



**City of Lapeer
Building Department
576 Liberty Park
Lapeer, MI 48446
810-245-9621**

ACCESSORY STRUCTURES



Revised: July 2025

INTRODUCTION

Accessory Structures

The City of Lapeer has prepared this Guidebook to assist you in the process of building an Accessory Structure within our City. This Guidebook contains information that will help you understand the Building Permit and construction process from application to completion. We have included details for areas that have generated confusion or delays in the past. The information is presented in a start-to-finish sequence to guide you as you progress through your project.

Before You Build

Issues that should be checked at the beginning of your project.

Codes Currently in Effect

A list of current codes that will apply to your project.

From Application to Completion

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

A list of the fees related to building an Accessory Structure.

Inspection Requests

Contains details required for requesting an inspection, making sure your job is ready for inspection, the time inspections are done and what the inspection reports mean.

Construction Requirements

A general guide to help you understand and apply the Building Code requirements to your project. This information should be used as you prepare your construction drawings and construct your Accessory Structure.

Plot Plan Requirements

A list of the items that are required to be shown on the Plot Plan. This list should be given to the person preparing your Plot Plan. Please take time to make sure your drawings are complete. Plot Plans that contain all necessary information and details will help expedite the review process.

Sample Plot Plan

A sample Plot Plan to help you understand the information that needs to be contained on the Plot Plan.

Sample Drawings

Sample Floor Plan, Wall Section, Elevations and wall bracing details to help you understand the information that needs to be contained on the construction drawings and to assist you with the construction of your Accessory Structure project. This information should be given to the person preparing your plans.

Forms

-Building Permit Applications

-Contractor Registration

*All forms are available at our
counter or online at:
www.ci.lapeer.mi.us*

This Guidebook contains many procedures and requirements. We urge you to read through it completely. It may save you valuable time in completing your project. 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. Please review and complete the Customer Survey Form that is attached at the end of this Guidebook and available online at www.ci.lapeer.mi.us

NOTE: This Guidebook is only intended to be a guide and is not all inclusive of the Building Code. For complete details of all requirements, please refer to the Michigan Residential Code (MRC). The information in this Guidebook is subject to change without notice.

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. If you need further assistance, please contact the Building Department at (810) 245-9621.

Zoning	Min. Lot (4) (10)		Max. Building Height (ft.) (3)	Max. % Lot Coverage	Min. Setbacks(ft.)(6,7)				Min. Floor Area Per Dwelling Unit
	Area (sq. ft.) (4)	Width (ft.)(2)			Front (8)	Side Yards (9)		Rear	
						Least 1	Total 2		
R-1	6,000	50	25	30%	25	4	12	35	850
R-2	8,400	70	25	30%	25	5	15	35	1,000
R-3	12,000	90	35	30%	30	10	25	40	1,000

Setbacks Accessory Structures shall be at least 3 feet from side and rear property lines and at least 10 feet from the house. Accessory Structures may be located closer than 10 feet to the house if they meet the minimum setback requirements for the house. Additional setbacks are required for properties with regulated steep slopes.

BEFORE YOU BUILD

Accessory Structures

The following 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 Accessory Structure.

Accessory Structure A building that is incidental to the main structure or principle use of the land. Example: A detached garage, shed, gazebo or any other structure not attached to the house by a common wall. This Guidebook does not cover attached garages, additions (see Additions Guidebook), or decks (see Wood Deck Construction Guidebook).

Size By Ordinance, the total combined floor area of all detached Accessory Structures on a lot (not including gazebos) is limited by lot or parcel size and shall not exceed the total square footage of the main building. Structures that are 200 square feet or less **do not require a Building Permit, they require a Zoning Permit**, and shall comply with Ordinance requirements for height, setbacks, total floor area (as mentioned above), and distance to the house. Gazebos may not exceed 180 square feet and require a Building Permit; however, their area does not count towards the maximum allowable floor area for Accessory Structures. Please contact the Building Department if you have any questions.

Location Accessory Structures cannot be built in any front yard or in any easement, or on a vacant lot. **Please note: Corner lots may have two (2) front yards.**

Setbacks Accessory Structures shall be at least 3 feet from side and rear property lines, and at least 10 feet from the house. Accessory Structures may be located closer than 10 feet to the house if they meet the minimum setback requirements for the house. Additional setbacks are required for properties with regulated steep slopes.

Height Accessory Structures shall not exceed one story or 14 feet in height, measured from grade to the mid-gable point of the roof when the roof pitch is less than 4/12. Gazebos are allowed to have a maximum height of 16 feet.

Deed Restrictions Your subdivision may have Deed Restrictions that apply. The City of Lapeer cannot enforce Deed Restrictions; however, we encourage you to verify any restrictions that may apply to your project.

