Residential Additions

May 2016

A City of Rochester Hills
Building Department
Guide to building
a Residential Addition

Rochester Hills Building Department
1000 Rochester Hills Dr.
248-656-4615

INTRODUCTION

Residential Additions Guidebook

The City of Rochester Hills Building Department has prepared this Guidebook to assist you in the process of building a residential addition within our City. We recognize that in order for your project to be a success, all parties involved need to work together towards the final goal; a safe, well-built addition. We take great pride in being part of your success story and encourage you to keep all lines of communication open from the start to the finish. We want to know how we can help!

Included in this Guidebook is important information to help you understand the Building Permit and construction process, from application to completion. We have included details for areas that have generated confusion or construction delays in the past.

When your Building Permit application is submitted, it will go through a three-step review process:

1. **Grading Review:** This review covers work related to the property, including drainage, sidewalks, driveways, utility locations and connections. We also check for wetlands, steep slopes, watercourses, flood plains and other outside agency permits that may be required.

2. **Zoning Ordinance Review:** This review is performed to verify that your residential addition will meet the lot coverage, setback, height and size requirements for your Zoning District. This review will also determine if a Tree Removal Permit or Right-of-Way Tree Permit is required.

3. **Building Plan Review:** This review covers all the Michigan Residential Code requirements that apply to your proposed project.

Submitting a complete set of plot plans and construction drawings containing all the necessary information will expedite the plan review process. Details of typical submittal requirements are included in this Guidebook. The permit applicant will be notified if the information submitted does not meet the City of Rochester Hills Zoning Ordinance, grade or Michigan Residential Code requirements.

This Guidebook is set up to allow you to quickly reference specific areas of interest.

Please Note: This Guidebook is only intended to be a guide and is not all inclusive of the Michigan Residential Code and City Ordinances. For complete details of all requirements, please refer to the Michigan Residential Code that is currently in effect. The guidelines in this Guidebook are subject to change without notice.

We hope this Guidebook is helpful and we encourage you to provide us with any suggestions you may have as we continue to work toward improving our permitting process.

Thank you!

The City of Rochester Hills Building Department

HOW TO USE THIS GUIDEBOOK

Residential Additions

This Guidebook is set up to allow you to quickly reference specific areas of interest. The titles of the information provided in each section are listed below along with an explanation of what is contained on that sheet with a page number for quick reference.

Before You Build ..... Page 1
- Issues that should be checked at the beginning of your project.

Phone Directory ..... Page 2
- A list of City and outside agency phone numbers for your reference.

Codes Currently in Effect ..... Page 3
- A list of the current Codes that will apply to your project.

From Application to Completion ..... Pages 4-5
- This is intended to be your general guide through the complete process. It provides information on the application requirements, permits, and inspections.

Building Permit Fees ..... Page 6
- A list of fees related to building a residential addition.

Plan Review Checklist ..... Pages 7-9
- A guide to help you understand the information that needs to be contained in the construction drawings. Construction drawings that contain all the necessary information and details will help expedite the review process.

Inspection Request ..... Page 10
- Contains details required for requesting an inspection, making sure your job is ready for inspection, times inspections are done and what the inspection reports mean.

Building and Trade Inspections ..... Pages 11-16
- Explanation of the standard building and trade inspections required and some of the common items the Inspectors check during inspections. This should be used as a guide by builders, superintendents and homeowners to review the project before calling for an inspection.

Sample Drawings ..... Pages 17-21
- Sample foundation and floor plans, wall section and elevations for a residential addition.

ZONING AND GRADING SECTION

Setback Requirements ……..... Page 22
- A sheet to help you determine where your addition can be located on your property.

Subdivision Zoning Districts …….....… Page 23-24
- A list of all the City's subdivisions and their Zoning classification.

Plot Plan Requirements …….....… Page 25-27
- A list of the items required to be shown on the plot plan. Please take time to make sure your drawings are complete. Plot plans that contain all of the necessary information and details will help expedite the review process.

Sample Plot Plan …….....… Page 28
- A sample plot plan is enclosed.

Customer Satisfaction Survey……..…….....Page 29
Please take the time to complete this survey. It is an opportunity for you to provide comments and suggestions that will help us as we continue working to improve our service.
We welcome your comments!

FORMS

- Building Permit Application
- Contractor Registration
- Customer Survey Form

All forms are available at our counter or online at www.rochesterhills.org

BEFORE YOU BUILD

Residential Additions

The following items should be checked at the beginning of your project. Any of these items can affect the type, location, cost and length of time it takes to build your residential addition.

Existing Foundation - When an addition is constructed, the existing foundation system needs to be capable of supporting the additional loads. If your house does not have an adequate foundation system, additional work may be required to ensure the existing house and new addition are properly supported. Please Note -An addition cannot be constructed on an existing wood deck unless the deck is designed to support the additional loads (typically engineering is required).

Setbacks - The City of Rochester Hills Zoning Ordinance contains minimum dimensions required between your residential addition and the established property lines. Your addition cannot be located closer than 10 feet to any accessory structure without having to meet additional requirements. Aa addition attached to any portion of the house having a nonconforming front, side or rear yard setback will be required to meet the current standards of the Zoning Ordinance. Additional setbacks may be required if your property has regulated steep slopes. See "Setback Requirements" page 22.

Deed Restrictions - Your subdivision may have Deed Restrictions that apply. The City of Rochester Hills cannot enforce Deed Restrictions, however, we encourage you to check for any restrictions that may apply to your project.

Drainage - Will the existing yard drainage be affected by the location of the proposed residential addition? All changes to the existing drainage will need to be shown on the plot plan. If large grade changes and/or slopes are proposed, retaining walls or special grading may be required. See "Plot Plan Requirements" - pages 25-27. If you have any questions, please call the Building Department at (248) 656-4615.

Flood Plains - Flood plains are usually associated with lakes, streams, rivers and drainage courses. They are areas designated as prone to flooding during times of rain. Building in these areas is strictly regulated. If your residential addition is built in a floodplain, it will require a Structural Engineer's design and a Floodplain Use Permit prior to Building Permit approval. Please call Rochester Hills Engineering Services at (248) 656-4640 for additional information.

Wetlands -These areas have been determined to be indispensable and are to be protected as a natural resource. If your residential addition will be close to or in regulated wetlands, additional paperwork, including permits, may be required from the City or State of Michigan prior to Building Permit approval. Please contact the Building Department at (248) 656-4615 for additional information.

Steep Slopes – Conservation practices to prevent disturbance of existing steep slopes are in effect to protect public health, safety, & welfare. Effective protection of steep slopes is regulated by City Ordinance. Please contact the Building Department at (248) 656-4615 for additional information.

Historic District - If your house is located in a Historic District, your residential addition will be required to be reviewed and approved by the Historic District Commission. The Planning Department can help you understand the process and explain what you need to provide. Please call the Planning Department at (248) 656-4660 for additional information.

Trees - A Right-of-Way Tree Permit is required for all trees located between the property line and the street that will be affected by the construction.

Permit Process – Please allow time for the permit process. Plan review time varies depending on the Building Department's workload.

These are some of the common items that may cause delays in the permit process. If your project is beyond the scope of this Guidebook, additional requirements may be necessary. Please call the Building Department at (248) 656-4615 if you have any questions.

PHONE DIRECTORY

CITY OF ROCHESTER HILLS

Office Hours: Monday – Friday (except Holidays) 8:00 a.m. – 5:00 pm.

DEPARTMENT	PHONE	FAX
Accounting	(248) 656-4632	(248) 608-8178
Assessing	(248) 656-4605	(248) 841-2585
Building	(248) 656-4615	(248) 656-4623
Inspection Request Line	(248) 656-4619	
City Clerk	(248) 656-4630	(248) 656-4744
Engineering	(248) 656-4640	(248) 656-4758
Facilities	(248) 656-4658	(248) 656-4670
Fire Prevention	(248) 656-4717	(248) 656-4726
Mayor	(248) 656-4664	(248) 656-4603
Parks, Forestry Division	(248) 656-4673	(248) 841-2576
Planning	(248) 656-4660	(248) 841-2576
Public Service	(248) 656-4685	(248) 656-4758
Water/Sewer Billing	(248) 656-4688	(248) 608-8178

City Website: www.rochesterhills.org

OUTSIDE AGENCIES, PERMITTING AGENCIES

Ameritech (telephone)	1-800-0244-4444
Cable:	
Comcast Cablevision (formerly AT & T Cable)	(248) 334-1144
Wide Open West (formerly Americast Cable)	1-800-848-2278
Consumers Energy	1-800-477-5050
DTE Energy	1-800-477-4747
Michigan Department of Environmental Quality	1-800-662-9278
Michigan Department of Transportation	(248) 483-5100
Michigan Department of Natural Resources	(734) 953-0241
MISS DIG	1-800-482-7171
Oakland County Customer Service	(248) 858-0720
Oakland County Water Resource Commission	(248) 858-1105
Oakland County Health Department	(248) 858-1280
Pontiac, City of (Drain Layer License Information)	(248) 857-5670
Road Commission for Oakland County	(248) 858-4804

RESIDENTIAL CODES CURRENTLY IN EFFECT

February 8, 2016

Building:

Residential: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Plumbing:

Residential: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Mechanical:

Residential: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Electrical:

Residential: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Energy Compliance:

Residential: MRC 2015 (Michigan Residential Code 2015)
Effective February 8, 2016

Code books can be purchased by going to the Michigan Department of Labor & Economic Growth, Bureau of Construction Codes & Fire Safety, Lansing, MI 48909, or their website at: www.michigan.gov/bcc- Codes and Standards.

The codes noted above are adopted by the City of Rochester Hills Codified Ordinance Section 18-41 and 18-136.

FROM APPLICATION TO COMPLETION

Residential Additions

A General Guide Through the Complete Process

1. **Information required with a Building Permit application:**
   The following shall be submitted with the application. Please note that all forms need to be filled out completely.

   A. **Building Permit Application**
      - Application available at our counter and on line at www.rochesterhills.org.
      - The Application shall be filled out completely.

   B. **Application Fee**
      - Please see "Building Permit Fees" - page 6.

   C. **Plot Plans - Three Sets**
      - Please see "Plot Plan Requirements" - pages 25-27 and "Sample Plot Plan" - page 28.

   D. **Construction Drawings - Two Sets**
      - Please see "Plan Review Checklist" - pages 7-9 and "Sample Drawings" - pages 17-21.

   E. **Roof Truss Layout - Two Sets (if applicable)**
      - This may be required depending on the type of the roof construction.

   F. **Energy Compliance** – Please clearly indicate thickness and R-values of all insulation, and U values of all doors and windows being used and note any additional energy upgrades being done to the existing home on your plans.

