

STANDARD CHECKLIST FOR GRADING PLAN REVIEWS

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In accordance with chapter 13 section 3.0 of the revised general ordinances of Cherry Hill Township, a Grading Permit is required for all new home grading and earthwork operations on residential lots that result in a land disturbance of 500 square feet or more. Applications for Grading Permits shall be obtained from the Code Enforcement and Inspection Department, Room 205 of the Municipal Building, 820 Mercer Street. Applications shall be accompanied by a grading plan, submitted in *triplicate*, conforming to the standards contained within.

Applicants will be notified if their Grading Plan submission is found deficient and will be required to provide additional information within four (4) weeks of the review date. If additional information is not submitted within this time period, the application will be considered incomplete and will be denied by the Code Enforcement and Inspection Department.

Grading Plan approval in no way affect or negate any approval required by other Federal, State, County or local agencies. Comments or questions concerning these standards should be directed to the Department of Engineering at 856-424-3203.

The following items must be supplied on the plan:

1. ALL PROFESSIONALLY PREPARED GRADING PLANS:

A. Must have a title block indicating the address of the site, lot and block designation and be titled "GRADING PLAN". The title block must contain the name, firm, address, telephone number and fax number of the preparer. The plan must also contain the name, address, and phone number of the applicant.

B. The **existing conditions & Topographic survey(s)** must be signed and sealed by a Professional Land Surveyor as required by state stature.

C. The proposed design information must be signed and sealed by a Professional Engineer or Architect licensed in the State of New Jersey. Any plan with drainage proposed must be sign by a Professional Engineer.

D. Must have note on the plan specifying that the vertical datum used is NGVD 1929. If an assumed datum is used, a conversion equation must be indicated on the plan.

E. Any increase in total impervious area will require applicants to maintain and manage the additional storm water on-site or provide for positive flow to a municipal street. Minimum grading standards (see #8) must be met. Grading plan or supplemental information must provide for storm-water management (runoff) calculations for a 10 year storm event. In most cases, storm water may be managed in

infiltration trenches or dry wells. At the location of the storm management facility, the site soils must be tested for permeability and results utilized in consideration of the stormwater management design. All stormwater management must be endorsed by a Professional Engineer licensed in the State of New Jersey.

- F. Must be legible and of sufficient scale and quality to be reproducible.

2. PROPERTY LINES, EASEMENTS AND SETBACKS:

- A. Must be clearly shown on the plan and adjacent properties must be identified by Lot and Block Numbers.
- B. Must have bearings and dimensions of property lines, width and purpose of any existing or proposed easements and building setback lines in accordance with the Zoning Ordinance.

3. RIGHT-OF-WAY IMPROVEMENTS:

- A. Must be shown on the plan including width of right-of-way and cartway, location of existing/proposed curb, driveway aprons and sidewalks along the frontage of the property as well as 50' onto adjacent properties.
- B. Must have pertinent information related to the existing/proposed site improvements such as elevation of centerline of roadway, top of curb and gutter, sidewalk and driveway apron. Where no curb exists, pavement edge elevation should be provided.
- C. All work to be performed within the Township right-of-way will require the appropriate municipal right-of-way opening permits. The application may be obtained through the Department of Engineering located at 1 Perina Boulevard, Cherry Hill. Phone number: (856) 424-3203. The Department of Engineering shall be notified twenty-four (24) hours in advance of any construction activity.

4. ALL GRADING PLANS:

- A. Must include contour lines at one (1) foot intervals and spot elevations of high and low points. Contour lines must clearly show existing characteristics of topography such as existence of lawn swales, ditches, ridgelines and general pattern of drainage flow. Where grade changes (cuts or fill) are involved, proposed conditions must be superimposed over the existing contours. Existing contours shall be indicated as dashed lines and proposed contours as bold solid lines.
- B. Must show existing/proposed spot elevations of all property corners and intermediate points at intervals not exceeding fifty (50) feet along all property lines. Existing topography must also be extended a minimum of fifty (50) feet beyond the property lines in all directions. Spot elevations of adjacent building corners and finished floors must be shown.

