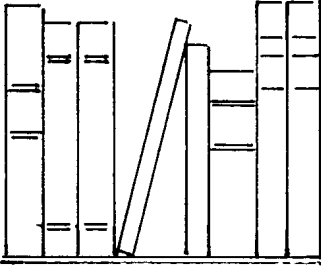


RESOURCE PAPER



ASSOCIATION OF NEW JERSEY
ENVIRONMENTAL COMMISSIONS

P.O. Box 157, Mendham, NJ 07945 • Tel: 973-539-7547 • Fax: 973-539-7713 • Website: www.anjec.org • Email: info@anjec.org

Site Plan/Subdivision Review: Environmental Analysis

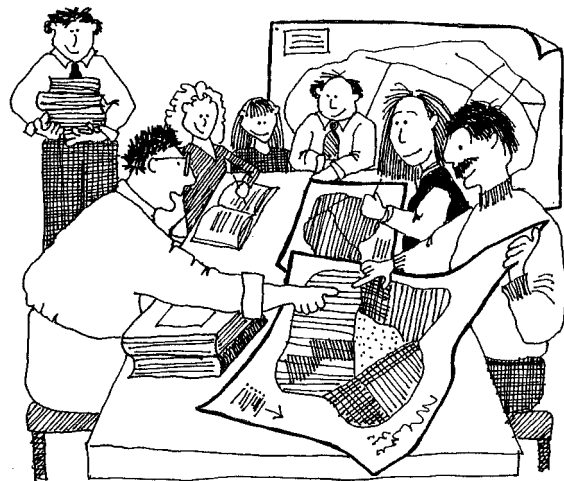
The State of New Jersey has given the primary responsibility for how its land will be used to its 566 municipalities. The Municipal Land Use Law (NJSA 40:55D-1 et seq.) sets up a three-step planning process for land use decisions: development and adoption of a master plan, adoption of land use and zoning ordinances, and site plan and subdivision review.

First, a municipal master plan guides the use of land to protect the public health and safety and to promote general welfare. Within a framework of stated goals and policies, along with maps and diagrams, the town formulates a comprehensive plan for its present and future development based upon its physical, economic and social factors. The master plan should reflect the information in the Environmental/Natural Resource Inventory (ERI/NRI), describing the town's physical features, including the environmentally sensitive areas. The MLUL requires municipal planning boards to adopt a land use element of the master plan before the governing body can zone.

Zoning is the second step in land use planning. Adopted by local legislation or ordinance, zoning designates uses allowed in different areas or zones, such as residential, commercial, industrial, or mixed use. In addition to uses, zoning regulations specify the bulk requirements for each zone, such as lot size, building height, or setbacks. Towns can also adopt additional land use ordinances, with standards for development

including protecting natural resources. If the town does not have strict environmental protection ordinances, requiring applicants to meet environmental standards will be very difficult.

The third step determines how the master plan and zoning will be carried out through site plan and subdivision review. A *Site Plan* is a plan for an individual lot. *Subdivision* is the division of a piece of land into a number of lots. The site plan will show changes to the lot including new buildings, driveways, utilities, grading and landscaping, while a subdivision plan will show new streets and utilities, but not buildings. Once lots are established through subdivision, a town has little ability to prevent development of those lots.



B. PRETZ

Legal Authority for Site Plan Review

The Municipal Land Use Law (MLUL) gives the planning board the authority to review subdivisions and site plans, except when the proposed development requires certain types of use variances. Then the zoning board of adjustment performs the review. Municipalities with populations of 15,000 or less may enact an ordinance to have the planning board exercise the powers of the zoning board of adjustment. (NJSA 40:55D-25c)

The MLUL also establishes the procedural guidelines for site plan and subdivision review. This is done in two phases: Preliminary Approval and Final Approval. Both phases have specific timeframes. (See CHART A on page 3.)

The developer receives **Preliminary Approval** after the planning or zoning board holds public hearing(s) and reviews the applicant's plans and takes comments from the municipal engineer, planner, environmental commission, other local agencies and interested citizens. The board may set requirements or conditions that the development must meet before the project receives final approval. Preliminary Approval generally establishes the specifics of the project – use, dimensions, design standards, provisions for water supply, drainage, sewerage, utilities, emergency access, stormwater management, erosion control, vehicular and pedestrian circulation and parking, landscaping, lighting, energy conservation, recycling, off-tract improvements and preservation of existing natural resources.

Once a project has received Preliminary Approval, the plan rarely has any major changes. (NJSA 40:55D-49) This approval controls how the project will be completed and gives the applicant protection from changed zoning for as long as five years.

The developer receives **Final Approval** to go ahead with the project when all conditions of Preliminary Approval have been met. (NJSA 40:55D-50)

Commissions Should Be Involved

The environmental commission has both the legal authority and the responsibility for taking part in the site plan review process.