Drainage Will the existing yard drainage be affected by the location of the new structure? All changes to the existing drainage need to be shown on the plot plans. If large grade changes and/or slopes are proposed, retaining walls or special grading may be required. See "Plot Plan Requirements". If you have any questions, please call the Building Department.

Flood Plains Floodplains are usually associated with lakes, streams, rivers, and drainage courses. They are areas designated to flood during times of rain. Building in these areas is strictly regulated. If your Accessory Structure is built in a floodplain, it may require a Structural Engineer's design .

Wetlands These areas have been determined to be indispensable and are to be protected as a natural resource. If your Accessory Structure is close to or in regulated wetlands, additional paperwork, including permits, may be required from the City and State of Michigan prior to Building Permit approval.

Historic District If the Accessory Structure will be built in a Historic District, it must be approved by the Planning Department. Please call the Planning Department (810) 664-4553 for more information.

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 (810) 245-9621 if you have questions.

Note: This Guidebook is only intended to be a guide and is not all inclusive of the Michigan Residential Code (MRC). For complete details of all requirements, please refer to the Michigan Residential Code. The information in this Guidebook is subject to change without notice.

CODES CURRENTLY IN EFFECT
Accessory Structures

Building Code:	2015 Michigan Residential Code
Mechanical Code:	2021 Michigan Mechanical Code
Electrical Code:	2023 NEC, w/Part 8 Amendments
Plumbing Code:	2021 Michigan Plumbing Code

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 & Standards.

FROM APPLICATION TO COMPLETION
Accessory Structures

1. Information Required On the Building Permit Application

A. Building Permit Application

- Forms are available online at www.ci.lapeer.mi.us or at the Building Department counter. Applications shall be filled out completely.

B. Application Fee

- See “Building Permit Fees”.

C. Plot Plan – Three Copies

- See “Sample Plot Plan”.
- Please show your existing house and the location of the proposed Accessory Structure.
- Please indicate the size of the Accessory Structure, setbacks and the distances to all property lines and easements.
- **Construction Drawings – Three Sets** See “Construction Requirements” and “Sample Drawings”.
- Plans that contain all the necessary information and details will help expedite the plan review process. Plans shall match Plot Plans.

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

Please Note: Any Contractor, hired by an Owner for a contract price of \$600.00 or more, shall be licensed in accordance with the State of Michigan Residential Builders Laws.

2. Registration of Builder’s License

- A Builder shall be currently registered with the City of Lapeer to be able to submit a Building Permit application.
- All Building registrations expire May 31st.
- Builders not currently registered can register at the time of application by providing the following:
 - o The original or a copy of the Builder’s license
 - o Registration fee is \$25 until the expiration date of license.
 - o Contractor Registration Form
 - The form shall have an original signature by the License Holder
 - The form shall be notarized (if not presented by License Holder)

A Contractor Registration Form is available at our counter or online: www.ci.lapeer.mi.us

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

3. Plan Review and Building Permit

- Construction drawings and Plot Plans will be reviewed for compliance with City Ordinances and the Michigan Residential Code (MRC).
- Plans are reviewed in the order they are received, based on the application date. Plan review time varies depending on the Building Department's workload.
- Plans that contain all the necessary information and details will help expedite the Plan Review process.
- The Permit Applicant will be notified if the plans do not meet Zoning Ordinance, grade, or Building Code requirements, or if any additional information is required.

4. Permit Ready

- Whether a regular Building Permit has been processed, the Permit Applicant will be called when the Building Permit is ready to be picked up.

Note:

- All Permit fees are due at the time of Permit issuance.
- Permit fees may be paid by cash or check or credit card. No over-the-phone payments are accepted.
- The Permit shall be issued within 6 months (180) of the application date, or the application will be canceled.
- Permits that have no activity for more than 6 months (180) may be canceled.
- Once the Building Permit is issued, Electrical, Mechanical and Plumbing permits can then be obtained (if applicable).

5. Electrical Permit (if applicable) may be obtained after the Building Permit has been issued.

- All items to be installed shall be listed on the Electric Permit.
- Items not listed shall be added to the Electrical Permit prior to the Final Electrical Inspection.

When all required permits are obtained, construction may begin. Revisions to the structure or grade after issuance of the Building Permit may require resubmittal and Building Department approval.

The following items shall be maintained throughout the construction process:

- The street address shall be posted on the house and visible from the street.
- The street shall be kept clean.
- All construction materials and debris shall be contained on the property.
- Temporary soil erosion control shall be erected and maintained.

7. Inspections (See “Inspection Requests”)

Once your Building Permit has been issued, you can begin construction. Your Accessory Structure will be reviewed and inspected in accordance with the requirements of the Michigan Residential Code (MRC). As your project progresses, the Building Department will need to perform the following inspections:

A. Footing and Sand Inspection – After footings are dug, the base compacted and forms are set. All organic materials shall be removed from the footing and slab areas. **Please note:** A minimum 12” wide x 24” below grade rat wall type footing may be installed if the Accessory Structure is a maximum of 600 sq. ft., constructed of lightweight construction, the eave height does not exceed 10 feet, and concrete block or brick are not being used. All other footings must be a minimum of 12” wide x 42” below grade concrete footing.