   G. **Owners** may submit a Building Permit application for work on property that is, or will be, on completion, their place of residence. Owners of rental property may submit a Building Permit application to do maintenance and alterations to their rental property.

   H. **Please Note:** Any contractor, hired by the Owner for a contract price of $600.00 or more, must be licensed in accordance with the State of Michigan Residential Builders Laws.

Note: All information noted above shall be submitted with the Building Permit Application.

2. **Registration of Builder's License**
   - Builders shall be registered with the City of Rochester Hills to submit a Building Permit application.
   - All registrations expire on May 31st.
   - Builders not currently registered can register at the time of application by providing the following:
     - The original or a copy of your Builder's License.
     - A copy of the License Holder's Driver's License, if not present in person. This will be returned to the applicant.
     - A Registration Fee of $45.00 for one year, $65.00 for two years or $85.00 for three years.
     - A completed Contractor Registration Form with an original signature by License holder.
       - The Form shall be notarized (if not presented to the Building Department by License holder)
       - A Contractor Registration Form is available at our counter or online at www.rochesterhills.org (City Services/Building & Ordinance/Forms).

3. **Plans Reviewed and Approved**
   - Building and plot plans are reviewed for compliance to the Michigan Residential Code and City Ordinances (pages 3 and 27).
   - Plans are reviewed in the order they are received based on the application date. Plan review times vary depending on the Building Department's work load.
   - Plans that contain all the necessary information and details will help expedite the review process.
   - The Permit Applicant will be notified if the information provided does not meet the City of Rochester Hills Zoning Ordinance, grading or the Michigan Residential Code requirements, or if any additional information is necessary.

4. **Permit Ready**
   - The Permit Applicant will be called when the Building Permit is ready to be picked up.
   - Building Permit and plan review fees are due at the time of the Building Permit issuance.
   - Permit fees can be paid by cash, credit card, debit card or check.
   - The Building Permit shall be secured within 6 months of the application date or the application will be canceled.
   - Issued Permits that have no activity for more than 6 months will be canceled.

5. **Plumbing, Mechanical and Electrical Permits** may be required depending on the nature of the project. These Permits can be obtained **after** the Building Permit has been issued.
   - All items to be installed shall be listed on the appropriate Permit Applications.
   - Items not listed shall be added to the appropriate Permits or additional Permits secured before Final Inspections.

When all the required Permits are obtained, construction may begin. Revisions to the building or grade after issuance of the Building Permit may require re-submittal or revised plans and approvals.

The following items shall be addressed and maintained throughout the entire construction process:
- The street address shall be posted and clearly visible from the street.
- Temporary soil erosion control shall be in place and maintained.
- The street shall be kept clean at all times.
- All construction materials and debris contained on your property.
- Tree protection (if required) shall be in place and maintained.

Note: See “Inspection Requests” page 10 and “Building Inspections” pages 11-16 for details on requesting inspections and what an Inspector looks for.

This itemized list is provided as a guide to help you understand the process for building a residential addition in the City of Rochester Hills. It covers the most common types of projects. If your addition is beyond the scope of this Guidebook, additional information, Inspections or Permits may be required. Please call the Building Department at (248) 656-4615 if you have any questions on how to apply this Guidebook to your specific project.

BUILDING PERMIT FEES

Residential Additions
(Effective 2/19/10)

1. **Application Fee** …… $75.00
   - Non-refundable.
   - Due when permit application is submitted.

2. **Building Permit Fee**
   - Based on the Construction Value of the project, excluding site work.

   Construction Value
   $1,000.00 and under ……. $75.00
   $1,001.00 to $10,000.00 –
   $75.00 plus $20.00 for each additional $1,000.00 or part thereof over $1,000.00.
   $10,000.00 and over –
   $255.00 plus $6.00 for each additional $1,000.00 or part thereof over $10,000.00.

3. **Building Plan Review Fee**
   - $1.47 per $1,000.00 of the Construction Value, minimum fee …… $75.00

4. **Zoning Review Fee**……. $35.00

5. **Registration Fee for Residential Builder Licenses** …… One Year $45.00 Two Years $65.00 Three Years $85.00

6. **Re-inspection Fee** ……. $75.00

7. **The Plumbing, Mechanical, and Electrical fee schedules are available in the Building Department.**

8. **Grading Plot Plan Review and Inspection Fee** ……. $69.00
   - Additional fee for each review after the second review…… $75.00
   - Drive Approach Permit Fee……. $75.00
   - Steep Slope Analysis (per hour)…….. $75.00
   - Floodplain Determination……. $75.00

SAMPLE SCHEDULE OF FEES FOR CONSTRUCTION OF A RESIDENTIAL ADDITION

CONSTRUCTION VALUATION	APPLICATION FEE	ZONING REVIEW FEE	BUILDING PERMIT FEE	BUILDING PLAN REVIEW	GRADE REVIEW FEE	TOTAL FEE
$0--------$1,000	$75	$35	$75	$75	$69	$319
$1,000 ---- $2,000	$75	$35	$95	$75	$69	$374
$2,000 ---- $3,000	$75	$35	$115	$75	$69	$419
$3,000 ---- $4,000	$75	$35	$135	$75	$69	$464
$4,000 ---- $5,000	$75	$35	$155	$75	$69	$509
$5,000 ---- $6,000	$75	$35	$175	$75	$69	$554
$6,000 ---- $7,000	$75	$35	$195	$75	$69	$608
$7,000 ---- $8,000	$75	$35	$215	$75	$69	$644
$8,000 ---- $9,000	$75	$35	$235	$75	$69	$689
$9,000 ---- $10,000	$75	$35	$255	$75	$69	$734
$10,000 ---- $11,000	$75	$35	$261	$75	$69	$765
$11,000 ---- $12,000	$75	$35	$267	$75	$69	$796
$12,000 ---- $13,000	$75	$35	$273	$75	$69	$827
$13,000 ---- $14,000	$75	$35	$279	$75	$69	$858
$14,000 ---- $15,000	$75	$35	$285	$75	$69	$889
$15,001 and over	see items 1 thru 4 above					

PLAN REVIEW CHECKLIST
Residential Additions

This list is being provided to help you understand the information that is required on your construction drawings. Please give this information to the person preparing your plans for their use.

Residential addition construction documents submitted for plan review shall contain the following:

1. Two sets of construction drawings meeting the following requirements:
   - Drawn to scale in a draftsman-like manner. Scale not less than 1/8" = 1'0".
   - Drawings shall be clear and readable.
   - Drawing sets shall consist of a single sheet size no larger than 24" x 36".

If the proposed residential addition is over 3500 square feet, the construction plans shall have the original signature and seal of a State of Michigan licensed Architect or Engineer. Please Note: All construction plans less than 3500 square feet do not have to be signed and sealed by a licensed Architect or Engineer, but shall be clear and contain all required information.

Pre-manufactured structures such as glass sunroofs or patio enclosures shall be designed, signed and sealed by a State of Michigan licensed Architect or Engineer. Plans submitted for these types of structures shall contain details for all design loads, connections and foundations as they pertain to the specific project.

2. Two sets of pre-engineered truss schematics (if trusses are being used).

3. Plot plans that match your construction drawings.

4. Plans that clearly indicate the location of both the existing and proposed construction.

5. A **Foundation Plan** that contains the following information: (See "Sample Foundation Plan" page 17)
   Basement (as applicable):
   A. Footing and column pad sizes indicated with all layout dimensions. Details of existing foundations indicated.
   B. Sizes and spacing of beams and columns. Details of the existing beams and columns when a proposed addition is supported by existing construction.
   C. First floor joist direction, size, spacing and span. Details of existing floor joists when a proposed addition is supported by existing construction.
   D. Size of support for all bearing walls and point loads above.
   E. Framing details at stair and fireplace openings.
   F. Basement floor thickness, vapor barrier and type of 4-inch base being used.
   G. Basement wall type and thickness, and reinforcing steel sizes & spacing (if applicable).
   H. Location and sizes of all egress windows and window wells or doors to the exterior from the basement.
   Crawl Space (as applicable):
   A. See items A-D for Basement, above.
   B. Foundation types and thicknesses, and reinforcing steel sizes & spacing (if applicable).
   C. Location of all foundation vents and crawl space access. Ventilation is required within 3 feet of each corner. An 18" x 24" minimum crawl space access is required if in the floor, 16" x 24" if in a foundation wall.
   D. Clearance between ground and nontreated floor joist shall be 18" minimum.
   E. Clearance between ground and nontreated wood beams shall be 12" minimum.

   Test holes may be required to verify the depth of the existing foundation before a Building Permit will be issued. This will be determined at the Building Plan Review stage by the Plan Reviewer.

6. **1st and 2nd Floor Plans** (as applicable - Please see "Sample Floor Plan" on page 18):
   - Full dimensions and use of all rooms, proposed and existing.
   - Ceiling heights of all rooms.
   - Floor joist direction, size, spacing and span. Details of existing floor joists when a proposed addition is supported by existing construction.
   - Roof framing direction, sizes, spacing, spans and types.
   - Sizes and locations of all support for bearing walls and concentrated loads down to beams or foundations designed to support all loads.
   - Details of existing beams, foundations and support when a proposed addition is supported by existing construction.
   - Sizes of all doors and windows.
   - Details of existing beams, columns and foundations supporting bearing walls and point loads for the proposed and existing construction. Design information for all beams, columns and foundations designed to support all existing and new loads.
   - The locations, sizes and supports for any openings between the existing building and proposed addition.
   - Operable emergency egress windows or doors in all sleeping rooms.
   - Details of separation required between an attached garage and the house.
   - Location of all smoke alarms. (When an addition is constructed the Building Code requires smoke alarms to be installed in the existing house and possibly the new addition. Smoke alarms are required on each floor level, in each bedroom and outside each sleeping area in the immediate vicinity of the bedrooms. The smoke alarms are not required to be interconnected unless interconnected wiring can be installed without disrupting existing construction. This will be determined by the Electrical Inspector.)
   - Indicate the locations of all Carbon Monoxide alarms.

7. **Roof Framing Plan** indicating the location, direction, size, spacing and span of all roof and ceiling framing members (for conventional framing), including the thickness of the roof sheathing. Indicate trusses if roof trusses are being used. Indicate support for all bearing walls and concentrated loads from ends of hip and valley rafters, ceiling joist, rafters, trusses and girder trusses. Also indicate roof pitch for all portions of the roof, felt paper (underlayment), and ice and water shield.

8. **Building or Wall Sections** with the following information (Depending on the complexity of your project, more sections or details may be required. Please see "Sample Wall Section" on page 19):
   - Footing and basement wall sizes, types and heights, including any reinforcing steel required.
   - Basement wall waterproofing/damp-proofing and drain tile.
   - 1st and 2nd Floor ceiling heights.
   - Location of finish grade.