The environmental commission enabling legislation (NJSA 40:56A-1 et seq.) states that an environmental commission has responsibility for “the protection, development or use of natural resources, including water resources, located within its territorial limits.” Furthermore, the MLUL states that “whenever the environmental commission has prepared and submitted to the planning board and the board of adjustment an index of the natural resources of the municipality, the planning board or the board of adjustment shall make available to the environmental commission an informational copy of every application for development submitted to either board.” (NJSA 40:55D-27) The index of natural resources, also known as the environmental or natural resources inventory (ERI/NRI), gives the environmental commission objective environmental information to evaluate development applications.

In addition, the MLUL and the environmental commission enabling legislation require that a member of the environmental commission be a member of the planning board. (NJSA 40:55D-23 and 40:56A-1) The environmental commission legislation gives further authority, stating that “an environmental commission shall have power to study and make recommendations concerning open space preservation, water resource management, air pollution control, solid waste management, noise control, soil and landscape protection, environmental appearance, marine resources and protection of flora and fauna.” (NJSA 40:56A-6)



B. PRETZ

CHART A

SUBDIVISION AND SITE PLAN REVIEW TIME REQUIREMENTS

Application Submissions

Application declared complete or incomplete 45 days¹

Time Periods for Planning Board Action ^{2,3}

Decision for minor subdivision, or subdivision of 10 or fewer lots 45 days

Preliminary decision for major subdivision, or subdivision of more than 10 lots 95 days

Final decision for major subdivision 45 days⁴

Decision for minor site plan or site plan of 10 or fewer acres 45 days

Preliminary decision for major site plan or site plan for more than 10 acres 95 days

Decision on bulk variance for a subdivision, site plan or conditional use 95 days

Final decision major site plan 45 days⁴

Time Periods for Zoning Board of Adjustment Action ^{2,3}

Decision on use variance 120 days

Decision on a bulk variance that does not involve
subdivision, site plan or conditional use 95 days

¹ If the municipal agency, authorized committee or designee fails to act within 45 days and the application includes all ordinance-required checklist items, the application is deemed complete and the MLUL applicable time period for action begins.

² If the board fails to act within the prescribed time period, the application is approved.

³ All times may be extended with the consent of the applicant.

⁴ After meeting the conditions of preliminary approval (does not apply if applicant seeks both preliminary and final approval at the same time).

Site Plan Review Sequence

1. Pre-application Conference should take place before applicant has completed detailed drawings. The MLUL states that a developer can request an informal review; however it's to the planning board's advantage to schedule one. At this time the applicant has not invested a lot in engineering and architectural renderings, and is more likely to make changes. The full planning board can have an informal review or a planning board subcommittee, and/or

environmental commission can meet with the applicant, review the concept plan, and make recommendations for the project to conform to the master plan, relevant laws and ordinances. (NJSA 40:55D-10.1)

2. Application Submission should include all information required by the municipal ordinance. This will include plans for building layout, vehicular access and utilities, stormwater management and also may

include an environmental impact statement for major development, and delineation of wetlands, soils, floodplains, steep slopes, location of major trees and other environmental features. (NJSA 55D-38&39) A development application consists of several maps including: existing conditions, proposed grading, utility layout, landscape/lighting plan.

3. **The site inspection** can give the board and commission the opportunity to walk the area with the applicant and his engineer, to compare the maps and reports to the lay of the land. If the planning board or zoning board does not schedule a site inspection, the environmental commission can hold one. The applicant must agree to allow the planning board or environmental commission on the property. (Sometimes a permission statement is a standard part of the development application.) If a quorum of the board or commission plans to attend the site walk, it must be advertised as an official public meeting. Public notice of planned site visits can be made at the annual organizational meeting if site visits are scheduled for a particular day of each month – for example, the second Saturday.
4. **Public Hearings** are an opportunity for the environmental commission and the public to hear the applicant’s presentation and to ask questions of the applicant’s experts, present comments and make recommendations. Except for minor subdivisions and minor site plans, the applicant and/or the board must publish a public notice of subdivision and site plan review hearings, giving the date, time, place and nature of matters to be considered. (NJSA 55D-11&12)
5. **Preliminary Approval** gives the applicant the right to develop the property as provided in the plans, and sets conditions that must be met before Final Approval will be granted. Although called “preliminary,” most decisions are set by this approval.
6. **Final Approval** is granted by majority vote after all conditions have been met or financial guarantees posted for their completion. (NJSA 40:55D-4)

Role of the Environmental Commission

The Commission should be involved as early as possible, at the pre-application conference, if feasible. Commissions who recommend changes early in the site plan review process have a better chance that the developer and the board will accept those recommendations. Early changes are less costly for developers in terms of design alterations and application process time. In addition, the board knows up front what the environmental concerns are and why the commission is recommending certain modifications.