- Approved plans shall be on site for all inspections when a regular Building Permit has been issued. For Expedited Reviews, your copy of the Accessory Structure Guidebook shall be on site for inspections.
- These inspections may be done separately depending on your construction sequence.
- Common items the Inspector looks for are:
 - o Location of structure.
 - o Property lines shall be clearly marked to verify the distance between the property lines and the structure.
 - o Footing is being installed in accordance with the approved plans.
 - o All vegetation has been removed from the floor area.
 - o A 4-inch minimum base of compacted sand, gravel or crushed stone has been installed.
 - o Forms have been installed a minimum of 6 inches above grade.
 - o The size of the floor shall match the approved Plot Plan.
 - o The floor in garages shall slope toward the main vehicle entry door.

B. Underground Electrical Inspection (if applicable) – After wire or conduit is installed and all underground Electrical work is completed.

- Shall be inspected before covering. Please note: Proper materials shall be used. Contact the Electrical Inspector if you have questions (810) 245-9621.
- Wiring from the house to the structure shall be at least 18 inches below grade
- All work shall comply with the Michigan Residential Code (MRC).

- C. Final Electrical Inspection** (if applicable) – After all Electrical equipment, switches, plugs, covers, and fixtures have been installed and are operational.
- A minimum clearance of 3 feet is required between the roof and all Electrical service wires.
 - A Rough Electrical inspection is required if interior walls are covered.
 - An Underground Electrical inspection is required before the trench is covered.
 - Proper operation of ground fault circuit interrupters and breaker sizes are checked. Ground fault interrupters (GFI) are required for Electrical protection in all garages.
- D. Final Building and Grade Inspection** – After Electrical Inspections are done and the structure is completed.
- A Rough Building Inspection is required prior to a Final Building inspection if any of the interior walls are covered.
 - Approved plans shall be on site for all inspections.
 - Common items the Inspector looks for:
 - o The height of the structure is 16 feet or less.
 - o All exterior siding, trim and painting have been completed.
 - o Grading is in accordance with the approved Plot Plan.
 - o The grade slopes away from the structure – a min. 6 inches within first 10 feet.
 - o There must be a 6” clear between the ground and wood siding, sheathing and wall construction.
 - o Treated bottom plates have been installed.
 - o Proper framing and header sizes are installed.
 - o Anchor bolts have been installed.
 - o Braced wall panels, hold downs and header straps are in place (if applicable)
 - o Truss drawings are on site (if applicable).
 - o Hurricane clips have been used.
 - o The step from the service door to grade is less than 7 ¾ inches.
 - o Steep slope requirements and reconstruction (if applicable) are completed and inspected prior to the Final Building Permit approval.

This itemized list is provided as a guide to help you understand the process for building an Accessory Structure in the City of Lapeer. It covers the most common types of projects. If your project is beyond the scope of this Guidebook it may require additional information,

BUILDING PERMIT FEES

Accessory Structures

1. Permit Fee.....\$225
2. Inspections \$90
3. Reinspection..... \$90
4. Plan Review..... \$90 per hour (one hour min)

INSPECTION REQUESTS

Accessory Structure

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

- **24-hour Inspection Request Line** – An Inspection may be requested by calling our Inspection Request Line at (810) 245-9621 and providing the following information:
 - **The Street Address of the job site.**
 - **The Permit Number.**
 - **The type of Inspection you are requesting.**
- **Inspections can be requested by email**, send request to building@ci.lapeer.mi.us providing the following information:
 - **The Street Address of the job site.**
 - **The Permit Number.**
 - **The type of Inspection you are requesting.**

Inspections scheduled before 3:00 p.m. that have been verified by the Building Department Staff will be scheduled for the next business day between 9:00 a.m. and 3:00 p.m. Inspections may be done earlier or later depending on the Inspector's workload. Inspections will be done Monday through Thursday.

A request to cancel an Inspection needs to be called in to the Building Department at (810) 245-9621 before 9:00 a.m. on the day of the Inspection requested.

Please make sure your project is ready for your inspection. If your project is not ready for an inspection, the inspection will not be done, and an \$90 reinspection fee may be charged. The following items shall be completed or in place at the time of the inspection:

- Safe access to the job site and throughout the area to be inspected.
- Approved plans and truss drawings on site.
- The job is ready for inspection.
- The Street address and lot number posted and visible from the street.
- Temporary soil erosion control is properly installed.
- The street kept clean.
- All construction materials and debris are contained on the project property.
- Any required tree protection properly installed and maintained.

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

Green Tag

Your Inspection has been approved.