9. **Wall Construction Details:**
   - Interior finishes, types & thicknesses.
   - Insulation types and thicknesses.
   - Sizes and spacing of wall studs.
   - Walls over 10 feet in height and walkout walls – special framing details are required. Provide complete details to show that these walls are designed to resist wind load and support all other imposed loads.
   - Base course flashing.
   - Type and thickness of exterior sheathing.
   - Anchor bolt sizes and spacing.
   - Type and thickness of subfloor.
   - Roof construction details with thickness and type of sheathing, felt (underlayment) and snow and ice shield. Type and amount of attic ventilation. Truss/rafter construction with connection details.
   - Brick veneer.
   - Weather-resistant membrane behind brick.
   - Lintels and flashings.
   - Brick wall ties and flashing.
   - Weep holes 33 inches on center.

10. **Wall bracing information including (as applicable):**
    - All braced wall lines clearly indentified.
    - Methods of bracing clearly indentified.
    - Location and length of braced wall panels indicated.
    - Foundation requirements (if required) and anchorage of all braced wall panels indicated.
    - Construction details for each braced wall panel being used provided.

11. **Stair Details** with all tread, riser, guardrail and handrails, dimensioned.

12. **Energy Code Compliance** (as required in the Michigan Residential Code – as applicable) Provide completed Energy Code Worksheets and supply associated method of compliance information.

Please note: This is not an all-inclusive list. Depending on the type and complexity of your project, more details or engineering by a State of Michigan licensed Architect or Engineer may be required.

INSPECTION REQUESTS

Residential Additions

The Building Department offers three convenient methods to allow you request inspections:

- **24-hour Inspection Request Line** – An Inspection may be requested by calling our Inspection Request Line at (248) 656-4619 and providing the following information:
  - **The Street Address of the job site.**
  - **The Permit Number.**
  - **The type of Inspection you are requesting.**
- **Please Note:** This 24-hour Inspection Request Line is for Building Department Inspection Requests only.
- **Online Inspection Requests –** Inspections may also be requested by visiting the Building Department's website at www.rochesterhills.org. By clicking on the City Government tab, highlighting Departments, selecting Building, then Inspection Scheduling and filling in the appropriate information on the Online Inspection Request Form, you can schedule an inspection.
- **QR Code Inspection Scheduling–** Scanning the QR Code at the top of this page will gain you direct access to the same Online Inspection Request Form as mentioned above. You will find the QR Code for scheduling inspections on many of our Building Department documents for your convenience.

Inspections scheduled before 6:30 a.m. that have been verified by the Building Department Staff will be scheduled for the same day between 9:00 a.m. and 4:00 p.m. Inspections may be done earlier or later depending on the Inspector's workload. Inspections will be done Monday through Friday. Inspections may be available outside the normal business hours by special arrangement. Additional fees for "After Hours" inspections shall be paid in advance of the inspection.

A request to cancel an Inspection needs to be called in to the Building Department at (248) 656-4615 before 9:00 a.m. on the day of the requested Inspection.

Please make sure your project is ready for an Inspection. Inspections will not be done and a re-inspection fee may be charged if the following items are not completed or in place:

- Safe access to the job site and throughout the area to be inspected.
- Approved plans and truss drawings on site. (Please Note: Missing plans or other field required information will result in the Issuance of an Inspection Report and the visit will count as an Inspection).
- The job ready for inspection.
- The Street address and lot number posted and visible from street.
- Temporary soil erosion control properly installed.
- The Street kept clean.
- All building construction debris and materials contained on the property.
- Tree protection properly installed and maintained.

Inspection results will be left on site after each inspection has been completed.

Green Tag	Inspection approved.
Inspector's Report	Inspection not approved. The Inspector's Report will contain a list of items that need to be addressed before calling for a re-inspection. A re-inspection fee will be due for items not corrected at the time of the second Inspection. Inspection shall be approved before proceeding with the next phase of construction.

It is your responsibility as the permit holder to check the job site for the Inspection results. Please read the information on all Inspection Green Tags or Inspector's Reports. If you have any questions regarding this information, please call (248) 656-4615 between 8:00 a.m. and 9:00 a.m. and ask to speak with the Inspector that wrote the Inspector's Report.

BUILDING AND TRADE INSPECTIONS

Residential Additions

This list is intended to help you understand standard Inspections and some of the common items the Inspector looks for during an Inspection. This is not intended to be an all-inclusive list. The type and complexity of your project will determine what Inspections are required.

Please Note - A safe access shall be provided to the inspection site and through all areas to be inspected.

Open Rail – After the rails are formed for spread footings, the following will be checked:

- Footing sizes.
- Footings match the approved plot plan.
- Footings are down to solid undisturbed virgin soil.
- That any required reinforcing steel (rebar) is in place.
- Special footings that may require additional inspections prior to pouring:
  - Walk-out basement footings.
  - Bad ground conditions.
  - Engineered foundation systems.
  - Engineered pile foundations.
- Tree protection – maintained as required.
- Electrical bonding (if required) is in place.

Backfill – Before the backfill has been installed, after the drain tile has been installed, and stone and waterproofing or damp-proofing have been completed. The following will be checked:

- Properly installed lead walls with footings to the edge of the excavation, a minimum of 3 feet from the basement wall.
- 6 inches of required stone cover on the drain tile.
- Any As-Built plot plans have been submitted and approved prior to backfill for setback and brick ledge verification.
- Properly installed foundation anchors and wall bracing anchors.
- Damp-proofing applied from footing to above proposed grade.

Footings – The following will be checked:

- Footings shall rest on solid undisturbed soil.
- Footings shall be 42 inches below grade – minimum.
- Any forming required to provide protection of footing due to ground conditions.
- Footings installed in accordance with the approved plans.
- Footing locations and dimensions match the approved construction drawings and plot plan.

Underground Plumbing – After all underground plumbing is installed. The following will be checked:

- Types and sizes of all piping.
- Slopes of pipe – 1/8-inch per foot minimum.
- Stone installed around perforated pipe.
- Traps installed at all floor drains.

Rough Plumbing – After bathtubs, showers and all concealed piping in walls, floors and attics has been installed and fire stopped with proper material. The following will be checked:

- Types and sizes of piping.
- All water, sanitary and vent piping.
- Fire stopping of all tubs, showers and piping per code requirements.
- Pressure testing for concealed piping depending on job conditions.

Rough Mechanical – After all concealed gas piping, duct work, return air, chimneys and electrical wiring have been installed and fire stopped with proper material. The following will be checked:

- All concealed gas piping has been pressure tested.

- All ductwork has been sealed and tested (as applicable).
- Any exterior ductwork has been properly insulated.
- Proper clearances between chimneys and combustible materials exists.
- Bath fan ducts are installed and terminated to the outside.
- Complete framing and fire-stopping on all chimneys, chimney chases, return air and piping has been done.
- Covers installed on second floor registers.
- Floor registers in bathrooms, laundries and kitchens are a minimum one (1) inch above the finish floor.
- Floor registers in bathrooms are located at least 3' from water closet.

Rough Electrical – After all wires, boxes and recessed fixtures have been installed with grounds and neutrals tied together and wire holes are fire-stopped as required by Code. The following will be checked:
- Wires shall extend a minimum of 6 inches from boxes.
- All wires shall be secured as required by Code.
- Smoke alarms – wired and interconnected with 3-wire cable.
- Carbon Monoxide Alarms shall be installed per manufacturer's installation instructions.
- Wire holes fire-stopped where required by Code with proper material.
- Vertical wires are not installed in return air areas.
- Recessed fixtures installed in insulated ceilings are the proper type fixtures and have been installed per the Michigan Uniform Energy Code requirements.
- Switches, plugs and covers are not installed prior to Rough Inspection.

Rough Fireplace
- **Masonry Fireplace** – A damper inspection is required after the damper has been installed and the smoke chamber is in place with the first flue set. The following will be checked:
  - Concealed gas piping prior to covering.
  - Type of mortar used in fire box, hearth and smoke chamber construction.
  - Size and location of exterior air intake.
  - A min. 2-inch clearance from combustibles from floor through roof.
  - Size and construction of hearth extension.
  - Flue sizes.
  - Location and construction of fire damper and smoke shelf.
  - Size of mortar joints in fire box.

- **Pre-fab Fireplace** – After the fireplace, chimney, and hearth extension protection have been installed as required by manufacturer. The following will be checked:
  - A Mechanical Permit has been secured.
  - The fireplace has been installed per manufacturer's requirements.
  - Installation instructions are on site.
  - Clearances between chimney and combustible material per manufacturer.
  - Framing and fire-stopping at the fireplace and the chimney chase has been completed.
  - Concealed gas piping has been pressure tested.
  - Proper hearth extensions and protection per manufacturer.
  - Manufacturer's installation instructions have been followed.

Pre-Masonry
- The proper type of water resistant material has been installed with the required proper lapping.
- Joints have been protected with proper type building wrap material.
- Flashing has been properly installed at all locations as required by Code.
- All wall bracing requirements have been met.
- All penetrations have been properly sealed.

Rough Building – After Rough Plumbing, Mechanical, Electrical and Fireplace Inspections have been conducted and approved. Approved plans and truss drawings shall be on site for all inspections. The following will be checked:

Floors

- Floor joist spans.
- If any floor trusses have been damaged or modified.
- Joist hangers are installed where required and have been properly nailed.
- If floor joists have been improperly notched or bored.
- Floor joists or trusses have proper bearing.
- Support under header studs has been installed.
- Support under heat, cold air and plumbing cut outs has been installed.
- Support under bearing walls has been installed.
- Stairway width of 36-inch minimum when all walls are finished.
- Stair risers are equal in height with a maximum rise of 8 ¼".
- Stair treads are equal in depth with a minimum depth of 9".
- Winder stair tread widths meets code requirements.
- Proper headroom at stair – 6'8" minimum.
- Proper sill plate on foundation with the proper size, type and spacing of foundation anchors.
- A minimum 16" x 24" access to the crawl space if through a perimeter wall, a minimum of 18" x 24" if through a floor.
- Crawl space ventilation, including ventilation within three feet of each corner.
- The Engineered floor system (if applicable) has been properly laid out per the engineered drawings (Please Note: The joist layout and all details shall be readable).
- Steel beam sizing and column spacing and size of column footings.
- Proper bearing and connections for steel beams and columns.
-

Walls

- All beams/girders have been properly supported.
- All girder trusses have been properly supported.
- Double studs at cut plates under joists have been installed.
- Proper portal framing has been installed for garage door opening with foundation anchors secured in footings to meet code requirements for wall bracing.
- Plates in contact with concrete are treated and nailed with proper corrosion resistant nails.
- All joints in top plates are supported.
- All bottom plates have been properly nailed.
- All headers have been shimmed at the bearing points if necessary.
- Notching in any studs has been done properly.
- Boring in any studs has been done properly.
- Proper wall bracing has been installed, including all requirements and hold-downs.
- Sheathing has been installed in a proper manner and any holes have been repaired.
- All holes through plates (for wiring, plumbing, HVAC) have been properly fire blocked.
- The chimney chase (if applicable) has been properly fire blocked.
- Any drop ceiling has been completely fire blocked.
- All bathtubs/shower pans have been completely fire blocked.
- All dead spaces have been properly fire blocked.
- All furred walls have been properly fire blocked.
- Window installation, including:
- Required safety glass, with readable labeling.
- Bedroom egress window sizes.
- Basement egress windows.
- Studs at wall intersections have been properly nailed.
- Wall sheathing has been properly nailed.
- All braced wall methods (as applicable) have been properly installed.
- Exterior house wrap has been properly installed per manufacturer's installation instructions. including overlaps.
- Air barriers have been properly installed as required per the energy compliance requirements in the Michigan Residential Code.