In each step of the process before the board grants Preliminary Approval, be prepared to ask questions, request more information, make comments, and suggest alternatives. When the application involves specific environmental concerns, invite the developer to make a presentation at a commission meeting so that members can see plans and ask questions.

REVIEW PROCEDURE

In reviewing an application, the commission can use the **Checklist** on page 11 – which can be amended to fit local conditions and ordinance requirements.

Steps for environmental commission to take when reviewing a development plan:

1. Review present land uses on and off site.
2. Review existing environmental features, critical areas and the like. Compare with Environmental/Natural Resource Inventory (ERI/NRI) data, zoning and design requirements, the municipal master plan, county plans, and other databases, such as the NJDEP’s i-MapNJ, available at www.nj.gov/dep. (See also Sources of Environmental Information on page 12.)
3. Evaluate the proposed project’s impact on existing environmental resources.
4. Determine whether the town’s water supply, sewer service and road infrastructure are adequate to serve the project.
5. Evaluate the project’s use of nonstructural techniques to manage stormwater, required by DEP standards.

6. Review the applicant's environmental impact statement (EIS), if submitted. Evaluate for data given, data omitted. The EIS should include site-specific data; for example, soil borings as opposed to generalized information found in soil surveys.

7. Make a site inspection with all parties involved in review, including applicant, to compare the maps and reports to the existing conditions. (See **Guidelines for Site Inspection Visits** on page 9.)

8. Review site preparation and construction phases of project.

9. Prepare report in the format of Findings of Fact and Recommendations (See sample

Report Format, on page 10.) and send to the planning board early in the review process and well in advance of the board meeting.

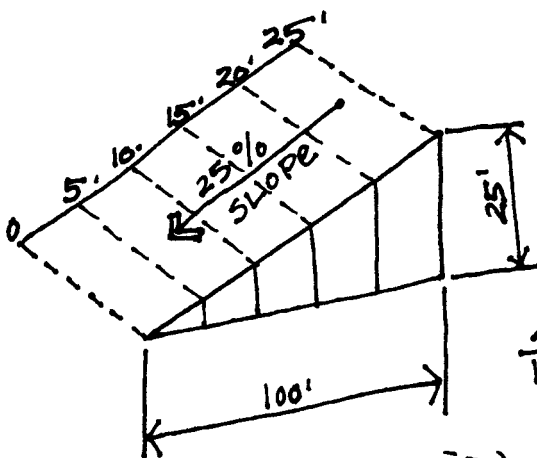
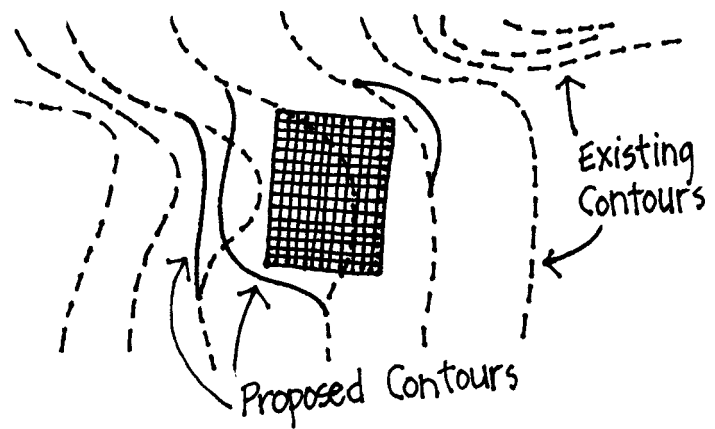
10. Present the environmental commission's Findings of Fact and Recommendations report orally at a planning board or board of adjustment public hearing. This makes the report a part of the record and gives it official status. It also gives the board a chance to ask questions to understand the environmental commission's recommendations.

11. Continue to follow application. Be prepared to make additional recommendations based on project modifications. Conditions set as part of the board's Resolution of Approval can be critical to improving a project.

Reading the Maps

TOPOGRAPHY

Dotted lines show the existing contours. The closer the lines are together the steeper the slopes. Solid lines show the proposed contours after grading.



