

**ENGINEERING DEPARTMENT  
REQUIREMENTS FOR CONSTRUCTION OF  
NEW BUILDING STRUCTURES**

(This is in addition to Zoning & Building Department requirements)

**STEP 1**

To obtain a Building Permit: Proposed Grading Plan, Fee Submittal and Groundwater Investigation Results and COAH (Affordable Housing) payment.

Applicant must submit a proposed Grading Topo Plan with sufficient grades to determine that the property topography meets Township Standards of 2% minimum slope, 12% maximum slope and does not cause impacts to any adjoining properties. Diversions consisting of swales, berms or drainage systems must be created or maintained to prevent runoff to adjoining properties. There is a minimum \$225.00 fee and additional fees may be required if plans need to be reviewed more than twice. This fee to the Engineering Department is for review of all plans, revisions and final site inspection by Engineering Department inspection personnel. The Grading Plan must be prepared and sealed by a Professional Engineer. Garage floor elevation, structure corner elevations, property corner elevations and sufficient contour grades as a minimum must be shown on the Grading Plan. There is an approximate 20 working day review process at this step. Applicant is responsible to contact the Engineering Department after 20 working days of submittal to determine if the Grading Plan is approved or rejected with comments. Rejected plans must be revised and resubmitted for another review cycle to determine compliance.

**STEP 2**

To Frame Structure – Build superstructure: Foundation Location and Elevation Plan Submittal

Applicant must submit a certified Foundation Location and Elevation Plan prepared and sealed by a Professional Engineer or Surveyor. This step certifies the foundation is in the proper location and built to the proper elevation. Framing of the superstructure is not authorized until this certified plan is reviewed and approved by the Engineering Department. As-built distances from property lines (front, rear and side yards) must be shown to determine if proper structure setbacks meeting zoning requirements have been met. Likewise, an as-built top of block foundation elevation at the garage floor must be shown to determine if proper elevation per approved proposed grading plan as required in Step 1 is adhered to. There is also an approximate 10 working day review process at this step. It is the applicant's responsibility to contact the Engineering Department after 10 working days to pick up an approved Foundation Location/Elevation Plan or a rejected plan for comments. If Foundation Location/Elevation Plan does not meet approved proposed Grading Plan required in Step 1 the applicant must either correct the foundation to meet the approved Grading Plan or resubmit the Grading Plan for re-evaluation to determine if new slope still meet Township standards and not cause any adverse impacts to adjoining properties.

**STEP 3**

To obtain Certificate of Occupancy: As-Built Grading Plan Submittal

Applicant is required to submit an as-built Grading Plan (Topo) prepared and sealed by a Professional Engineer or Surveyor certifying the as-built finish lot grading conforms with the proposed grading plan as approved in Step1. This plan must be submitted minimum 48 hours prior to scheduling a final site inspection. Applicant is responsible to schedule a final site inspection directly with the Engineering Department. This is in addition to Building Department final inspections.

## ENGINEERING DEPARTMENT CHECKLIST

For Construction of Additions, Barns, Sheds, Garages, Pools, Driveways, Etc.

The construction of additions, garages, barns, sheds, inground pools, driveway expansions, etc. require review by the Engineering Department for proper grading and storm water management. A detailed proposed grading plan prepared by a professional engineer is required and must be submitted for review and approval prior to sign off for construction to the Building Department. The following information is to be shown on a copy of the property survey of record:

1. Show existing and proposed distances to all property lines (side, front and rear). Additionally, the building envelope (setbacks) shall be clearly indicated with dashed lines.
2. Show adjoining lot buildings and approximated distances from property line.
3. Show any nearby streams or watercourses to the property.
4. Township slope standards of 2% minimum and 12% maximum must be maintained a minimum of 20 feet around the proposed addition, garage, shed, driveway and in all disturbed areas. The limit of disturbance shall be clearly indicated. See Engineering Department for example of required grading plan.
5. Show any driveway expansion and proposed slopes. Indicate if driveway edging, (curb, timber, etc.) is proposed. Slopes from new edging to existing grade must meet Township standards of 2% minimum 12% maximum. Driveway must be sloped toward the roadway to prevent additional runoff to adjoining lots.
6. Show roof leader discharge points and methods to prevent their flow to adjoining lots (i.e. underdrain to storm systems, swale, etc.)
7. Show existing grading of slopes around proposed addition, garage, shed, etc. and path of water runoff flow. Swales, berms, inlet systems, etc. either existing or proposed must be shown to prevent runoff to adjoining lots. Indicate on plan if the swale, berm or inlet is existing or proposed. Grades shall be shown by spot elevations to the nearest one hundredth of a foot at all corners and breakpoints. Contours may be used elsewhere. An assumed datum is allowed.
8. Show impervious surface calculation meeting Township code for the zone.
9. Furnish copy of approved Zoning Permit.
10. Provide a signed statement regarding the disposition of excess excavated earth, which qualifies the extent of regrading and/or placement of fill. If soil is to be brought into the site, the homeowner/contractor must indicate the soil is native Hillsborough soil or as per Township ordinance, out of town soil must have a certified soil test.

For projects of minor impact, a waiver of the professionally prepared grading/site plan may be considered. To make this determination the applicant shall provide as much of the above information as possible and can support the request for waiver with photographs and a narrative. As a guide, the following applications will be considered though not necessarily granted a waiver.

1. House additions less than 600 sq. ft. but not more than 50% of the existing dwelling.
2. Small sheds or barns less than 600 sq. ft.
3. Driveway expansions.