Red Tag /Inspector's Report

Your Inspection has not been approved. The Report will contain a list of items that need to be addressed before calling for a reinspection. A \$90

re-inspection fee will be charged for any items not corrected at the time of the second inspection. Inspections shall be approved before proceeding with the next phase of your construction project.

It is your responsibility as the permit holder to check the job site for the inspection results. Please read the information on all Inspection Reports. If you have any questions regarding this information, call (810) 245-9621 between 8:00 a.m. and 9:00 a.m. and ask to speak with the Inspector that wrote the Inspector's Report.

CONSTRUCTION REQUIREMENTS

Accessory Structures

This information is provided in a "User-friendly" format as a general guide to help you apply the standard Building Code requirements to your project. It covers the most common types of projects. The actual Building Code language may contain additional requirements that may apply if your project is beyond the scope of this Guidebook.

Your Accessory Structure will be reviewed and inspected in accordance with the requirements of the State of Michigan Residential Code (MRC) and the City of Lapeer Zoning Ordinance Chapter 7.

1. Foundation (See "Sample Drawings")

- Footings for Accessory Structures shall be at least 12 inches wide and 24 inches below grade when the structure is built of light-frame construction, less than 600 SF and has an eave height less than 10 feet. Footing for other than light-framed construction or structures greater than 600 SF shall be a minimum of 42 inches deep.
- Alternate foundation systems may be used when approved by the Building Department.
- Footing shall rest on undisturbed soil.

2. Concrete Floor (See "Sample Drawings")

- All vegetation, topsoil and foreign material shall be removed from the proposed floor area.
- Fill material shall be free of vegetation and foreign materials.
- Fill shall be compacted and shall not exceed 24 inches in depth for sand or gravel and 8 inches for earth.
- Concrete slabs shall be at least 3 ½ inches thick with a compressive strength at 28 days of not less than 3,500 pounds per square inch.
- 1/2-inch anchor bolts or equivalent shall be installed in concrete before it has hardened. See "Framing" below for requirements.
- See "Wall Section"
- Garage floors shall slope toward main vehicle entry door.

3. Framing (See "Sample Drawings")

Wall

- Sill plates resting on concrete or masonry shall be pressure-treated.
- Wood siding, sheathing and wall framing that are less than 6 inches above grade or less than 2" above concrete steps, porch slabs, or patio slabs, are required to be pressure-treated material.
- The sill plate shall be anchored to the foundation with ½-inch diameter anchor bolts or equivalent which is 6 feet on center and not more than 12 inches from each end of the plate. Bolts shall extend at least 7 inches into concrete or masonry.
- Walls are typically framed using 2 x 4 studs at 16 inches on center with a double top plate.
- Cutting or notching of 2 x 4 studs shall not exceed 7/8-inch.
- Holes drilled and boring in 2 x 4 studs shall not exceed 1-7/16 inch and shall be at least 5/8-inch

from the edge of the stud.

-Proper sized headers shall be installed over all window and door openings. A pre-engineered header (Example: Glue-lam, Microlam, or LVL) is typically required for 16-foot-wide door openings that support roof construction. Additional engineering may be required.

-Headers above man-doors and windows up to 3-foot in width, within bearing walls shall be 2-2 x 4's. Headers above man-doors and windows from 3 ft. to 6 ft. wide in bearing walls shall be 2-2 x 8's.

-Walls shall be braced at the ends with 1-inch by 4-inch let-in bracing, approved metal strap devices or structural sheathing.

Building Permit Applicants shall use Continuous Sheathing (CS-G) Braced Wall Panel method for 16'-0" wide overhead door opening. See "Sample Drawings".

-Portal frame opening framing shall be installed for each overhead door opening. See the Michigan Residential Code for details.

-Exterior wall covering/siding shall be installed to provide a barrier against weather and insects (building wrap).

Garage Doors

-Garage doors shall be solid or honeycomb core steel or solid core wood not less than 1 3/8" thick or 20-minute fire rated door or equivalent between the house and garage. Required exit doors shall be side hinged, a minimum of 32" clear width opening between the face of door and the door stop (when the door is in a 90-degree open position) and 78" in height.

Safety Glazing

-Safety Glazing is required in all fixed or operable panels within a 24" arc of a door, in fixed panels over 9 sq. ft. and nearer than 18" to the floor or walking surface and with a top edge greater than 36" above the floor and within 36" horizontal of walking surface.

-All Safety Glazing shall be clearly labeled.

Roof

-Roofs shall be designed to support a minimum of 25 pounds per square foot live load.

-Roof trusses (if used) shall be installed and spaced as required by the truss manufacturer. Manufacturer's truss drawings shall be on site at the frame inspection.

-Rafters (if used) shall have the proper size and spacing – (see examples in table below.)

