



Requirements for Obtaining Building Permits & Helpful Information

Residential Structures

(One-and Two-Family Residential with *less* than 3,500 square feet of calculated floor area)

- ❖ Application for Building Permit.
- ❖ Minimum of two (2) sets of plans that include the following:
Foundation and floor plans including Dimensions, joist sizes, header sizes, Electrical outlets, fixtures, service, Plumbing stacks.
Roof and wall section.
Building elevations.
Site plan
Michigan Energy Survey
Topographic survey indicating the existing and proposed ground and building elevations (plot plan).

Commercial Structures

(Including One-and Two-Family Residential with *more* than 3,500 square feet of calculated floor area)

- ❖ Application for Building Permit.
- ❖ Copy of plan review approval letter. Plan review must be approved prior to a building permit being issued.

Mobile and Pre-manufactured Homes

- ❖ Application for Building Permit.
- ❖ Minimum of two (2) sets of plans for the foundation and the method or anchoring the unit to the foundation.
- ❖ Site plan.
- ❖ For Michigan approved pre-manufactured units; one (1) copy of the Building System Approval and the approved plans.

You will need to furnish the following information.

- ❖ Total square footage of the structure.
- ❖ Use group (i.e., "R-1-C" use group for single family homes, "U" use group for detached garages, pole barns, etc.).
- ❖ Type of construction ("5B" for wood frame construction).

When to Call for an Inspection

Please call the inspection line on your building permit at least two (2) days prior to the time you need an inspection. A minimum of three (3) inspections are required on most structures. It is the permit holders' responsibility to call for inspections, prior to the construction being covered.

Building inspections shall follow the schedule below to the applicable extent.

1. FOUNDATION – NEW CONSTRUCTION AND ADDITIONS
 - a. Basement Footing – Rails to be set – bleeders to be under footings – rebar minimum #4 - prior to footing being poured.
 - b. Trench Footing – Minimum 42" depth – dependant upon soil conditions - width dependant upon construction type - dowelled into or stepped below existing foundations if applicable- minimum # 4 rebar- prior to footing being poured.
 - c. Ratwall – Detached structures only! Minimum 24" depth. Structures 400 square feet and less only, structures over 400 square feet require a trench footing (b).
2. BACKFILL CERTIFICATE – REQUIRED ON ALL NEW CONSTRUCTION
 - a. Preliminary Grade Certificate – must indicate setbacks, and grade of construction.
 - b. Must indicate FEMA flood zone and be signed and sealed by surveyor.
 - c. Backfill certificate must be approved prior to backfill inspection.
3. BACKFILL INSPECTION – BASEMENTS, CRAWL SPACE, AND SLAB FOUNDATIONS
 - a. Basements – drain tile and pea stone, walls to be waterproofed, long walls to be braced at time of inspection.
 - b. Crawl Space – Sump pit to be in – perimeter insulation to be installed, stone and 6mil vapor barrier to be down for inspection - ***Note – A-2 Flood zone – top of crawl space floor must be at or above 578.0 BFE, maximum crawl space height of 3' permitted in A-2 Flood zones.
 - c. Slab Floors – Perimeter insulation, sand for slab and 6 mil vapor barrier to be in place for inspection.. ****Note – A-2 Flood zone – top of slab must be at or above 580.0 BFE.