Roof Framing

- Roof trusses have been properly installed and trusses are bearing at design bearing points.
- Trusses have not been altered or damaged.
- Properly sized truss hangers have been installed at girder truss connections.
- Rafter sizes are proper for their span.
- Ceiling joist sizes are proper for their span.
- The porch roof (if applicable) has been properly supported.
- The bay roof (if applicable) has been completed and weatherproofed.
- The ridge board is properly sized for the size of rafters being used.
- Collar ties have been installed.
- Trusses have been braced per manufacturer's requirements as noted on the engineered truss drawings.
- Roof/ceiling framing members have been properly notched or boring, if necessary.
- Roof sheathing is of the proper thickness & type for the rafter/truss span and has been nailed correctly.
- Any valley boards are properly sized and lay on roof framing.
- Shingles have been installed and nailed properly.
- A minimum 22" x 30" attic access has been provided with sturdy sides built up to the required depth of blown in insulation in the attic.
- Bath fan vents have been connected to vent directly to the exterior.
- Roof ventilation has been provided.
- Any framing hangers used are properly sized and properly nailed.
- Cut ends of rafters have been properly supported.
- Truss and rafter connectors to top plates have been installed.
- Engineered truss drawings have been provided on site for review with a readable truss layout.
- Blocking/panels installed between trusses/rafters above braced wall panels.

Energy

- Insulation has been correctly installed per approved plans and energy calculations.
- Blown in attic insulation will be checked at Final Building Inspection.
- Insulation baffles have been installed for proper ventilation.
- Insulation has been installed behind pre-fab fireplaces with an air barrier (if applicable). This is checked at the Rough Frame Inspection.
- Insulation has been installed behind bathtubs with an air barrier. This is checked at the Rough Frame Inspection.
- Paper facing has been removed within 6 inches of recessed light fixtures.
- Paper facing on insulation is in substantial contact with wall, ceiling or floor covering.
- Doors and windows have been installed with U values as listed on your approved plans. U Values shall be labeled on all doors and windows.

Basement Stone – After Underground Plumbing approval has been obtained and the floor is ready to pour. The following will be checked:

- A 4-inch stone base and a 6 mil vapor barrier have been installed.
- The existing foundation and basement wall will be checked for cracks.
- Finish floor height has been indicated.
- Locations of columns and column footings are per the approved plans.
- Columns have been installed properly.
- Insulation requirements (if applicable) for energy compliance.

Garage Sand – After all forms are set, the base has been compacted and all required reinforcement has been installed. The following will be checked:

- A 4-inch stone or sand base has been installed. A 6 mil vapor barrier has been installed on attached garages.
- All forms have been installed and the finish floor height has been indicated.
- The form at the overhead door opening is down to the top of the footing.
- Reinforcement has been installed over any excavated area.
- The brick ledge and footing have been cleaned off.

- Any untreated wood has been protected.
- The floor is sloping towards the overhead door.

Sump Line – After the sump line has been installed and connected to the storm system.
- The inspection is requested by calling the Department of Public Service at (248) 656-4685.
- An inspection is required prior to covering any pipe.
- The type and slope of piping will be checked.
- The connection to the existing storm system will be checked.

Drive Approach – Prior to concrete installation. The following will be checked:
- A 4-inch sand base has been installed and forms have been properly placed.
- The width and location is according to the approved plot plan.
- Structures in or adjacent to the concrete have been properly adjusted to match the finish elevation (a Permit and inspection from the Department of Public Service is required for the adjustment and isolation of the structure).
- There is a proper slope – minimum 2% - maximum 10%.
- The concrete will be a minimum 6-inch thick (including sidewalk at drive).
- The concrete for the sidewalk has a cross slope of 2%.
- There is a 5-foot minimum clearance between the drive and any fire hydrant.

Final Plumbing – After all fixtures have been installed and are properly operational. The following will be checked:
- Hot water is being provided to all fixtures.
- All items installed are listed on the Plumbing Permit. If additional items were installed they shall be added to the permit before Final Plumbing approval.

Final Mechanical – After gas piping, the furnace, all duct work and return airs have been installed and are fully operational. The following will be checked:
- The furnace manufacturer's installation instructions are on site for reference.
- All ductwork has been sealed and air tested (as applicable).
- All dampers have been installed for all intake and exhaust openings.
- All items installed are listed on the Mechanical Permit. If additional items were installed they shall be added to the Permit before Final Mechanical approval.

Final Electrical – After all electrical equipment, switches, plugs, covers and fixtures have been installed and are fully operational. The following will be checked:
- The electrical panel has been labeled, indicating all circuits.
- Smoke alarms and carbon monoxide alarms have been installed and are operational.
- Light bulbs have been installed in all fixtures.
- All items installed are listed on the Electrical Permit. If additional items were installed they shall be added to the Permit before Final Electrical approval.

Final Fireplace
- **Masonry Fireplaces**
  - Are inspected at the Final Building Inspection.
  - The fireplace and hearth shall be completed.
  - Clearances between fireplace openings and combustible materials have been maintained.
- **Pre-fab Fireplaces**
  - Inspected after fireplace surrounds and hearth extensions are installed as required per manufacturer.
  - Manufacturer's installation instructions shall be on site for reference.
  - Clearances between fireplace surrounds and the fireplace are per manufacturer's requirements.

Final Masonry – The following will be checked:
- Lintel installation, weep holes, and flashings.
- All windows, flashing, and weep holes below the brick sill.

Final Building and Grade – After Final Plumbing, Mechanical, Electrical and pre-fab fireplace inspections have been performed. The following will be checked:

- Smoke alarms are interconnected, working, and properly located.
- Carbon Monoxide alarms have been properly installed.
- Proper and equal height, risers and tread width on stairs, taking into consideration the finish floor height.
- Exterior painting and caulking have been completed.
- Proper drainage away from the building has been provided.
- The fire separation between the house and the garage has been completed (if applicable).
- All handrails are graspable and returned to a wall or post.
- There is a properly installed address.
- A minimum 6 inches is maintained between grade and any untreated wood.
- Guardrails have been installed at raised floor surfaces and open sided stairs located more than 30 inches above floor or grade below at any point within 36" horizontally to the edge of the open side.
- Intermediate rails or ornamental closures in guardrails do not allow the passage of an object 4 inches or more in diameter. Openings in guardrails for stairways do not allow passage of an object 4-3/8" or more in diameter.
- Doors are secure leading to future deck or stair areas that are not yet built.
- Weep holes are properly located and not covered by landscaping.

Permanent Erosion Control (inspected as part of the Final Grade Inspection) shall be installed as required by Ordinance. The following will be checked:

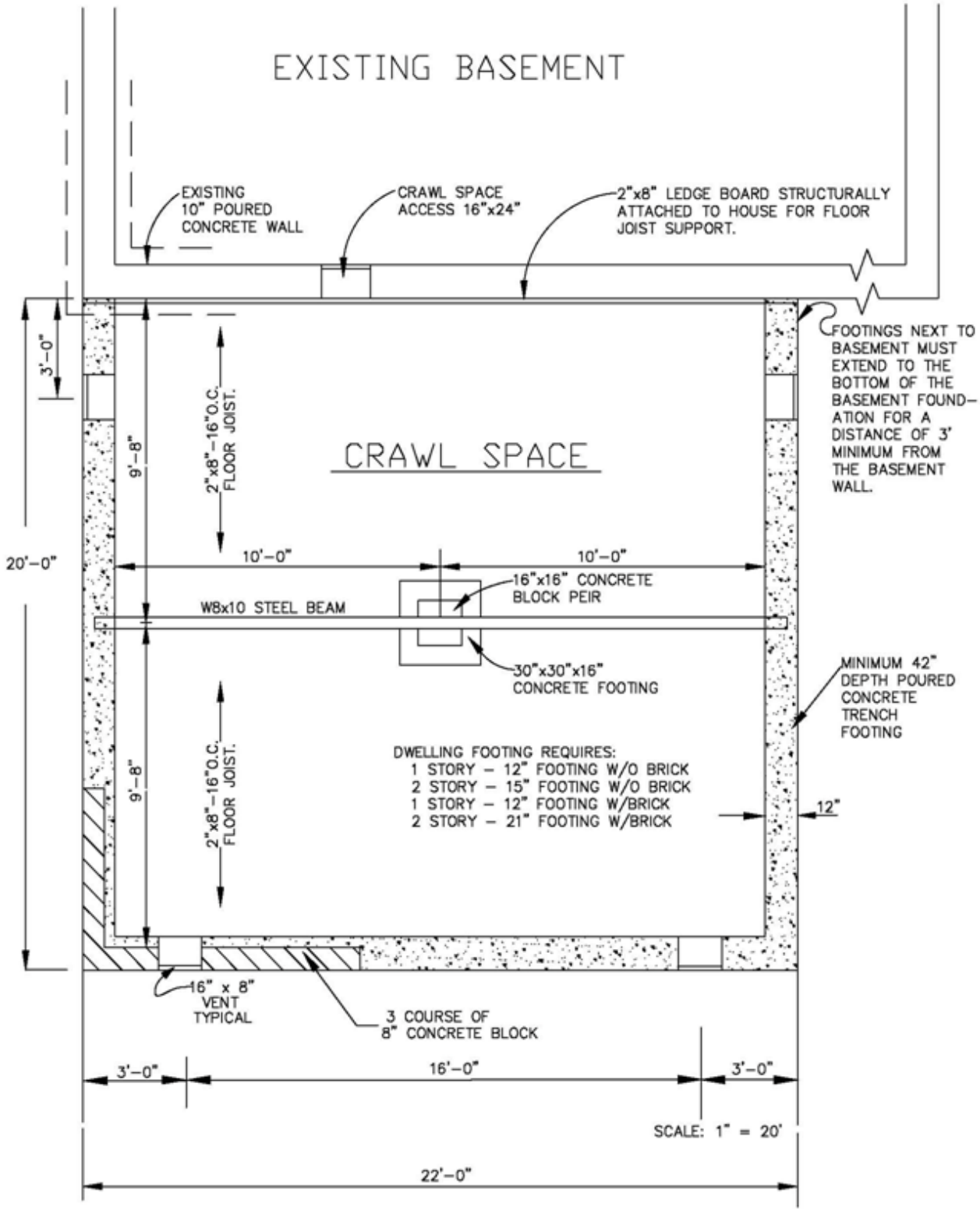
- Sod or grass seed at least 50% germinated are installed in the areas noted below:
- In the Right-of-Way – From the edge of the road to private property (typically 16.5 ft.).
- In and along all ditches.
- On the house side of bike paths or sidewalks.
- On all slopes greater than 1 foot on 5 feet.
- A minimum 10 feet around catch basins and storm manholes.
- All other areas prone to erosion as determined by the Inspector.