Maximum Allowable Span for Rafters (Spruce-Pine-Fir #2 or Better)	
Ground Snow Load = 30psf, Ceiling Not Attached to Rafters	
Rafter Size & Spacing	Maximum Span
2 x 6 - 12 inches on center	13'9"
2 x 6 - 16 inches on center	11'11"
2 x 8 - 12 inches on center	17'5"
2 x 8 - 16 inches on center	15'1"
2 x 10 - 12 inches on center	21'4"
2 x 10 - 16 inches on center	18'5"

Ceiling joists (if used) shall have the proper size and spacing to provide a 20 pound per square foot live load when the roof slope is steeper than 3 in 12. (See examples in the table below)

Maximum Allowable Span for Ceiling Joists (Spruce-Pine-Fir #2 or Better) Uninhabitable Attics with Limited Storage, Live Load = 20psf	
Ceiling Joist Size & Spacing	Maximum Span
2 x 6 - 12 inches on center	14'9"
2 x 6 - 16 inches on center	12'10"
2 x 8 - 12 inches on center	18'9"
2 x 8 - 16 inches on center	16'3"
2 x 10 - 12 inches on center	22'11"
2 x 10 - 16 inches on center	19'10"

-Rafter/collar ties are required 4 feet on center when ceiling joists are not installed, or ceiling joists are not parallel with rafters.

-Cut ends of rafters shall be fully supported at the ridge board and at all walls.

-The ends of rafters and ceiling joists (if used) shall have at least 1-1/2 inches bearing on the top plate of the wall.

-Notches at the end of rafters and ceiling joists shall not exceed ¼ the depth. Notches in the top and bottom shall not exceed 1/6 depth and shall not be in the middle 1/3 of the span. The tension side of the rafter shall not be notched except for at the ends.

-Cutting, notching or alterations to manufactured roof trusses are not allowed.

-7/16-inch OSB or ½ inch plywood roof sheathing, rated to span the distances between the rafter and roof trusses are typically used for roof sheathing.

-Asphalt shingles are typically installed when the roof slope is 4 units vertical in 12 units horizontal or greater. One layer of Type 15 felt (tar paper) is required over the entire roof with one layer of No. 40 coated roofing (ice and water shield) from the eaves to a line 24 inches inside the exterior wall.

Trusses and rafters shall be connected to the wall plates with approved connectors (typically referred to as "hurricane" clips.)

PLOT PLAN REQUIREMENTS
Accessory Structures

Three copies of plot plans containing all the information and details noted below shall be submitted with the Building Permit Application. See "Sample Plot Plan". The Plot Plan may be drawn by the Homeowner, Contractor, Land Surveyor, Engineer or Architect. Special circumstances may require the Plot Plan to be drawn by a licensed Land Surveyor. This will be determined during the Plan Review process.

The Plot Plan shall contain the following information:

General

- Builder's name, address, and telephone number.
- The North arrow, street right-of-way and street name.
- Plot Plan scale shall be between 1" = 20' and 1" = 50'.
- Soil erosion control measures may be required based on field inspection.

Zoning

- The location and dimensions of all structures on the lot, including proposed structures and distances from lot lines and/or existing structures shall be indicated.
- Plot Plans shall have all the lot dimensions indicated.
- The Plot Plan footprint and the construction drawings shall be consistent with each other.
- Accessory Structures shall be at least 3 feet from the side and rear property lines and at least 10 feet from the Main Structure.

PLEASE NOTE:

Detached structure accessories to a residential building may be located in the side or rear yard. Such structures shall not be located in the front yard or in any easement, or on a vacant lot.

Detached accessory (attached and detached) structures shall not exceed the ground floor area of the main building main building.

A structure shall be considered detached when it is separate from the main structure.

Maximum height:

The maximum height of all Accessory Structures is 14 feet measured from grade to mid-gable.

Grading and Drainage

All Building permit applications shall also submit a site grading plan for review and approval by the City.

The site grading plan shall include the following:

All easements

Soil Erosion Measures

Grades and slopes for the proposed project

All existing or proposed drainage structures

Indicate where roof drainage will discharge

Show how site improvements will not have adverse impact on adjacent sites

Wetlands, Floodplains, and Steep Slopes:

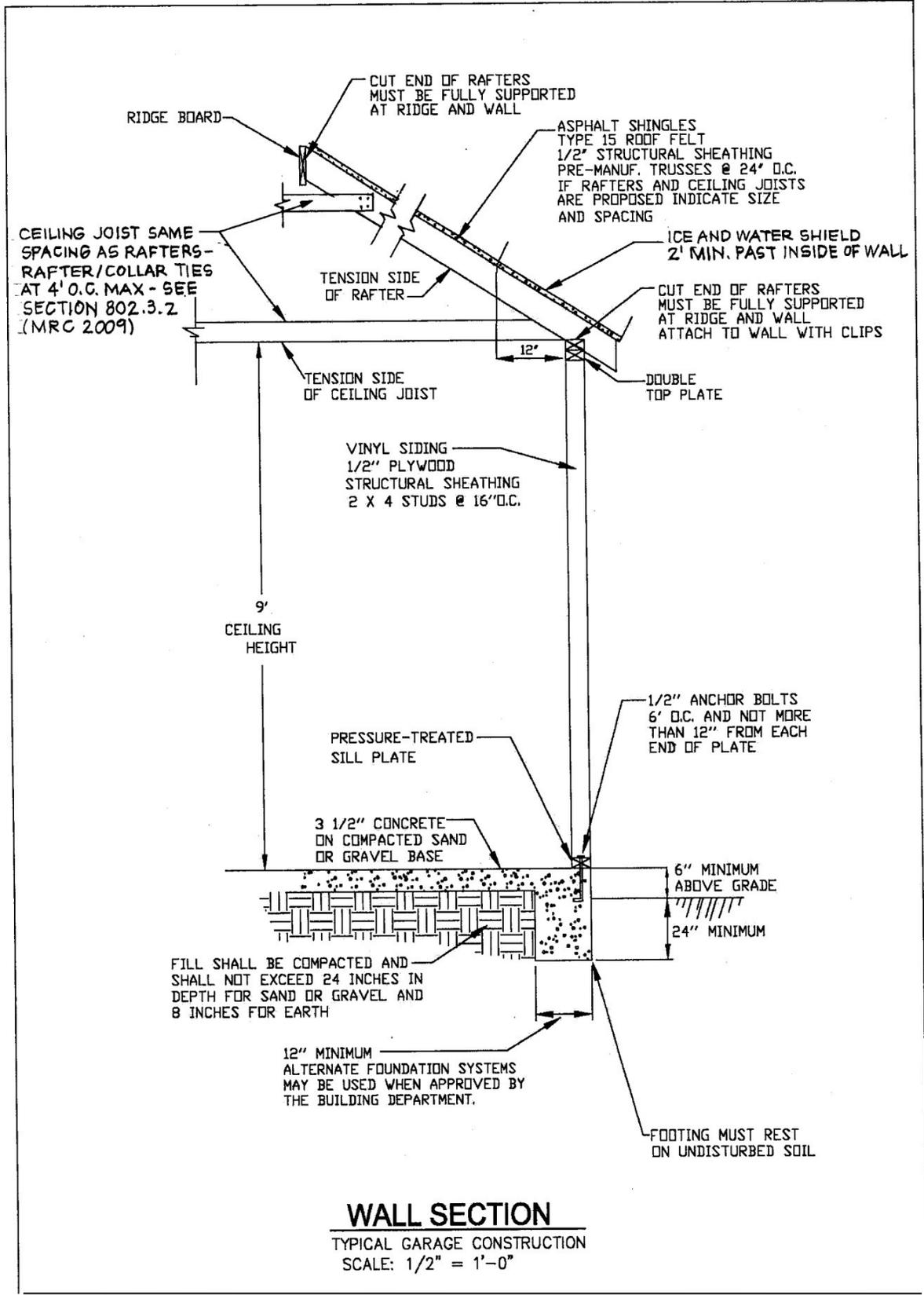
If there are wetlands, flood plains, or steep slopes on your lot, a survey from a Licensed Land Surveyor or Engineer, (signed and sealed) may be required. This will be determined during Plan Review.

Wetland limits, natural features setback, and protective fencing, shall be indicated. (Activity within 10 feet of the regulated wetlands will require a Wetlands Use Permit.)

A State of Michigan Department of Environmental Quality Permit will be required if the property has State-regulated wetlands.

A Soil Erosion Control Permit from the Lapeer County Health Department is required for all properties with wetlands or flood plain, or located within 500 feet of a lake, stream, storm drain, etc. Please contact the Lapeer County Health Department for further information at (810) 667-0392.

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.



CUT END OF RAFTERS MUST BE FULLY SUPPORTED AT RIDGE AND WALL

RIDGE BOARD

ASPHALT SHINGLES
TYPE 15 ROOF FELT
1/2" STRUCTURAL SHEATHING
PRE-MANUF. TRUSSES @ 24' O.C.
IF RAFTERS AND CEILING JOISTS ARE PROPOSED INDICATE SIZE AND SPACING

ICE AND WATER SHIELD
2' MIN. PAST INSIDE OF WALL

CEILING JOIST SAME SPACING AS RAFTERS - RAFTER/COLLAR TIES AT 4' O.C. MAX - SEE SECTION 802.3.2 (MRC 2009)

TENSION SIDE OF RAFTER

CUT END OF RAFTERS MUST BE FULLY SUPPORTED AT RIDGE AND WALL ATTACH TO WALL WITH CLIPS

TENSION SIDE OF CEILING JOIST

DOUBLE TOP PLATE

VINYL SIDING
1/2" PLYWOOD
STRUCTURAL SHEATHING
2 X 4 STUDS @ 16" O.C.