4. OPEN JOIST – PRIOR TO FLOOR DECKING
 - a. Required on all crawl spaces and second floor additions prior to floor deck being installed. Pre-engineering floor joists require layout plans and specifications on site for inspection.
5. GARAGE TRENCH/FOOTING – ATTACHED GARAGES ONLY
 - a. Trench to lead walls of basement, trench must extend to undisturbed soils. Existing structures see FOUNDATION item (b).
6. BASEMENT STONE – REQUIRES UNDERGROUND PLUMBING APPROVAL PRIOR TO INSPECTION.
 - a. Stone and 6 mil vapor barrier to be in place. All stone to be cleaned from perimeter footings and stanchion pads at time of inspection. Chalk line to indicate top of floor.
7. GARAGE SAND/PORCH SLAB – OVER 24" OF FILL WILL REQUIRE SOIL ENGINEERING REPORT FOR % OF COMPACTION
 - a. Minimum #4 rebar on basement over dig areas, 6 mil vapor barrier required on all attached garages.
 - b. Forms and sand to be ready for inspection for porch cap
8. SHEATHING – PRIOR TO EXTERIOR WALL COVERING
 - a. Weather resistive sheathing paper, overlapped and taped, windows to be taped, all bare wood to be covered. Egress window requirements are inspected at this time.
9. FLASHING – MASONRY OR STONE EXTERIOR COVERING
 - a. First course of brick, pea stone behind and flashing material to be installed for inspection.
10. FIREPLACE – MASONRY ONLY
 - a. Inspection for damper and flue required.
11. ROUGH FRAMING – REQUIRES ROUGH ELECTRICAL, MECHANICAL AND PLUMBING APPROVALS PRIOR TO INSPECTION BEING SCHEDULED
 - a. All framing to be completed, pre-engineered structural components require layout plans and specifications for inspection to be on site.
 - b. Approved construction plan to be on site for inspection.
12. DRYWALL- Multi-family, fire, separation and party walls only
 - a. Inspection required on all fire, separation and party walls. UL cut sheets or architectural specifications to be on site for inspection.
13. INSULATION
 - a. All insulation to be installed in accordance with the indicated R-value on approved construction plan.
 - b. Affidavit from installer for blown-in insulation required to be on site, if applicable, for this inspection.
14. AS-BUILT PLOT PLAN – REQUIRED ALL NEW CONSTRUCTION
 - a. Existing elevations and setbacks to be confirmed by registered surveyor and recorded on the township approved plot plan for comparison.
 - b. FEMA Elevation Certificate also required for all new construction in an A-2 Flood zone.
15. FINAL GRADE - APPROVED AS-BUILT PLOT PLAN REQUIRED (ALSO APPROVED FEMA CERTIFICATE IN A-2 FLOOD ZONE)
 - a. All grading and drains to be installed. Drainage patterns to be inspected and verified with this inspection.
16. FINAL BUILDING – REQUIRES FINAL ELECTRICAL, MECHANICAL AND PLUMBING APPROVALS PRIOR TO INSPECTION BEING SCHEDULED
 - a. All building to be completed in accordance with the approved construction plan.
17. FINAL CERTIFICATE OF OCCUPANCY
 - a. Issued only after final grade (if applicable) and final building has been approved.

Certificate of Occupancy

A new building or a building that is altered shall not be used or occupied until the code official issues a Certificate of Occupancy. The permit holder or their authorized agent must request a Certificate of Occupancy upon the completion of the project. This request may be verbal, however, it is recommended that a written request be sent in, which includes the building, electrical, mechanical, and plumbing permit numbers, and when applicable, the Office of Fire Safety approval number. A Certificate of Occupancy cannot be issued until all permits are finalized and the work covered by a building permit has been completed in accordance with the permit, the code, and other applicable laws and ordinances. If an electrical, mechanical, plumbing permit or fire safety approval is not required, write "not applicable" on the request form in the appropriate space.

Helpful Information

- ❖ Septic Permit from Macomb County Health Department (if no sewers) 586-469-5235
- ❖ Soil Erosion Permit from Macomb County Department of Public Works or Exemption letter 586-469-5327
- ❖ Culvert and /or Driveway Permit from Macomb County Road Commission or Exemption letter 586-463-8671
- ❖ Seawall or Cut/Fill Permit from U.S. Army Corps of Engineers 313-226-2218 and or MDEQ 586-753-3700
- ❖ Wetland Permit from Michigan Department of Natural Resources
- ❖ Homeowner Association Approval if required by particular association
- ❖ Engineering Review on all construction other than one and two family residential.

Development in Flood Hazard Area

This policy is intended to specify the minimum additional requirements to be imposed upon building permit structures located in flood hazard areas. Flood hazard areas are lands subject to flooding by a 100-year storm event. Such areas include areas identified on the current FEMA FIRM maps. The following guidelines are applicable.