Items To Be Installed Per Approved Plot Plan (Inspected as part of the Final Grade Inspection)

- Ditches.
- Culverts.
- Drive Apron and associated material.
- All required lot grading.
- Tree protection (Please contact the Planning Department (248) 656-4660) for final approval).
- Lot and the adjacent lots are free of debris

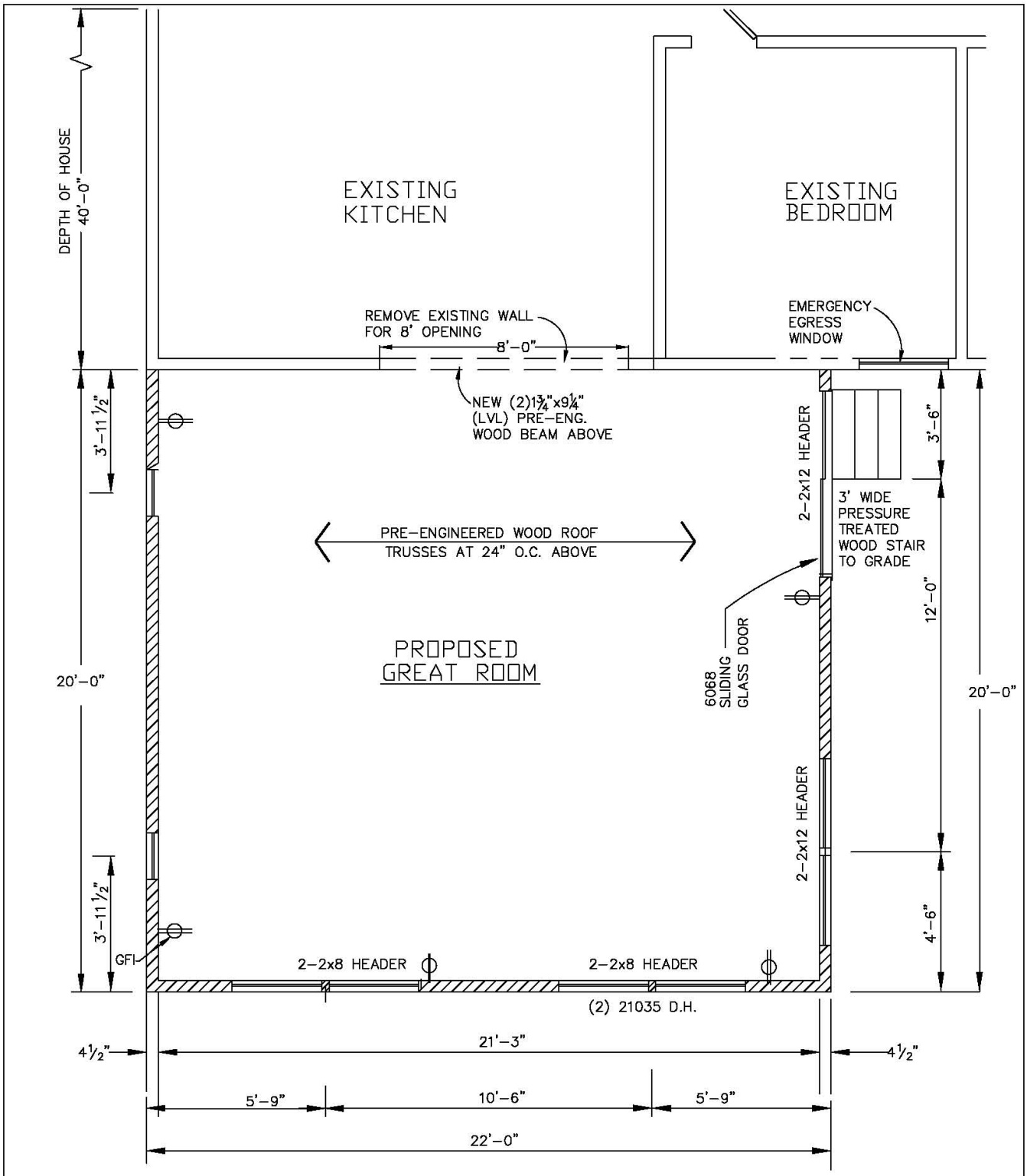
Steep Slope Requirements

- Steep slope requirements and reconstruction shall be completed and inspected prior to final Building Permit approval.



SAMPLE FOUNDATION PLAN

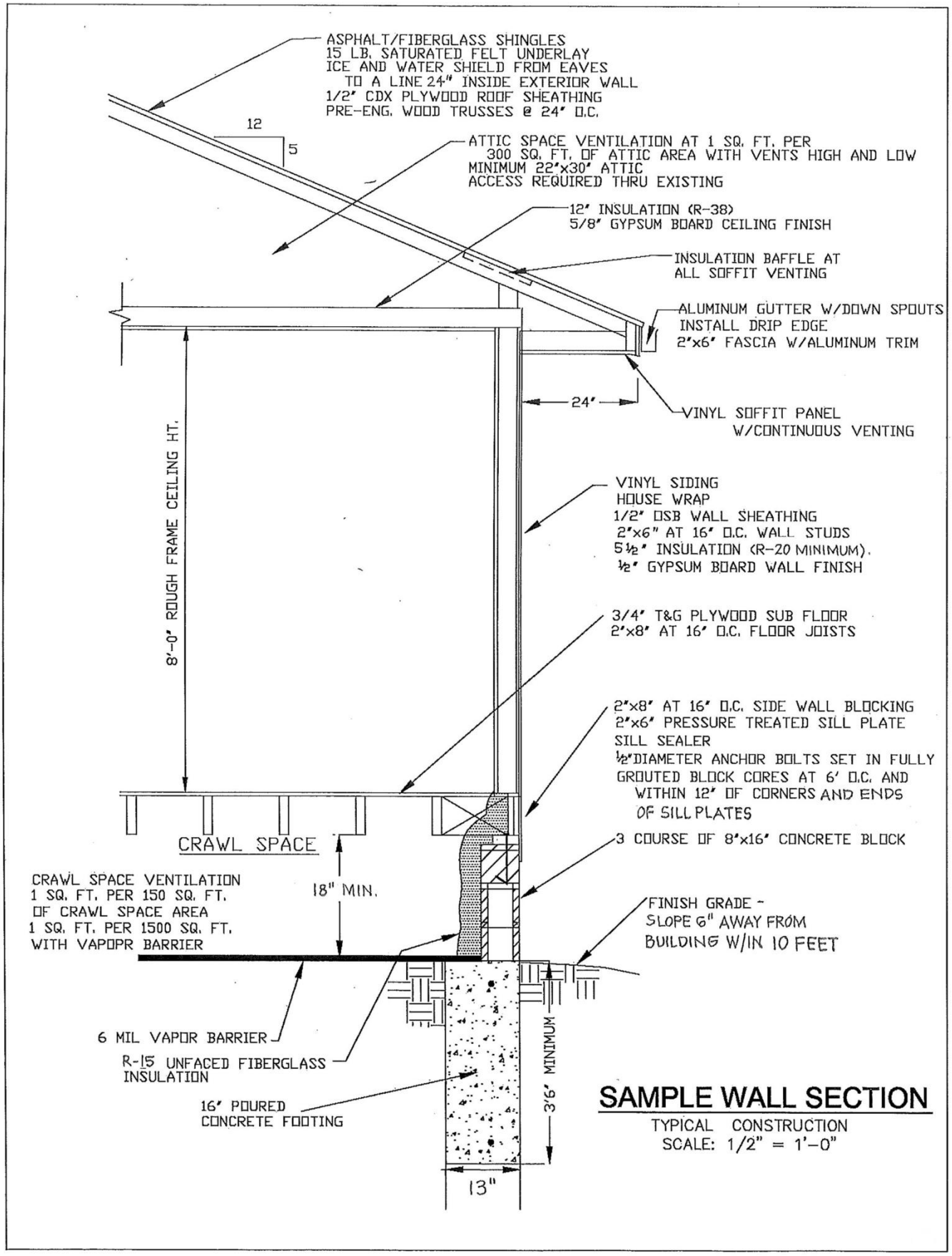
SCALE: 1/4" = 1'-0"