9' CEILING HEIGHT

12"

1/2" ANCHOR BOLTS
6' O.C. AND NOT MORE THAN 12" FROM EACH END OF PLATE

PRESSURE-TREATED SILL PLATE

3 1/2" CONCRETE ON COMPACTED SAND OR GRAVEL BASE

6" MINIMUM ABOVE GRADE

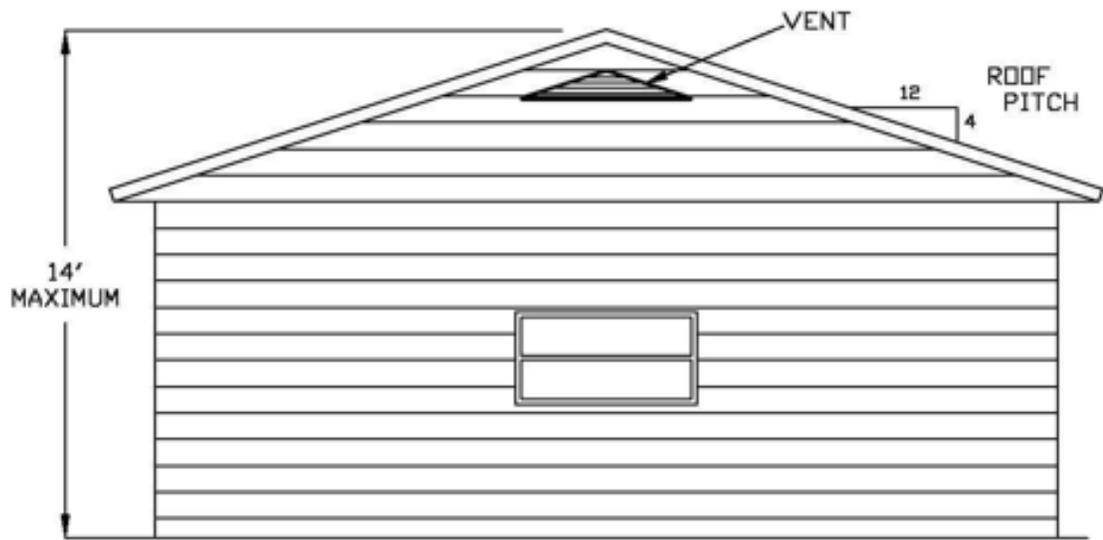
24" MINIMUM

FILL SHALL BE COMPACTED AND SHALL NOT EXCEED 24 INCHES IN DEPTH FOR SAND OR GRAVEL AND 8 INCHES FOR EARTH

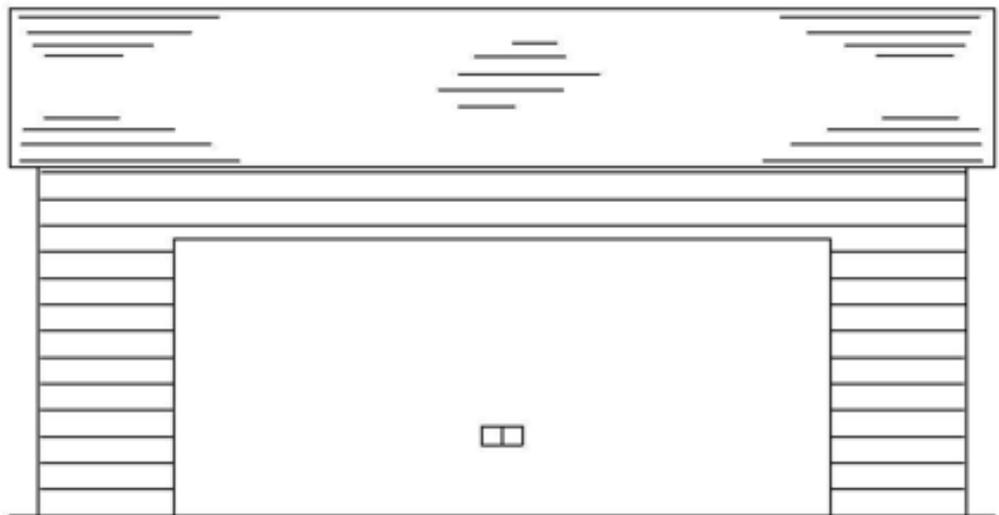
12" MINIMUM ALTERNATE FOUNDATION SYSTEMS MAY BE USED WHEN APPROVED BY THE BUILDING DEPARTMENT.

