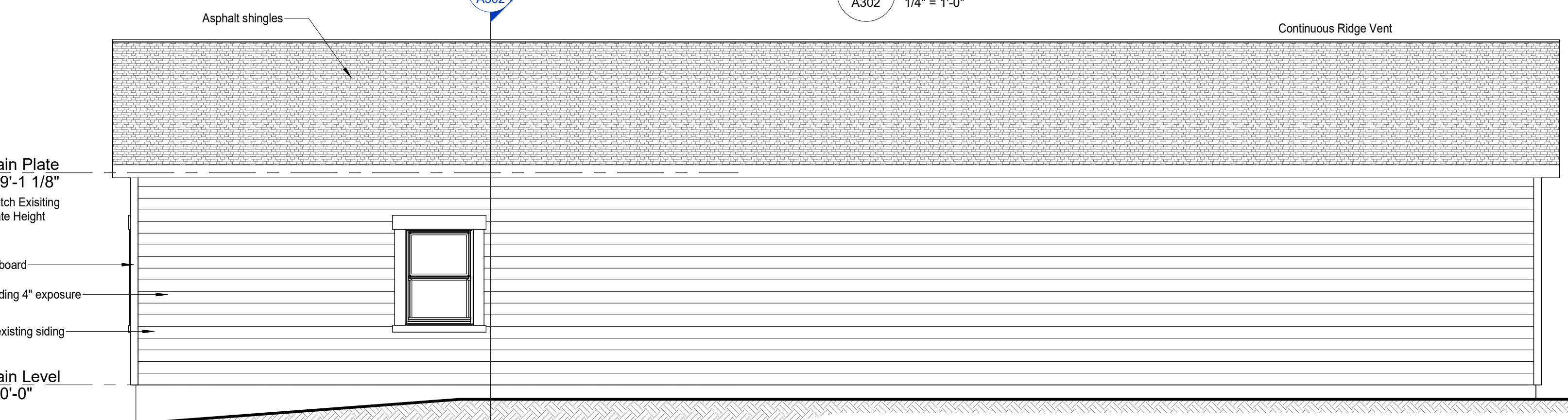
- Grade shall have a minimum of 6" fall in the first 10'-0" out from the structure.
- Provide caulk and sealant to all voids, around windows and doors, at masonry, trim, to all exterior joints, penetrations, and material changes.
- Provide approved corrosion resistant flashing at exterior wall envelope.
- Provide weather stripping at all exterior doors, and garage doors interior and exterior.
- Provide continuous gutters and downspouts at all eaves unless noted otherwise.
- Construction address or location number to be posted and plainly visible from the street frontage. Numbers to be Minimum 4" high with 1/2" stroke and contrasting background.
- All chimneys shall extend 2'-0" taller than any roof element within 10'-0" of the chimney. Provide a factory built fire box or stove Provide manufacturers approved cap for chimney termination, a spark arrestor is required on all wood burning fire boxes or stoves.
- Exterior wall covering shall extend from the top of foundation to the roof and terminate at 2" nominal solid blocking between the rafters at all roof overhangs or at the underside of enclosed overhangs. It is the responsibility of the owner and/or builder to choose all paint colors, siding and trims sizes and styles. Recommended sizes are shown and called out where selected. Verify with owner
- Roof shingles shall be applied over a minimum of one ply of #30 felt. Felt shall be laid parallel to the eaves with 2" top overlap minimum and 4" end overlap. Minimum roof slope shall be 3:12 slope. Ice and water shield at all eaves and valleys. Ice and water shield shall be installed a minimum of 24" from the inside face of the exterior wall below.
- All enclosed attics and rafter spaces shall have cross ventilation with a net free open area of not less than 1/150 of the attic area when vents are placed only in the upper part of the attic. When openings are placed in the upper and lower part of the attic the net free open are shall not be less than 1/300 of the attic area. All openings shall be protected against the entrance of snow and rain
- All trusses are to be designed by the truss manufacturer and provided with detailed drawings illustrating truss layouts and engineering calculations. It is the owner's and/or builder's responsibility to supply any and or all of this information as required by the building department for permit. It is the truss manufacturer's responsibility to verify and adjust the size of members and framing carrying the roof loads. The truss manufacturer shall notify the Architect of any changes required to the drawings.
- Glass within 18" of the floor, 12" of a door swing, or within 60" of a water using fixture shall be tempered glass
Window sill shall be within 44" of the finish floor elevation
minimum Width: 20"
minimum Height: 24"
minimum Net Clear Area: 5.7s.f. / 5.0s.f. At Grade



2 South Elevation
A302 1/4" = 1'-0"



3 West Elevation
A302 1/4" = 1'-0"



1 East Elevation
A302 1/4" = 1'-0"

6 Wall Section
A302 1/2" = 1'-0"

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