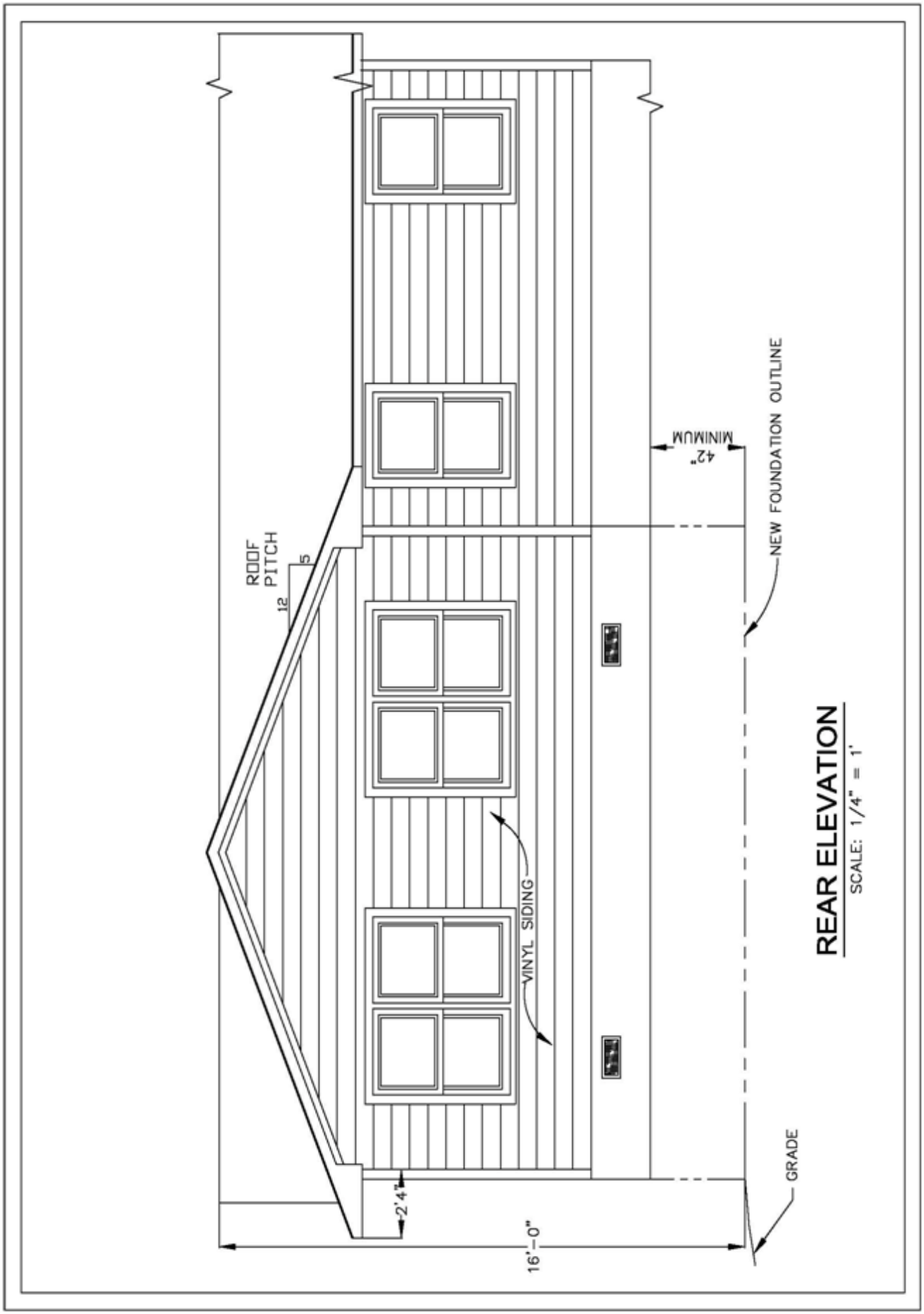


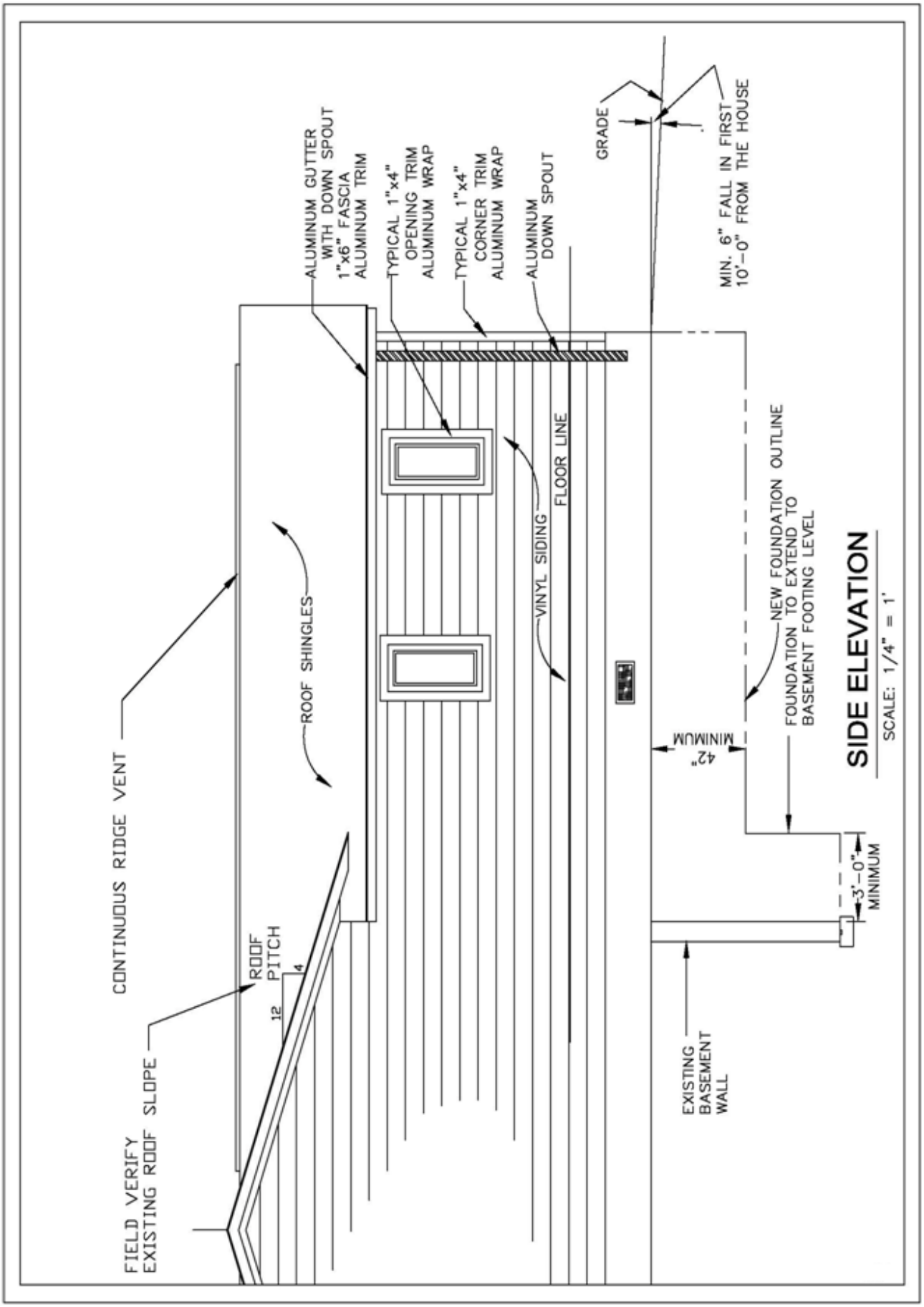
NOTE: SMOKE DETECTORS MUST BE INSTALLED IN THE EXISTING HOUSE. THEY ARE REQUIRED ON EACH FLOOR LEVEL, IN EACH BEDROOM AND OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. SMOKE DETECTORS MUST BE HARDWIRE WITH A BATTERY BACKUP. THE REQUIREMENT FOR INTERCONNECTION WILL BE DETERMINED BY THE ELECTRICAL INSPECTOR.

SAMPLE FLOOR PLAN

1/4" = 1'-0"


ASPHALT/FIBERGLASS SHINGLES
15 LB. SATURATED FELT UNDERLAY
ICE AND WATER SHIELD FROM EAVES
TO A LINE 24" INSIDE EXTERIOR WALL
1/2" CDX PLYWOOD ROOF SHEATHING
PRE-ENG. WOOD TRUSSES @ 24" O.C.
12
5
ATTIC SPACE VENTILATION AT 1 SQ. FT. PER
300 SQ. FT. OF ATTIC AREA WITH VENTS HIGH AND LOW
MINIMUM 22"x30" ATTIC
ACCESS REQUIRED THRU EXISTING
12" INSULATION (R-38)
5/8" GYPSUM BOARD CEILING FINISH
INSULATION BAFFLE AT
ALL SOFFIT VENTING
ALUMINUM GUTTER W/DOWN SPOUTS
INSTALL DRIP EDGE
2"x6" FASCIA W/ALUMINUM TRIM
24"
VINYL SOFFIT PANEL
W/CONTINUOUS VENTING
8'-0" ROUGH FRAME CEILING HT.
VINYL SIDING
HOUSE WRAP
1/2" OSB WALL SHEATHING
2"x6" AT 16" O.C. WALL STUDS
5½" INSULATION (R-20 MINIMUM).
½" GYPSUM BOARD WALL FINISH
3/4" T&G PLYWOOD SUB FLOOR
2"x8" AT 16" O.C. FLOOR JOISTS
2"x8" AT 16" O.C. SIDE WALL BLOCKING
2"x6" PRESSURE TREATED SILL PLATE
SILL SEALER
½"DIAMETER ANCHOR BOLTS SET IN FULLY
GROUTED BLOCK CORES AT 6' O.C. AND
WITHIN 12" OF CORNERS AND ENDS
OF SILL PLATES
CRAWL SPACE
3 COURSE OF 8"x16" CONCRETE BLOCK
CRAWL SPACE VENTILATION
1 SQ. FT. PER 150 SQ. FT.
OF CRAWL SPACE AREA
1 SQ. FT. PER 1500 SQ. FT.
WITH VAPOPR BARRIER
18" MIN.
FINISH GRADE -
SLOPE 6" AWAY FROM
BUILDING W/IN 10 FEET
6 MIL VAPOR BARRIER
R-15 UNFACED FIBERGLASS
INSULATION
16" POURED
CONCRETE FOOTING
3'6" MINIMUM
13"
SAMPLE WALL SECTION
TYPICAL CONSTRUCTION
SCALE: 1/2" = 1'-0"


ROOF PITCH
12
5
VINYL SIDING
2'4"
16'-0"
42" MINIMUM
NEW FOUNDATION OUTLINE
GRADE
REAR ELEVATION
SCALE: 1/4" = 1'


ALUMINUM GUTTER
WITH DOWN SPOUT
1"x6" FASCIA
ALUMINUM TRIM
TYPICAL 1"x4"
OPENING TRIM
ALUMINUM WRAP
TYPICAL 1"x4"
CORNER TRIM
ALUMINUM WRAP
ALUMINUM
DOWN SPOUT
GRADE
MIN. 6" FALL IN FIRST
10'-0" FROM THE HOUSE
CONTINUOUS RIDGE VENT
ROOF SHINGLES
VINYL SIDING
FLOOR LINE
NEW FOUNDATION OUTLINE
FOUNDATION TO EXTEND TO
BASEMENT FOOTING LEVEL
42"
MINIMUM
SIDE ELEVATION
SCALE: 1/4" = 1'
3'-0"
MINIMUM
ROOF
PITCH
4
12
FIELD VERIFY
EXISTING ROOF SLOPE
EXISTING
BASEMENT
WALL

SETBACK REQUIREMENTS

How Close Can I Build To My Property Line?

The distance between your house and your property line is called "**setback**." The Zoning Ordinance outlines specific requirements for minimum setbacks depending on the Zoning District you live in. Find your subdivision name on the "Zoning District" list to determine your specific zoning classification. Then, refer to the chart below to determine the setback requirements for your area. Zoning Districts followed by an "OS" indicates an Open Space Subdivision. If you need further assistance, please contact the Building Department at (248) 656-4615.