DEGREE OF SLOPE

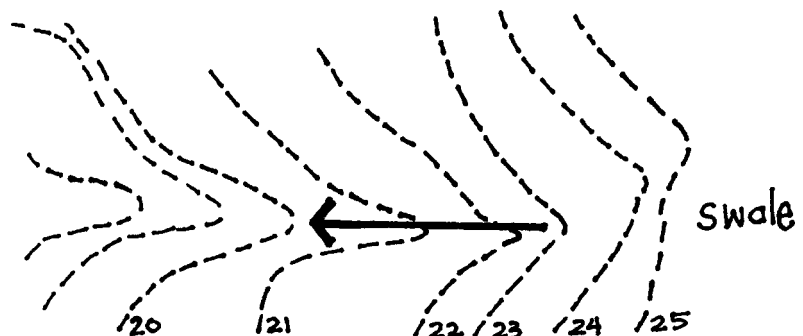
A slope's steepness is expressed as a percentage – the higher the percentage, the steeper the slope.

The percentage is measured by dividing the vertical distance (change in elevation) by a given horizontal distance.

$$\frac{25'}{100'} = 25\% \text{ SLOPE}$$

SWALE

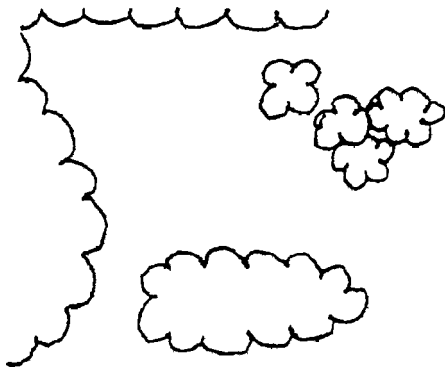
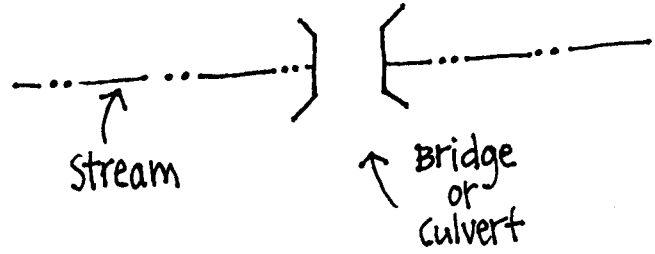
A swale is shown on a map when contours with a lower elevation run sharply towards contours with higher elevations. Swales provide important drainage functions.



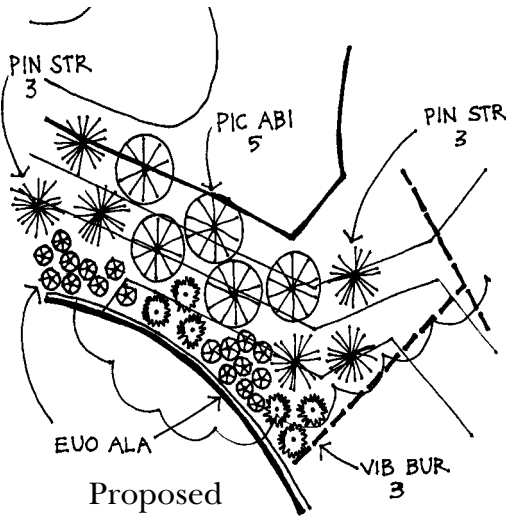
Reading the Maps *Continued*

STREAM

A stream is represented by dotted lines interspersed with solid lines. If the stream has a delineated 100-year floodplain it should be shown on the map. A culvert or bridge is shown by two parallel lines interrupting the stream or swale.



Before Development



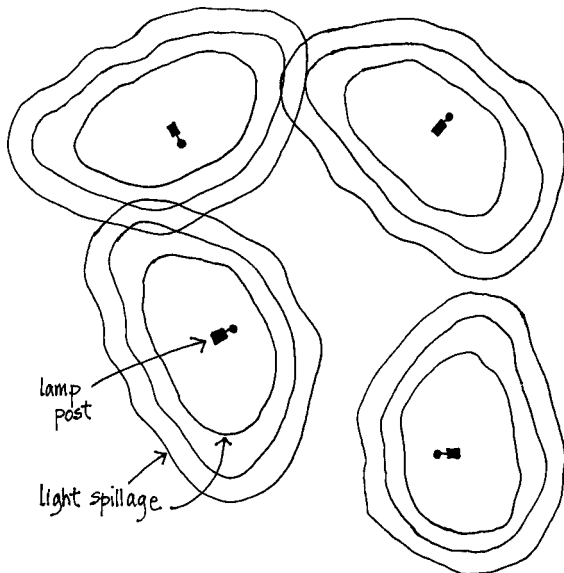
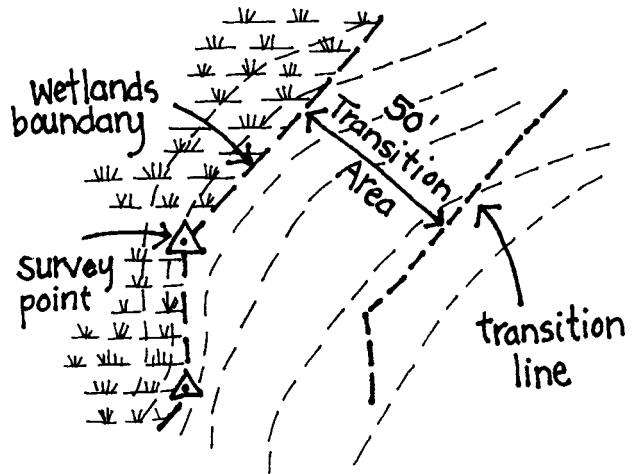
Proposed