C. Must show lot layout including all structures and other site improvements with overall dimensions of structures, offset distances from property lines and location of all existing and proposed condition, i.e driveways, fences pools, decks, trees, etc.

D. Based on a site inspection, conditions presented on the plan are not consistent with actual field conditions.

5. WHERE A NEW STRUCTURE OR ADDITION IS PROPOSED:

A. The lot shall be graded to direct surface runoff toward the road frontage or other defined drainage paths. Where it is intended to slope the lot toward the frontage road, the finish floor of the proposed dwelling shall be set a minimum of three (3) feet above the maximum pavement gutter elevation occurring along the frontage of the lot. Finish grades at the foundation perimeter shall be a minimum of nine (9) inches below the sill plate of the dwelling. In no case shall garage floor or any opening to the dwelling be less than one and one half (1 ½) feet above the lowest gutter elevation.

B. Elevations of first floor and garage, as well as finished grades at all building openings and corners, must be shown.

C. Location of existing/proposed utility service connections (sanitary and water) must be shown. Clean-out vent for sanitary lateral should be shown in the park strip between the curb and sidewalk, if sidewalk exists. Otherwise, the vent shall be shown within six (6) feet of the right-of-way line. Show proposed invert of clean-out and invert at dwelling.

6. WHERE A SWIMMING POOL INSTALLATION IS PROPOSED:

A. The lot shall be graded to direct surface runoff toward the road frontage or other defined drainage paths. Finish deck elevations shall be set above the natural grade occurring on the lot to prevent surface water from flowing into the pool.

B. Plan must have pertinent information related to elevations of the existing/proposed site improvements such as proposed pool deck, finish floor of the dwelling, finished grades at all building openings and corners, top of curb and gutter, sidewalk, driveway, etc.

C. Plan must show limits of fill and land disturbance. In no case shall fill be placed as to interrupt existing drainage patterns, or within five (5) feet of the property line or an easement line.

7. WHERE A LOT ABUTS A STREAM CORRIDOR, FLOODPLAIN OR WETLANDS:

A. Stream encroachment, flood boundary and/or wetland lines shall be shown and a source of the information should be noted on the plan. In cases where no study is available, it shall be so noted on the plan.

- B. Must have bearing and distances with NJDEP permit number and date of approval for wetlands and wetlands buffer requirements.
- C. Plan must show all flood plain elevations as documented by all applicable resources.
- D. All construction and grading activities shall comply with the requirements of applicable NJDEP Regulations. The Applicant is responsible for obtaining a jurisdictional determination from the appropriate authorities.

8. MINIMUM GRADING STANDARDS

A. Drainage for the total site shall be positive. Lawn areas with gradients of at least two (2%) percent shall be sloped away from building foundations. Grassed lawn swales, with a desirable slope of two (2%) percent, but in no case, less than one and one half (1.5%) percent, shall direct surface runoff toward the road frontage or other defined drainage paths. Grading shall not impact adjacent properties by diversion of surface runoff.

- B. Proposed drainage patterns shall be denoted with flow arrows. Spot elevations shall be provided along major drainage paths, as well as a minimum of a 50' grid pattern.
- C. Slopes shall not be steeper than three (3) horizontal to one (1) vertical. Slopes shall be well rounded at top and bottom to reduce the possibility of erosion. Steeper grade changes shall be confined by retaining structures or other acceptable methods. Terracing is permitted.
- D. Top of an excavation and/or toe of slope of a fill section shall not be closer than five (5) feet to an adjoining property line or structure.
- E. Proposed grading shall not extend beyond the property lines unless the written consent of the adjacent owner is obtained.
- F. Driveways shall not have a slope greater than twelve (12%) percent. Where site conditions require a greater slope, a design waiver may be requested.

9. SOIL EROSION AND SEDIMENT CONTROL:

- A. All disturbed land within or adjacent to the work area, which is the result of the contractor's operation, shall be stabilized in accordance with the STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY. All grading and soil stabilization shall be completed within thirty (30) days from the issuance of the permit. A note to this effect shall be added to the plan.
- B. Soil erosion and sediment control measures shall be provided, and shall include silt fences at downslope perimeters of the disturbed area and a stabilized construction entrance, approximately ten (10) feet wide and twenty (20) feet long, consisting of a six (6) inch thick stone apron (2" aggregate – ASTM Size No. 2).
- C. Stockpiling of material and debris within the right-of-way area is not permitted. The roadway shall be swept clean of all earth and debris at all times.

