

§ 425-72.

I. Requirements for a Site Development Stormwater Plan

1. Submission of Site Development Stormwater Plan

- a. Whenever an applicant seeks municipal approval of a development subject to this ordinance, the applicant shall submit all of the required components of the Checklist for the Site Development Stormwater Plan at Subsection 425-72.I.3 below as part of the submission of the applicant's application for subdivision or site plan approval.
- b. The applicant shall demonstrate that the project meets the standards set forth in this ordinance.
- c. The applicant shall submit ten (10) copies of the materials listed in the checklist for site development stormwater plans in accordance with Subsection 425-72.I.3 of this ordinance.

2. Site Development Stormwater Plan Approval

The applicant's Site Development project shall be reviewed as a part of the subdivision or site plan review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the engineer retained by the Planning and/or Zoning Board (as appropriate) to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this ordinance.

3. Checklist Requirements

The following information shall be required:

a. Topographic Base Map

The reviewing engineer may require upstream tributary drainage system information as necessary. It is recommended that the topographic base map of the site be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1"=200' or greater, showing 2-foot contour intervals. The map as appropriate may indicate the following: existing surface water drainage, shorelines, steep slopes, soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category One waters, wetlands and flood plains along with their appropriate buffer strips, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearing and distances of property lines, and significant natural and manmade features not otherwise shown.

b. Environmental Site Analysis

A written and graphic description of the natural and man-made features of the site and its environs. This description should include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally sensitive features, environmentally critical areas and to those that provide particular opportunities or constraints for development.

The site analysis shall also include a groundwater mounding analysis for each stormwater infiltration BMP. The groundwater mounding analysis shall calculate the maximum height of the groundwater mound based upon the volume of the maximum design storm. The Professional Engineer conducting the analysis shall provide the municipal engineer with the methodology and supporting documentation for the mounding analysis used and shall certify to City of Vineland, based upon the analysis, that the groundwater mound will not cause stormwater or groundwater to breakout to the land surface or cause adverse impact to adjacent surface water bodies, wetlands or subsurface structures including but not limited to basements and septic systems. If there is more than one infiltration BMP proposed, the model shall indicate if and how the mounds will interact. The mounding analysis shall be calculated using the most restrictive soil horizon that will remain in place within the explored aquifer thickness unless alternative analyses are authorized by the municipal engineer. The mounding analysis shall be accompanied by a cross section of the infiltration BMP and surrounding topography and the mound analysis shall extend out to the point(s) at which the mound intersects with the preexisting maximum water table elevation.

c. Project Description and Site Plan(s)

A map (or maps) at the scale of the topographical base map indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural facilities for stormwater management and sediment control, and other permanent structures. The map(s) shall also clearly show areas where curbing and roadway superelevation is existing and proposed. The map(s) shall also clearly show areas where alterations occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high ground water elevations. A written description of the site plan and justification of proposed changes in natural conditions shall also be required.

d. Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of Subsections 425-72.C through 425-72.F are being met. The focus of this plan shall be to describe how the site is being developed to meet the objective of controlling groundwater recharge, stormwater quality and stormwater quantity

problems at the source by land management and source controls whenever possible.

e. Stormwater Management Facilities Map

The following information, illustrated on a map of the same scale as the topographic base map, shall be included:

- i. Total area to be paved or built upon, proposed surface contours (indicating high and low points), land area to be occupied by the stormwater management facilities and the type of vegetation thereon, and details of the proposed plan to control and dispose of stormwater.
- ii. Details of all stormwater management facility designs, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway.

f. Calculations

- i. Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in Subsection 425-72.D of this ordinance.
- ii. When the proposed stormwater management control measures (e.g., infiltration basins) depends on the hydrologic properties of soils, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soils present at the location of the control measure.
- iii. A summary narrative of the calculations shall be provided. Said narrative shall include, but not be limited to:
 - (a) Design requirements;
 - (b) Design methodologies;
 - (c) Pre- and Post-Development peak discharge and volume results in tabular form for all design storms;
 - (d) New Jersey Groundwater Recharge Spreadsheet (NJGRS) printout;
 - (e) Post-Development TSS removal rates by drainage area;

- (f) Stage-Area-Storage Table for proposed Stormwater management facilities which will indicate basin elevation in relation to basin surface area, storage volume, peak inflows and outflows;
- (g) Time to drain Stormwater management basin (calculations may be provided in other parts of report);
- (h) Bulleted summary of conformance to the various Stormwater management requirements.

g. Maintenance and Repair Plan

The design and planning of the stormwater management facility shall meet the maintenance requirements of Subsection 425-72.J.

h. Non-Structural Point System (NSPS) Worksheet

The applicant shall complete the New Jersey Nonstructural Stormwater Management Strategies Point System (NSPS) and submit all pages for review.

If the NSPS demonstrates that sufficient nonstructural Stormwater management measures have been utilized, no further proof of compliance with the maximum extent practicable requirement shall be required. However, if the NSPS fails to demonstrate such compliance, such results shall not be used to disapprove any permit application sought by a proposed major development. Instead, the applicant will be required to demonstrate compliance through other and/or alternate means. This includes the Low Impact Development (LID) Checklist contained in Appendix A of the New Jersey Stormwater Best Management Practices Manual.

i. Waiver from Submission Requirements

The municipal official or board reviewing an application under this ordinance may, in consultation with the municipal engineer, waive submission of any of the requirements in Subsections 425-72.I.3.a through 425-72.I.3.f of this ordinance when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.