VEGETATION

Existing vegetation as opposed to proposed vegetation, which is shown by symbols explained by a key elsewhere on the site plan.

WETLANDS

A wetlands boundary or delineation is shown by a dotted line and frequently has symbols identifying particular points of a survey. The transition area, or wetlands buffer, should also be shown.



LIGHTING

Irregular, concentric circles show the extent of illumination on the ground. Safety considerations require adequate lighting but over-lighting should be avoided.

Evaluating Environmental Impacts

Evaluate the proposed use and development for its compatibility with adjacent activities and land uses. Think of its impact now and in the future – 10, 20 or even 50 years from now. Compare the layout to existing land-forms and topography to see how the proposed development affects the site's desirable natural features and resources. What is the relationship of the project site to its surroundings? Is the proposed development in harmony with adjacent activities and land uses? How does the proposed action impact the surroundings? What adverse impacts cannot be avoided if the proposed project is built? What are the alternatives to the proposed action?

Identify critical resources and suggest ways that they can be protected and/or preserved:

SOILS

- Are the soil conditions suitable for the proposed development? Soil borings submitted by the applicant will provide more accurate site information than soil surveys.
- Is the Soil Erosion and Sediment Control Plan adequate, enforceable?

SLOPES AND GRADING

- Are the existing slopes shown with steep slopes clearly marked?
- Does the development avoid steep slopes? Significantly altering steep slopes might cause increased erosion and slope instability.
- Is there an adequate, enforceable grading plan?
- Does the proposed layout work with the site topography or against it? Grading should be kept to the minimum, because changes in grading will affect the direction, velocity and quality of stormwater runoff. Extensive grading means removal of more trees and vegetation, and may require soil importation or removal.

- What mitigation measures will be taken during construction to reduce erosion, save vegetation?

HYDROLOGY

- What is the current *water table* level? Will the proposed development adversely affect the water table? Will basements, grading, detention/retention ponds, or excavations go below the water table?
- If the site is in an area of high *groundwater recharge*, how will the recharge area be maintained? What measures will be taken to keep recharge free of contaminants?
- Does the plan show the surface water bodies and any state-required buffers? Is this site in a watershed for a surface water body that supplies *drinking water*? If so, what special buffering and other measures will be taken to maintain good water quality?
- Are *wetlands* delineated on the plan? If not, does the Environmental/Natural Resource Inventory (ERI/NRI), state wetlands maps or the site walk indicate that wetlands might be present? If so, the developer should be required to get a Letter of Interpretation (LOI) from the NJDEP. If wetlands are present, has the developer applied for/received a permit?

STORMWATER CONTROL

Is stormwater adequately addressed? Does the plan meet the requirements of the state and municipal stormwater regulations? Have natural controls – swales, channels, sheet flow over grass – been used whenever possible? Are the stormwater detention features adequate to manage rate and volume of the water and protect its quality? Have off-site impacts of stormwater been considered?



The NJDEP's manual, *Best Management Practices (BMPs) for Control of Nonpoint Source Pollution from Stormwater* (available at www.nj.gov/dep/stormwater/bmp_manual2.htm) has information on controlling the quantity and quality of stormwater during development. It has several recommendations to deal with stormwater during construction:

- Use low-impact development to minimize changes in hydrology from a site's predevelopment state;
- Maintain water flow rates, preferably by using non-structural processes, such as vegetation and landscaping to slow the flow of runoff and to increase infiltration;
- Minimize site disturbance and grading so natural drainage areas are not altered, or overland flow of water concentrated;
- Maintain recharge through measures such as landscaping and directing roof water to seepage pits;
- Minimize impervious area by requiring the minimum width necessary for streets and sidewalks and having porous pavement or grass pavers for driveways and parking areas;
- Disconnect impervious areas;
- Increase the amount of time the stormwater has to infiltrate into the ground by increasing surface roughness, reducing slopes, or having vegetated conveyances such as channels or swales.