- D. Plan shall provide for Stormwater Management of all additional impervious areas. Dry well(s), infiltration trench(es) or other stormwater managements practiced will be considered. All soils shall be tested for permeability and considered during design. Minimum design shall manage a 10 years storm.

10. WHERE RETAINING STRUCTURES OR OTHER SITE DETAILS ARE NEEDED:

- A. Retaining structures, which must retain more than four (4) feet of material or for rip-rap bank protection which is steeper than three (3) horizontal to one (1) vertical, must have calculations prepared by a licensed professional engineer, certifying the stability of the structure.
- B. Details of all proposed site improvements such as landscape or retaining structures, drainage facilities, etc. shall be submitted with and become part of this application. All proposed site improvements, which are subject to building codes, shall be submitted to the Code Official for review to determine compliance with applicable standards.

11. AS-BUILT PLAN: (Required only if checked)

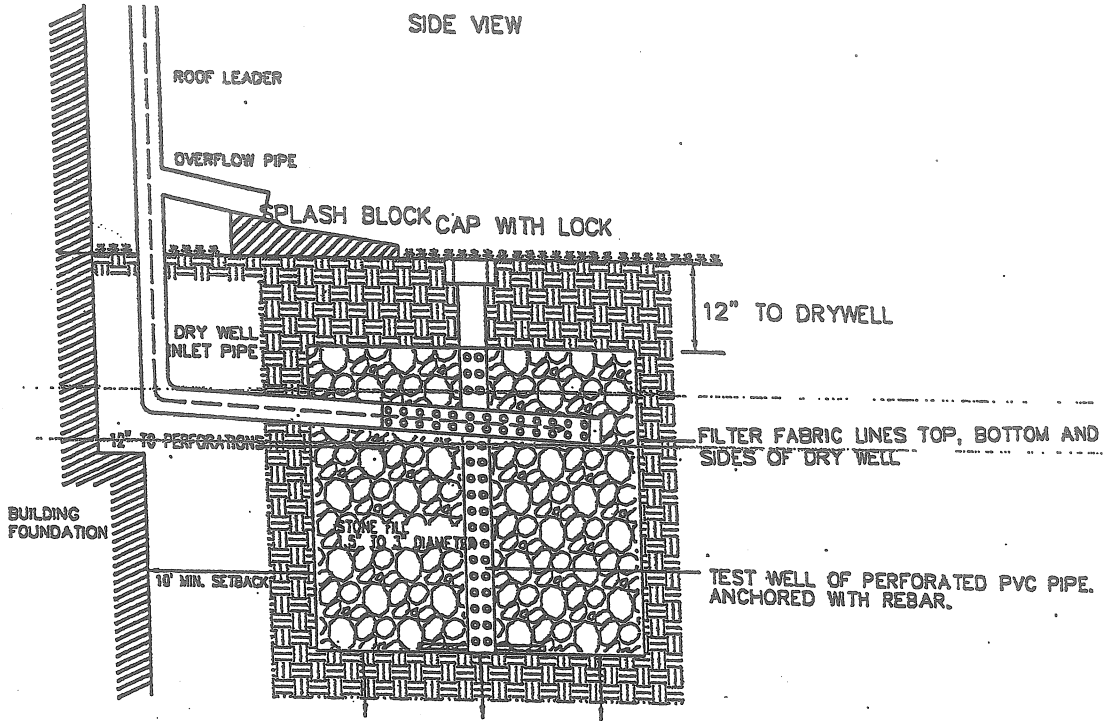
- Upon completion of all improvements, professionals shall submit an as-built plan documenting all improvements were constructed in accordance with proposed grading plan. As-built plan shall include a note documenting “All improvement have been installed/construction in substantial compliance with approved grading plan.”

12. OTHER COMMENTS:

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DRY WELL
N.T.S