FOOTING MUST REST ON UNDISTURBED SOIL

WALL SECTION
TYPICAL GARAGE CONSTRUCTION
SCALE: 1/2" = 1'-0"



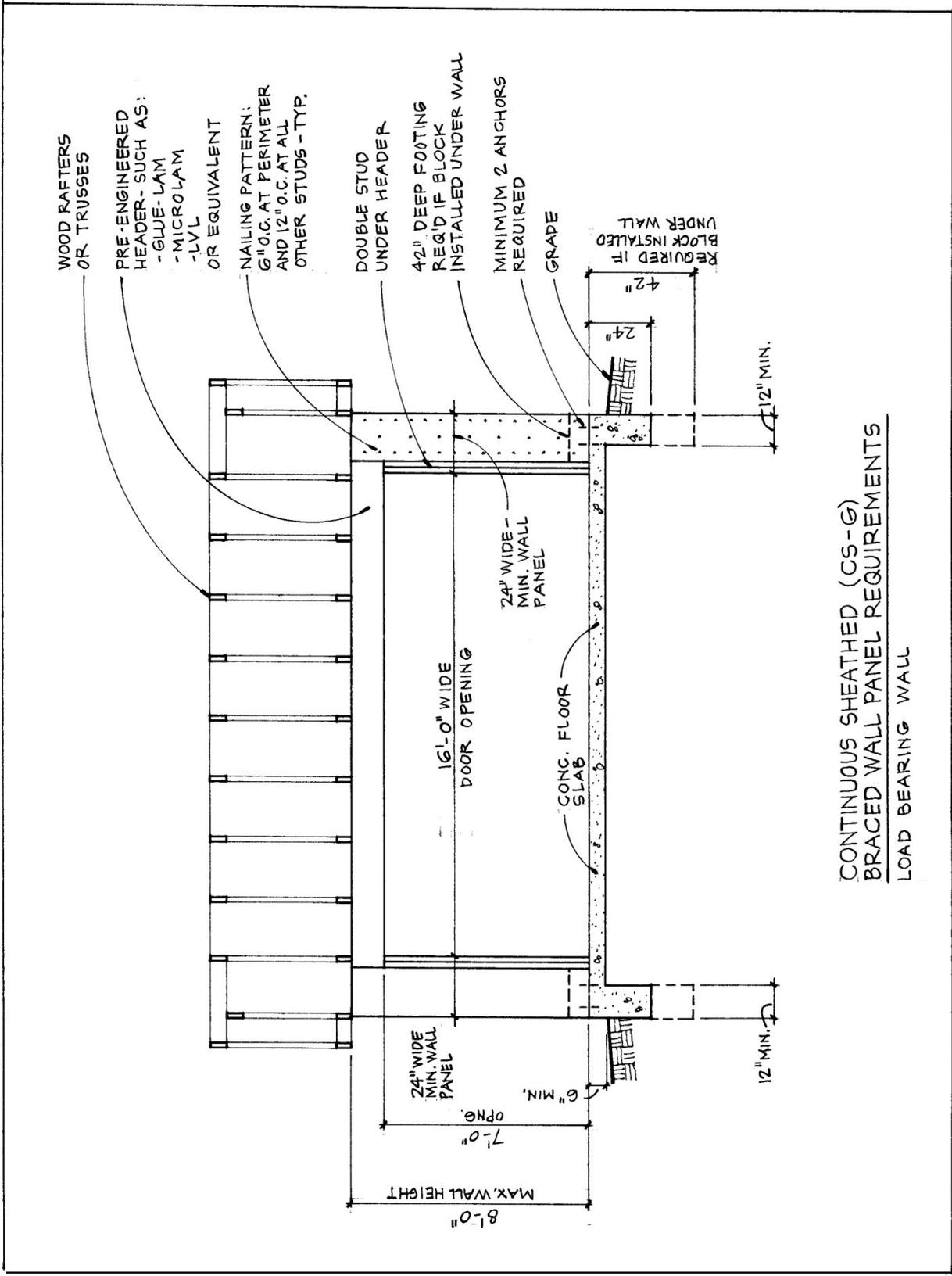
SIDE ELEVATION



FRONT ELEVATION

SAMPLE ELEVATIONS

SCALE: 1/4" = 1'



WOOD RAFTERS
OR TRUSSES

PRE-ENGINEERED
HEADER- SUCH AS:
-GLUE-LAM
-MICROLAM
-LVL
OR EQUIVALENT

NAILING PATTERN:
6" O.C. AT PERIMETER
AND 12" O.C. AT ALL
OTHER STUDS - TYP.

DOUBLE STUD
UNDER HEADER

42" DEEP FOOTING
REQ'D IF BLOCK
INSTALLED UNDER WALL

MINIMUM 2 ANCHORS
REQUIRED

GRADE

REQUIRED IF
BLOCK INSTALLED
UNDER WALL

16'-0" WIDE
DOOR OPENING

24" WIDE-
MIN. WALL
PANEL

CONG. FLOOR
SLAB

8'-0"
MAX. WALL HEIGHT

24" WIDE
MIN. WALL
PANEL

7'-0"
OPENING

6" MIN.

12" MIN.

12" MIN.

CONTINUOUS SHEATHED (CS-G)
BRACED WALL PANEL REQUIREMENTS
LOAD BEARING WALL