BUFFERS

Are setbacks and buffers adequate to protect critical areas, watercourses, adjacent lots, and streets? Buffers should be free of buildings and pavement and be planted with groundcover, bushes or trees to protect watercourses. Evergreens in buffers give adjacent lots more protection. If the town has Category One streams, NJDEP requires 300-foot buffers (Additional information available at www.state.nj.us/dep/wms/bwqsa/BUFFER_Fact_Sheet_2.pdf)

VEGETATION, TREES and LANDSCAPING

Is there a separate landscape plan, prepared by a landscape architect? Existing vegetation should be preserved where possible. Specimen trees or groves should be marked on the site plan. Are existing trees protected by having snow fencing at the drip line so roots and trunk are not damaged by construction equipment and grading?

The town ordinance should require new landscaping to meet standards for aesthetics, stormwater management and erosion control. Some questions to ask:

- Are the proposed plantings suitable for the locations where they are planted? For example, can the plant species next to roadways withstand increased levels of heat in the summer and salt in the winter? Will the vegetation quickly outgrow the locations where it is planted?
- Are native species being used? If not, suggest a native substitute for the proposed planting. The state stormwater regulations strongly recommend use of native plant material. A list is available in NJDEP's manual, *Best Management Practices (BMPs) for Control of Nonpoint Source Pollution from Stormwater* available at www.state.nj.us/dep/stormwater/bmp_manual2.htm
- Strongly recommend that invasive species not be planted. Examples include Japanese barberry, Norway maple, autumn olive.
- Have lawn areas been minimized and groundcover or shrubs given as an alternate? Grass has a much higher runoff rate than ground-cover, shrubs or mulch.
- Have vegetated filters and buffers been provided to help manage stormwater?

OPEN SPACE

Is open space provided as part of the development? Is it functional in terms of location, size, and design? Are there adequate maintenance provisions? For example, if it is commonly held open space in a subdivision, will a homeowners' association maintain the area? Is there a conservation easement on the open space so that it will be permanently preserved?

TRAFFIC

Does the street and pedestrian pattern design meet projected traffic demand? Are there provisions for pedestrian walkways and bikeways? An effort should be made to link communities, not just have a sidewalk to nowhere. For example, get rights of way designated to allow linkage between cul de sacs, or sidewalks between two strip malls.

WASTEWATER DISPOSAL

Is there adequate sewer capacity? Is the project in an approved sewer service area? If septic systems are being proposed, has the Board of Health reviewed the application?



B. PRETZ

Guidelines for Site Inspection Visits

Before preparing comments and recommendations on subdivision and site plan applications, environmental commissions should walk the site either with the planning board or with permission of the owner. The commission should make a careful, critical scrutiny of the area.

The site inspection visit should occur early in the application process. Many planning boards make site inspections part of the process. Often representatives from the developer, the board attorney and engineering consultant are also present. Becoming part of this inspection group allows the environmental commission to make all parties aware of its concerns early in the application process.

No matter how much familiarity you may have with an area, it is important to view the area in the context of the developer's plans for changing it. As you walk the site and see its features, consider and assess the impact that the proposed development will have on the site and its region. Also, a site walk will give an important opportunity to field-check all maps and site plans for critical environmental areas. You can determine if the site has evidence of wetlands, floodplains and steep slopes that should receive particular preservation attention. Remember that all maps, even those in the Environmental/Natural Resource Inventory (ERI/NRI) or from the NJDEP, may not be accurate on a site-specific level.

If a majority of the commission attends a site inspection, unless going with a publicly-noticed planning board inspection, it becomes an official commission meeting that must be announced according to the standards of the Open Public Meetings Act or "Sunshine Law." (NJSA 10:4-6 et seq.) Some commissions appoint a rotating three-member Site Inspection Committee; others give the planning board liaison the responsibility for inspecting, reviewing and reporting to the commission. A site inspection is generally not a legal proceeding; no testimony is given or taken. Its purpose is to provide opportunity for on site observation, and to ask questions if the applicant's representatives are present.

PREPARING FOR THE SITE INSPECTION VISIT

A. Obtain the most current copy of site/subdivision plan. Use colored markers/pencils to highlight important features on site plan such as surface water bodies, wetlands, slopes, stormwater runoff patterns, vegetation and vegetative patterns, known rare species habitat.

B. Request permission of the property owner, if an independent commission visit is scheduled. Invite/request project engineer and applicant to be present.

1. Request the staking or flagging of proposed structures, center line of all roads, and wetlands, if present.
2. Invite/request municipal board engineer, planning consultant to attend.

C. Publish 48 hour notice of commission meeting/site inspection, if necessary.

MAKING THE SITE INSPECTION VISIT

A. Take marked site/subdivision plans.

B. Invite applicant to attend and answer questions.

C. Compare site/subdivision plan proposals with environmental features of site. Does the map of existing conditions accurately reflect them?

