

TO: All Applicants for Industrial, Commercial, and Multiple-Family Building Permits

Re: Engineering Division Site Plan Requirements

In order to process your building permit application for the construction of a new building or an addition to an existing building, a complete site plan must be submitted to the Division of Engineering for approval.

Four complete sets of the site plan drawings must be attached to the building permit plan sets. In addition, the Engineering Division requires that the completed site plan drawings be submitted in electronic format either on disc or via e-mail at the time of permit application. The preferred electronic format is Micro-Station (.DGN), but Autocad (.DWG) files can also be accepted. For e-mail address information please call the Engineering Division at (586) 759-9300. If the final approved construction drawings differ in any way from the original & electronic submittals, an electronic copy of the approved plans must be furnished to the Engineering Division. A permit for construction will not be issued until the Engineering Division has reviewed and approved this electronic copy of the plans.

The following items must be included on the site plan in order for a review of the plan to occur:

1. All existing rights-of-way, easements, utilities and improvements adjacent to your property. Included in this shall be storm sewers, sanitary sewers, water mains, gas mains, paved or unimproved roads, sidewalks, catch basins, manholes, utility poles and any other relevant data which aids in developing a complete description of the site.
2. Five (5) foot wide concrete sidewalks along all sides of the property which abut any public street, and the proposed grades of said sidewalk.
3. Concrete driveway approaches from the existing pavement or edge of gravel to the property line. All approaches shall have a minimum thickness of 8-inches and radii conforming to the Engineering Division requirements in Section 600 of the "Specifications for Concrete Sidewalks and Drive Approaches."
4. Exact information as to the type of parking lot to be constructed and the proposed finished grades of the parking lot. An internal drainage system of catch basins and storm sewers to drain all hard-surfaced parking areas and any unimproved or landscaped areas is required. The size and elevations of the proposed storm sewers and catch basins must conform to city standards for catch basin construction, and the outlet for the storm sewer must be shown.

If the outlet for the site storm sewer is a county drain, on-site detention may be required. The Macomb County Public Works Office can be contacted at (586) 469-5325 for information regarding this issue.

5. The method of construction of all proposed utilities or improvements located in the street right-of-way. Where it is necessary to install a new utility under any existing pavement the method of construction must be approved by the Engineering Division.
6. Elevations of the existing land immediately adjacent to your property, existing adjacent structures or improvements, and other elevations needed in determining a complete picture as to how the grading of the area is to be developed. Sufficient existing grades must be given to adequately indicate changes in topography and should closely relate to proposed grade locations in order to indicate depths of cut or fill proposed.

Grades on adjacent properties shall be shown to the following minimum requirements:

- a. If adjacent to developed residential, all existing finished grade elevations at all houses and garages must be shown; plus,
 - b. All grades in a 50' grid pattern from the property line of the permittee to 100' out from the property line.
7. The "bench mark" used by your Engineer or Surveyor in establishing the required elevations to allow checking of the plan by Engineering.
 8. If a wall at the property line is required by the zoning ordinance, a drawing showing the elevation, plan and section will be needed. This drawing must include the final grades on each side of the wall.

Where the elevation difference is more than 1'0", the wall must be designed structurally by a registered engineer to withstand the forces created by the elevation difference plus the expected live load surcharge.

9. The completed site plan or plans must be sealed and signed by a registered professional engineer.
10. Before a building permit will be issued by the Building Division, a permit for utility construction must be obtained from Engineering. Information regarding that permit and its requirements can be obtained at the Engineering Division Office or by calling (586) 759-9300.

Thank you for your cooperation in this matter.