Zoning District	Front Setback	Side Setback	Rear Setback
RE	40(b)	15(c)	35(+)
RE-OS	30	10	35
R-1	40(b)	15(c)	35(+)
R-1OS	30	10	35
R-2	40(b)	15(c)	35(+)
R-2OS	30	10	35
R-3	30(b)	10(c)	35(+)
R-3OS	25	10	35
R-4	25(b)	10(c)	35(+)
R-4OS	25	10	35

Exceptions may apply to the above setback requirements. Please contact the Building Department if any of the following situations apply:

(b) The intent of Footnote (b) is to maintain some consistency in those residential areas where the houses have varying front yard setbacks. For example, you find from the chart above that your front yard setback is required to be a minimum of 40 feet, however, the average front yard setback is 70 feet. The ordinance requires you to comply with the average front yard setback, less 10 feet, but shall not require more than 60 feet, or permit a depth less than the minimum required in the chart above. You may choose to set your house back further than the minimum required.

(c) Footnote (c) applies to corner lots. The setback for a side yard abutting a street shall not be less than 15 feet in the R-4 District and 25 feet in the R-1, R-2, R-3 and RE Districts unless a larger setback is required by footnote (b) because neighboring houses on the side street have a front yard relationship to the side street.

Also, any interior or corner lot less than 60 feet wide may have a reduced side setback of 5 feet provided the total of the two side yard setbacks is at least 15 feet.

(+) The intent of Footnote (+) is to allow a less restrictive rear yard setback of 30 feet for lots that border land permanently dedicated for park, recreation and/or open space, provided that the width of the park, recreation or open space area is not less than 100 feet measured at the point where it abuts the rear yard.

Note: Additional setbacks may be required if your property has steep slopes.

SUBDIVISION ZONING DISTRICTS

ABERDEEN	R4
ADAMS OAKS	R2OS
ADAMS WEST (aka OXFORD)	R4OS
ARCADIA PARK	R1
ASHFORD FARMS	I1
AUBURN HIGHLANDS	R4
AUTUMN HILLS	R1
AVON HEIGHTS	R1
AVON HILLS	R4OS
AVON HILLS VILLAGE (Phase 3 aka SYCAMORES)	R3
AVON HOLLOW	R4
AVON LAKES VILLAGE	R3
AVON MANOR ESTATES	R1OS
AVON MEADOWS	R3OS
AVON POINTE	R3OS
AVON RAVINES	R4
AVON WOODS	R3
AVONCROFTS	R4/O1
AVONDALE FARMS	R2/R4
BASSET & SMITH	R1
BELLARMINE HILLS	R4
BELLE CONE GARDENS	R3
BLACKETTS FLORAL GARDEN	R3
BOGARTS PLACE	R1
BRABACH ORCHARDS	R2
BRIDGEWOOD FARMS	R2OS
BROOKEDALE WEST	R2/R3OS
BROOKEDALE WOODS	R4
BROOKLANDS	R4
BROOKLANDS PARK	RCD
BROOKWOOD	R3OS
BROOKWOOD GOLF CLUB	R2
BUTLER RIDGE I & II	R2OS/R1OS
CHICHESTER (aka GEORGETOWN)	R2OS
CHICHESTER EAST	R1
CHRISTIAN HILLS	R1OS
CLEAR CREEK	R1OS
CLEAR CREEK II	R1OS
CLEAR CREEK III	R2OS
CLINTON RIVER VALLEY	R4
C O RENSHAW ADDITION	R4
COOLIDGE HIGHWAY	R2
COUNTRY CLUB MEADOWS	R3OS
COUNTRY CLUB VILLAGE	R3
COVINGTON PLACE	R3
CRISSFIELD	R4
CROOKS CROSSING EAST	R1OS
CROSS CREEK (LOTS 1-13)	R3OS
CROSS CREEK (LOTS 14-61)	R4OS
CROSS CREEK (LOTS 62-121)	R3OS
CUMBERLAND HILLS	R3OS
CUMBERLAND WOODS	R3OS
DEER RUN	R4
DEE'S SUBDIVISION	R3
DENISON ACES	R4
DODGE AUBURN PARK	R4
EASTHAMPTON	R4
EASTHAMPTON II	R3/R4OS
EDDINGTON FARMS	R4
EDDINGTON WOODS	R4
EDINSHIRE	R4
ELDON ACRES	R4
ELMDALE	R2
ESTATES OF PINECREEK	R3
EYSTERS AVON GARDENS	R3
EYSTERS BLOOMER PARK	R4
EYSTERS AUBURN ACRES	RE
EYSTERS AVON ESTATES	R4
FAIRGROVE MANOR	R1OS
FAIRVIEW FARMS	RM1
FAIRWOOD VILLAS	R2
FALCON ESTATES	R4
FERRYVIEW HOMELANDS	R3
FIELDCREST	R4
FITZPATRICK	R3OS
FOXBORO	R4
GABELMAN	R1OS
GEORGETOWN (aka CHICHESTER)	R4
GLIDEWELL	R4
GOLDEN HILLS	R4
GOLFVIEW ESTATES	R4
GRANDVIEW	R4
GRANT M JOHNS	R3
GREAT OAKS	R2
GREAT OAKS WEST #1	R2
GREAT OAKS WEST #2	R3
GROSSE PINES	R4
GUNTHAR'S RUN	R3
HAMLIN ESTATES	R3
HAMLIN PLACE FARMS	R4
HAMPTON PARK	RM1
HAMPTON PINES TOWNHOMES	R1OS
HAWTHORN	R2OS
HAWTHORN HILLS	R4
HAZELWOOD	R4
HAZELWOOD HILLS	R4
HAZELWOOD MEADOWS	R2
HEARTPEACE HILLS	RM1
HEATHERVIEW ESTATES	R3/R4OS
HEATHERWOOD VILLAGE	R2OS
HERITAGE OAKS	R4
HICKORY RIDGE	R4
HILLCREST	R1OS
HILLSIDE CREEK	R1OS
HILLVIEW	RE
HILLWOOD	R1
HITCHMANS HAVEN	R4
HOMESTEAD ACRES	R3OS
HUNTERS CREEK	R4
INGRAM ACRES	R3/01
JOHN R HIGHLANDS	R1
JUDSON PARK	R1
JUENGELS ORCHARDS	R4
JUNCTION LAND CO	KENSINGTON FOREST
R4	R4

KINGSTON POINTE N	R4
KINGSTON POINTE S	R4
KLEM GARDENS	R4
KNAPPS FARM	R4
KNORRWOOD HILLS	R1
KOLLIN WOODS	R1
LEGGIT REIHER	R4
LOCHMOOR HILLS	R2
LONG MEADOWS	R2
MAC KARY	R4
MANCHESTER	R4
MANCHESTER KNOLLS	R1
MARTIN FARMS	R4
MEADOW CREEK I & II	R4
MEADOW BROOK	R1
MEADOWBROOK VALLEY	R2OS
MEADOWVIEW	R1
MESSMORE FARMS	R4
MICHELSON MEADOWS	R3
MIDVALE	R4
MILL STREAM VILLAGE	RCD
NORTH FAIRVIEW FARMS	R2OS
NORTH HILLS	R4
NORTH HILL GARDENS	R4
NORTH OAKS	R1
NORTHBROOKE	R4
OAK POINTE ESTATES	R2
OAKLAND VIEW	SP/R3
OXFORD ESTATES (aka ADAMS WEST)	R2OS
PAINT CREEK HILLS	RE
PARKE VALLEY	R4
PERRYDALE	R1
PHEASANT RING	R2OS
PINE TRACE VILLAGE	R4
PINE TRAIL	R3
PON-AVON FARMS	R4
QUAIL RIDGE	R2OS
QUAILCREST	RCD
REGAL COLONY CONDO	R4
REGENCY PARK CONDO	RM1
RELYEA ACRES	R1
RIVERSIDE HIGHLANDS	R1OS
ROCHDALE	R1
ROCHELLE PARK CONDO	RCD
ROCHESTER GLENS	R4
ROCHESTER HEIGHTS	R4
ROCHESTER HILLS	RE
ROCHESTER HILLS HEATHERS	R3
ROCHESTER KNOLL	R1
ROCKHAVEN ESTATES	R4
ROOKERY WOODS	R2OS
SANCTUARY IN THE HILLS	RCD
SHADOW WOODS PHASE 1	R2OS/R3OS
SHADOW WOODS PHASE 2	R1OS/R2OS
SHORTRIDGE ESTATES	R4
SKYVIEW	R1
SOUTH BOULEVARD GARDENS	R4
SPRING HILL	R1
STARR ESTATES	R3
STONY CREEK	R1/R4SP
STONY HOLLOW	R1
STRATFORD KNOLLS	R1/R2/R3
STREAMWOOD ESTATES	RCD/RM1
SUGAR CREEK	R4
SUNNYDALE GARDENS	R4
SUPERVISORS PLAT #2	R4
SUPERVISORS PLAT #5	R3/R4
SUPERVISORS PLAT #6	R4
SUPERVISORS PLAT #7	R3
SUPERVISORS PLAT #8	R3
SUPERVISORS PLAT #9	R4/I
SUPERVISORS PLAT #11	R4
SUPERVISORS PLAT #12	R4/B5
SYCAMORES (aka AVON HILLS VLG. PHASE 3)	R4
THORNRIDGE	R2OS
TIENKEN MANOR ESTATES	R2
UNIVERSITY HILLS	R3
VALLEY STREAM	R3OS
VINTAGE ESTATES	R1OS
WALNUT BROOK ESTATES	R4
WALNUT CREEK	R3OS
WALTONSHIRE ESTATES CONDO	R3
WAVERLY WOODS	RE
WEAVERS ACRES	R4
WHEATON & WORRALS AVON H.E.	R4
WHISPERING WILLOWS	R3OS
WILDFLOWER	R4OS
WILLOWOOD	R2OS
WINCHESTER VILLAGE	RM1OS
WINKLER MILL ESTATES	R1
YAWKEY & CHAPMANS ADD	R4
YORKTOWNE COMMONS	R4OS

NOTE: THIS CHART IS TO BE USED AS A GENERAL GUIDE ONLY. IT DOES NOT REPLACE THE DISTRICT REGULATIONS OR ANY OTHER PROVISIONS OF THE ZONING ORDINANCE.

R4

PLOT PLAN REQUIREMENTS

Residential Additions

Three sets of plot plans containing all the information and details noted below shall be submitted with the building permit application. See "Sample Plot Plan" on page 28. The plot plan can be drawn by the homeowner, contractor, Land Surveyor, Engineer or Architect. Special circumstances may require the plot plan to be drawn by a licensed engineer, Architect or Land Surveyor. This will be determined during the review process.