1. Mention and note inconsistencies
2. Mention and note questions, concerns and requests for further information
3. Suggest possible changes to mitigate environmental damage and to preserve and protect special features and areas during and after construction.

D. Be an advocate for the existing environment. During the site walk, consider:

1. Is the proposed development in harmony with adjacent activities and land uses?
2. Does the proposed layout recognize and preserve the site's desirable natural features?
3. Are there significant trees or other vegetation? Is existing vegetation preserved where possible?
4. Do the soils, vegetation or standing water show evidence of wetlands? If so, has the applicant gotten a Letter of Interpretation (LOI) from NJDEP?
5. If there are steep slopes, does the proposed layout work with the site topography or against it?
6. Are the soil conditions suitable for the proposed development?
7. Are there streams, ponds or other surface water bodies? Does the development give adequate setbacks and buffers from the watercourses?

D. Note off-site features that impact the site or that the development might impact.

E. Note what is proposed and how it appears to impact the existing landscape.

1. Short-term: during construction
2. Long-term: post-construction

F. Note questions and concerns on site plan.

AFTER THE SITE INSPECTION VISIT

A. Review notes/minutes with full environmental commission.

1. Focus on concerns and agreements made by the applicant.
2. Decide if further information is needed.
3. Decide what comments and recommendations to include in commission report.

B. If warranted, invite applicant to meet with commission to discuss concerns, questions, requests, suggestions and recommendations.

C. Prepare the commission's Finding of Fact and Recommendations report. (See **Report Format** on page 10.)



Environmental Commission Reports

Once the commission has studied the plan, done its research and taken a site walk, it is time to do a formal report for the board.

Be prepared to compromise – give on the little things, stand your ground on the big ones. Commend applicant for addressing environmental concerns and/or agreeing to mitigate, preserve, protect, modify or change, so that there is less damage and adverse impact to the existing environment.

Submit the report to all members of the planning or zoning board and secretary. Be sure details have been discussed with the commission liaison. Be prepared to read the report into the board meeting record, to answer questions and to defend positions taken.

Report Format

FINDINGS OF FACT (include commission's sources of information, i.e. the commission site inspection report, relevant meeting dates, plans and materials reviewed)

- Description of application or proposed action
- Current site description
- Current surrounding local conditions
- Current regional conditions
- Conditions on and off site during construction
- Conditions following occupancy
- Applicable ordinances
- Permits required from other agencies.

FINDINGS OF IMPACT BASED ON FACTS PRESENTED (note sources of expertise)

- Local impacts – positive and negative
- Regional impacts – positive and negative

RECOMMENDATIONS

Based on the Findings of Fact and Impact, the commission can make recommendations to mitigate the project's impact. Note if the site plan shows inconsistencies with the actual site or if the commission needs additional information. Also note where the application is not in compliance with applicable ordinances.

Suggest:

- Local and regional conditions to be met to mitigate impacts during construction and over the life of project
- Permits to be in hand before action starts

The commission can conclude that the project should be approved, rejected, approved with

CHART B

ENVIRONMENTAL COMMISSION SITE PLAN / SUBDIVISION CHECKLIST

1. Project Information

- A. Project Name: _____
- B. Applicant Name: _____
- C. Street Location: _____ Tax block and lot _____
- D. Date when application deemed complete: _____
- E. Project Description (single family, townhouse, commercial; acreage; size of structure, nature and use, etc.) _____

2. Information Received:

- A. Application
- B. Plans
- C. Variance Request(s)
Describe _____
- D. Environmental Impact Statement
Yes ___ No ___ Waiver requested ___ N/A ___
- E. Soil erosion & sediment control plans
Yes ___ No ___ Waiver requested ___ N/A ___
- F. Stormwater calculations
Yes ___ No ___ Waiver requested ___ N/A ___
- G. Septic; wastewater management plans
Yes ___ No ___ Waiver requested ___ N/A ___
- H. State permits: wetlands, flood hazard area; waste-water management amendment, sewer extension; coastal area facility review
Applied for ___ Received ___

3. Application deficiencies, inadequate items, discrepancies

4. Existing conditions: environmentally sensitive features

- A. Steep slopes (over 15%) Yes ___ No ___
- B. Wooded areas Yes ___ No ___
- C. Surface water Yes ___ No ___
- D. Aquifer recharge areas Yes ___ No ___
- E. Wellhead protection areas Yes ___ No ___
- F. Floodplains Yes ___ No ___
- G. Wetlands Yes ___ No ___
- H. Limestone areas Yes ___ No ___
- I. Drainage pattern Yes ___ No ___
- J. Significant trees or other vegetation Yes ___ No ___
- K. Types of habitat Yes ___ No ___
- L. Dunes Yes ___ No ___

5. Impacts of proposed development on the existing conditions during and after construction

Have the requirements of NJ's regulations and the town's environmental ordinances been met?