- ❖ No construction is allowed within the floodway without appropriate DNR and USA COE permits. Actual building should not be placed in the floodway.
- ❖ No building may be built or added to unless such new construction complies with Ordinance 186 and these policies.
- ❖ No basement or crawl spaces containing mechanical or HVAC equipment servicing the building built in any flood hazard area unless the lowest floor elevation is at or above elevation 580.00 NGVD.
- ❖ Crawl spaces, garages and sheds may be built below elevation 580.00 if they contain no equipment servicing the building. Minimum two Open vents must be provided with 1” open area per one square foot of floor area.
- ❖ All building or structure erected within a flood hazard zone shall be elevated so that lowest portion of all horizontal structural members supporting floors is located at or above the 580.00.
- ❖ The minimum finished grade or brick ledge must be 12” to 18” above the centerline elevation of the road pavement, or at the 580.00 elevation, which ever is higher.
- ❖ If a survey of your parcel confirms that it is incorrectly mapped on a FEMA map as A zone, the Township must still treat the parcel as a flood hazard area until you obtain a LOMA from FEMA.
- ❖ During construction in a flood hazard area, an elevation check must be made of all foundations, brick ledge, finish grades, etc. to assure that you will comply with flood damage prevention requirements prior to erecting floors, walls, etc.
- ❖ By federal law, commercial and industrial properties may build with lowest floor elevation lower than the 580.00 elevation provided they are flood proofed to at least the 580.00 (b.f.e.). Flood proofing of residential structure is not allowed under current federal guidelines.
- ❖ There may be other requirement from FEMA.

Zoning Information (Residential Districts)

| | R-1-A | R-1-B | R-1-C | R-1-D |
|--------------------------------------|--------------|--------------|--------------|--------------|
| 1. Lot area (square feet) | 12,000 | 10,800 | 9,600 | 8,400 |
| 2. Lot width (linear feet) | 100 | 90 | 80 | 70 |
| 3. Lot depth (linear feet) | 120 | 120 | 120 | 120 |
| 4. Rear Yard (linear feet) | 30 | 30 | 30 | 30 |
| 5. Side Yard (least side/total both) | 6/14 | 6/14 | 6/14 | 6/14 |

Road Classification

| | | | | |
|---------------------------|-----|-----|-----|-----|
| 1. Regional (204’ ROW) | 137 | 137 | 132 | 132 |
| 2. Regional (150’ ROW) | 110 | 110 | 90 | 90 |
| 3. Major thoroughfare | 90 | 90 | 90 | 90 |
| 4. Secondary thoroughfare | 90 | 90 | 90 | 90 |
| 5. Collector thoroughfare | 73 | 73 | 73 | 73 |

Building requirements

| | | | | |
|--|-----------|-----------|-----------|-----------|
| 1. Maximum Height (stories/feet) | 2.5/30 | 2.5/30 | 2.5/30 | 2.5/30 |
| 2. Maximum Lot coverage (percentage) | 30 | 30 | 30 | 30 |
| 3. Maximum impervious surface (percentage) | 40 | 40 | 45 | 50 |
| 4. Minimum floor area | | | | |
| 1-story first floor/total | 1200/1200 | 1200/1200 | 1200/1200 | 1200/1200 |
| 1½ - story first floor/total | 940/1340 | 940/1340 | 900/1350 | 875/1250 |
| 2- story first floor/total | 750/1500 | 750/1500 | 750/1450 | 750/1400 |

Note: Above information is for reference only. It may change from time to time. Please contact building department for latest requirements. Information is from MRC2003 and Harrison Township Ordinance book.

BUILDING PERMIT APPLICATION SUBMITTAL LIST

Subject Address: _____

- * Pay Plan Review Fee \$ _____
- * Pay Zoning Review Fee \$ _____
- * Building Permit Application Form completely filled out
- * Plot Plan (2) – Topographical survey with grade & floor elevation for new house construction
- Engineered documentation for foundation, basement floor slab and garage floor slab based on soil boring tests performed on the specific sites. (Brigantine)
- Soil Erosion Permit from Macomb County
- Culvert/Approach Permit from Macomb County
- Michigan Energy Survey
- * Blue Prints (2 sets) including (2) copies of the following:
 - * Foundation Plan
 - * Floor plan – with dimensions, joist sizes, header sizes
 - * Wall cross sections
 - * Building elevations
- * Elevation Certificate required for all additions in the A2 Flood Zone
- Septic Permit from Macomb County Health Department (at time of application) or
- Sewer Tap Permit (before building permit is issued)
- Water Tap Permit (before building permit is issued)
- * Homeowner Association Approval if applicable
- Wetland Permit (D.E.Q.)

Verifying Signature

Date

*** Required for Additions**