The plot plan shall contain the following information:

General:

Builder's name, address and telephone number.

The north arrow, legal description, street right-of-way and street name.

If the building is built on or adjacent to slopes greater than 1 unit vertical to three units horizontal, show the dimensions as required by the Michigan Residential Code.

Plan scale is to be between 1" = 20' and 1" = 50".

The preferred plan size is 8 ½" x 14". If it is necessary to go to a larger size, please do not exceed 18" x 24".

Temporary soil erosion control measures may be required based on the field inspection. Permanent soil erosion control measures may be required for final grade approval.

Zoning:

Show the location and dimensions of all structures on the lot, including the proposed structure and distances from lot lines and/or existing structures (see "Setback Requirements" page 22).

Plot plans shall show lot dimensions.

The plot plan footprint and the construction drawings shall be consistent.

Grading and Drainage:

The overall subdivision grading shall remain unchanged. Elevations may deviate slightly to accommodate the construction of the addition.

A minimum of 6 inches of fall away from the structure in the first 10 feet and a minimum of 1% grade for the remainder of the property is required for drainage.

Indicate existing and proposed drainage patterns.

Provide the location of all overhead and underground utilities such as electric, gas, phone, water and sewer.

Show the location of all slopes on the property that exceed one foot vertical to five feet horizontal (20%).

The maximum slope allowed is 1 foot vertical to 3 feet horizontal (33%). All slopes exceeding 1 foot vertical to 3 feet horizontal will require retaining walls with details of construction. Additional information and details may be required for retaining walls. This will be determined during the review process.

Any slopes exceeding 1 foot vertical to 5 foot horizontal (20%) will require permanent erosion control for final grade approval.

For Residential Additions with New or Revised Driveways:

If the road is gravel, the drive approach shall be gravel. If the road is paved, the drive approach shall be paved.

Indicate the width and type of proposed driveway construction.

The drive grade requirements are as follows:
Side entrance slab – minimum 2% - maximum 4% slope.
Slope down to road – minimum 2% - maximum 10% slope.
Reverse drive slope – minimum 2% - maximum 7% slope.

Show all existing curb drops and all proposed curb cuts.

The angle of the driveway should be 90% to the roadway edge.

A circle drive may be permitted if the lot frontage is 75 feet or more and the distance between the drives is a minimum of 45 feet to center.

A minimum of 5 feet is required between the driveway and fire hydrant.

A minimum of 6 feet is required between the driveway and a high back catch basin.

Driveways should avoid all utility manholes. If unavoidable, a permit and inspection from the Department of Public Service is required for the adjustment and isolation of the structure (detail available). For information, call (248) 656-4640.

Other agency permits will be required when a new approach or alterations to an existing approach are proposed and,

- The road your house is on is a County road. A drive approach permit from the Road Commission for Oakland County (RCOC) is required prior to plot plan approval,

- The road your house is on is a State road. A drive approach permit from the Michigan Department of Transportation (MDOT) is required prior to plot plan approval.

Trees in the Public Street Right-of-Way:

- All trees located between the property line and the street are regulated by the Street Tree Ordinance and require a Right-of-Way Tree Permit.
- Show all existing trees in the road right-of-way (public property).
- For Right-of-Way Tree Permit requirements, contact the Planning Department (248) 656-4660

Wetlands and Floodplain:

If there are flood plains or wetland on your lot, a survey from a licensed Land Surveyor or Engineer (signed and sealed) may be required. This will be determined during plan review.

Show the wetland limits, 25-foot natural features setback and required protective fencing. Activity within 10 feet of the regulated wetlands will require a Wetlands Use Permit. Provide information as required by the Natural Resources Ordinance, Chapter 126.

Provide a State of Michigan Department of Environmental Quality permit if the property has a State regulated wetlands.

Show the location and elevation of all watercourses and provide the floodplain elevation on the plan. Adhere to the City of Rochester Hills Flood Plains Ordinance, Chapter 114.

A soil erosion control permit from the Oakland County Water Resource Commission (WRC) is required for all properties with wetlands, flood plain, or within 500 feet of a lake, stream, storm drain, etc. Contact the WRC for further information.

Steep Slopes:

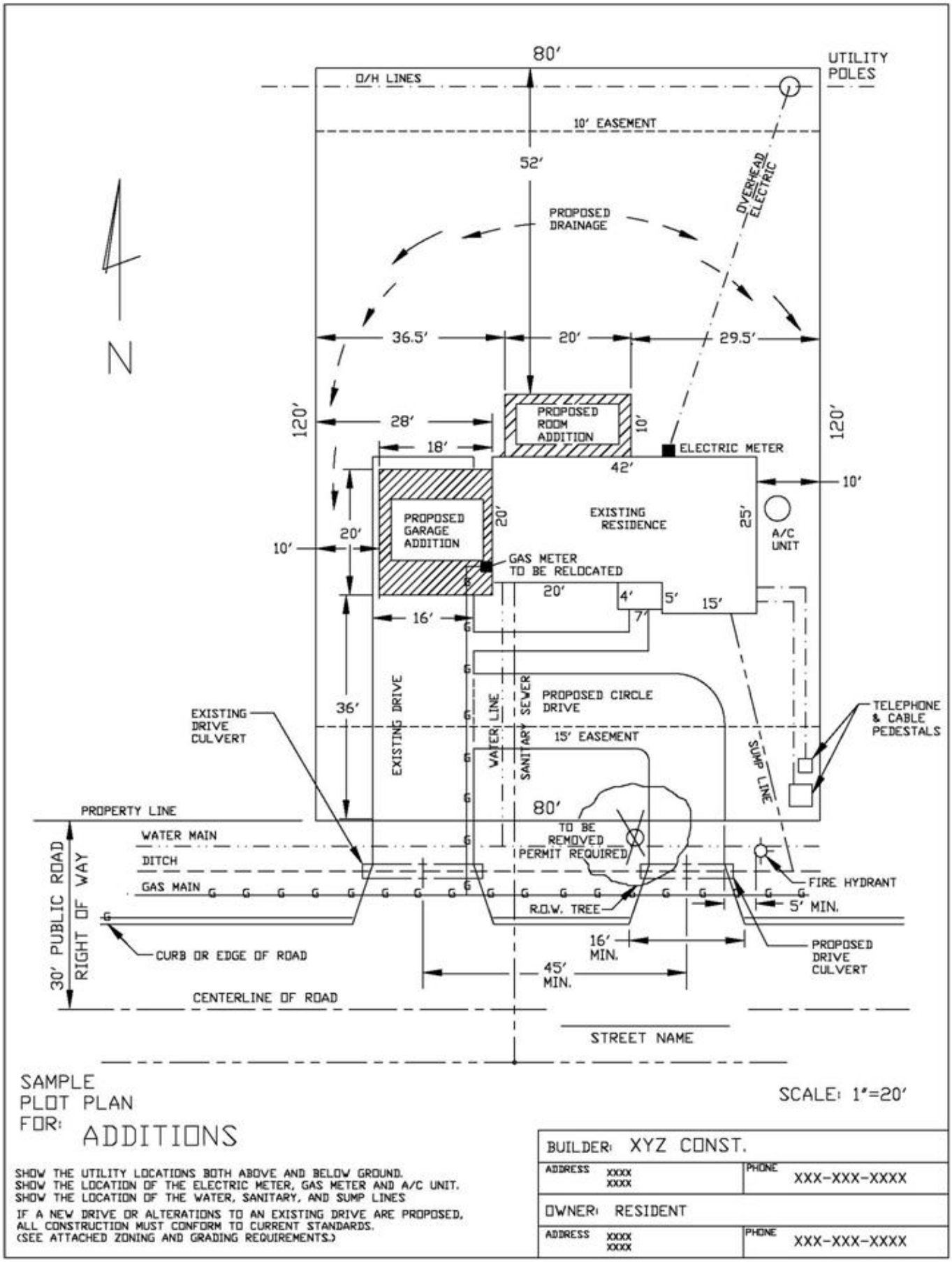
If steep slopes exist on your property, a survey from a Licensed Land Surveyor or an Engineer (signed and sealed) may be required. This requirement will be determined during the plan review process.

Plot plans submitted shall indicate the steep slope limits with appropriate setbacks and all information required by the Steep Slope Ordinance (#138-1082).

The setback and plot plan requirements are taken from the following ordinances and publications:

City of Rochester Hills Zoning Ordinance No. 138
City of Rochester Hills Codified Ordinance, Chapters 18, 54, 94,102, 114, 118, 126
Oakland County Soil Erosion Control Manual

This information is provided in a “user-friendly” format as a general guide to help you apply the ordinance requirements to your project. It covers the most common types of projects. The actual ordinance language may contain additional requirements or exceptions that may apply if your project is beyond the scope of this guidebook.



SAMPLE
PLOT PLAN
FOR: ADDITIONS

SCALE: 1"=20'

SHOW THE UTILITY LOCATIONS BOTH ABOVE AND BELOW GROUND.
SHOW THE LOCATION OF THE ELECTRIC METER, GAS METER AND A/C UNIT.
SHOW THE LOCATION OF THE WATER, SANITARY, AND SUMP LINES

IF A NEW DRIVE OR ALTERATIONS TO AN EXISTING DRIVE ARE PROPOSED, ALL CONSTRUCTION MUST CONFORM TO CURRENT STANDARDS. (SEE ATTACHED ZONING AND GRADING REQUIREMENTS.)

BUILDER: XYZ CONST.	
ADDRESS XXXX XXXX	PHONE XXX-XXX-XXXX
OWNER: RESIDENT	
ADDRESS XXXX XXXX	PHONE XXX-XXX-XXXX

City of Rochester Hills
Building Department
1000 Rochester Hills Dr.
Rochester Hills, MI 48309
(248) 656-4615 Phone
(248) 656-4623 Facsimile

CUSTOMER SATISFACTION SURVEY

ACCREDITED
Building Department

Date: _____

	Y	N	N/A
Were you treated with courtesy and respect?	☐	☐	☐
Did you receive clear and accurate information?	☐	☐	☐
Were city employees helpful and knowledgeable in answering your questions?	☐	☐	☐
Did you feel welcome when you came to the Building Department counter?	☐	☐	☐

How would you rate your visit at the Building Department today?

1	2	3	4	5
poor				exceptional

What can we do to improve this rating?

_____

_____

How would you rate the time it took for us to serve you?

1	2	3	4	5
poor				exceptional

What can we do to improve this rating?

_____

_____

Name of person who helped you today: _____

Comments/Suggestions: _____

_____

_____

Name (optional): _____

Thank you for taking your time to complete this survey.
Your comments and suggestions will help us as we continue working to improve our service.

E2.2.7040 Effective 032416