- A. Grading
 - 1. Change of slope
 - 2. Erosion, sedimentation and surface water
 - 3. Source of fills
 - 4. Preservation of topsoil
- B. Stormwater management (roads, buildings and other)
 - 1. Relationship to municipal requirements
 - 2. Impervious cover amounts
 - 3. Stream buffer, if applicable
 - 4. Easement on non-structural element
- C. Flood Hazard Area
- D. Wetlands fill or disturbance
- E. Buffering
 - 1. Proposed or needed
 - 2. Vegetation in buffers
- F. Landscaping/limits of disturbed areas
 - 1. Preservation of significant trees or other landscaping
 - 2. Appropriateness of new species; natives or invasives?
- G. Habitat fragmentation for plants and wildlife
- H. Hazardous substances
 - 1. Storage
 - 2. Generation
 - 3. Existing underground storage tanks
- I. Air, light or noise pollution
- J. Off-site secondary impacts:
 - 1. Surface runoff and flooding
 - 2. Non-point source pollution
 - 3. Sedimentation and erosion
 - 4. Water supply quality and quantity
 - 5. Traffic congestion
 - 6. Air pollution
 - 7. Habitat fragmentation

Consistency with existing plans

- A. Municipal Master Plan
- B. Conservation Element in Master Plan
- C. County Master Plan
- D. Other regional plans
- E. State Development and Redevelopment Plan

conditions, or redesigned (include rationale and expert testimony leading to decision).

Caution: Some planning board attorneys have ruled that if the commission reaches a conclusion, the common member may not be allowed to vote on the application. Not all attorneys agree with this opinion so check to see what your local policy is.

Sources of Information

Your town's **Environmental (or Natural) Resource Inventory and Master Plan.**

NJDEP's **Info Finder** at www.nj.gov/dep/infofinder/index.html.

NJDEP's **Environmental Map Layers** at www.nj.gov/dep/gis/newmapping.htm contain over 40 GIS (Geographic Information System) layers, covering open space, regulatory boundaries, sensitive lands, watersheds, surface water quality standards, Category One waters, groundwater contamination areas, aquifers, wellhead protection areas, landscape layers, legislative and congressional districts. On NJDEP's website, www.nj.gov/dep, visitors can

use I-Map (interactive mapping) to access, display and interact with GIS data through their web browsers. CDs of NJDEP GIS maps are available from General Services Maps and Publications at 609-777-1038.

NJDEP's **Natural Heritage Program** offers a comprehensive inventory of distribution, biology, status, and preservation needs of rare plant and animal species at www.nj.gov/dep/parksandforests/natural/heritage or 609-984-1339.

Federal Emergency Management Agency (FEMA) maps for 100-year flood/flood hazard elevation lines at www.fema.gov/ and search for Flood Maps, or call 800-358-9616, or municipal engineer.

The Natural Resources Conservation Service (NRCS) has an extensive on-line soils data base (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) and can supply digital data relating to soils.

Applicant's **Environmental Impact Statement (EIS)** if required.

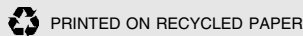
The **ANJEC RESOURCE CENTER** offers the following services to all citizens:

- reference collection of more than 7,000 books, pamphlets, documents and government publications ranging from academic texts to Environmental/Natural Resource Inventories;
- more than 1,200 material files covering topics from acid rain to zoning;
- extensive materials on state and federal laws including current legislation and regulations;
- extensive file of municipal and model ordinances on topics such as light and noise pollution, critical areas protection and stormwater management;
- response and referral for information requests and questions on local, state and national environmental issues, problems and projects.

This publication was made possible by a grant from The William Penn Foundation.

ANJEC is a statewide non-profit organization that informs and assists environmental commissioners and interested citizens in preserving and protecting New Jersey's environment.

For further information, contact ANJEC at
P.O. Box 157, Mendham, NJ 07945, Tel. 973-539-7547, Fax 973-539-7713



MIMI UPMEYER RESOURCE PAPER COLLECTION



ANJEC dedicates its collection of Resource Papers to Mimi Upmeyer, who worked for ANJEC for 10 years and later served as a board trustee. As our State Plan project director, she worked with environmental commissioners and local officials in towns across New Jersey and provided them with information and contacts to help implement good land use planning and zoning. To help local officials deal with these issues, she conceived the idea for ANJEC's Resource Papers - and wrote the first three. Packed with concise, practical information on specific topics for local environmental protection, ANJEC's ever expanding stock of Resource Papers has become a standard element of our educational program. For a list of all our

Resource Papers, contact ANJEC at 973-539-7547 or visit the Publications page on www.anjec.org.