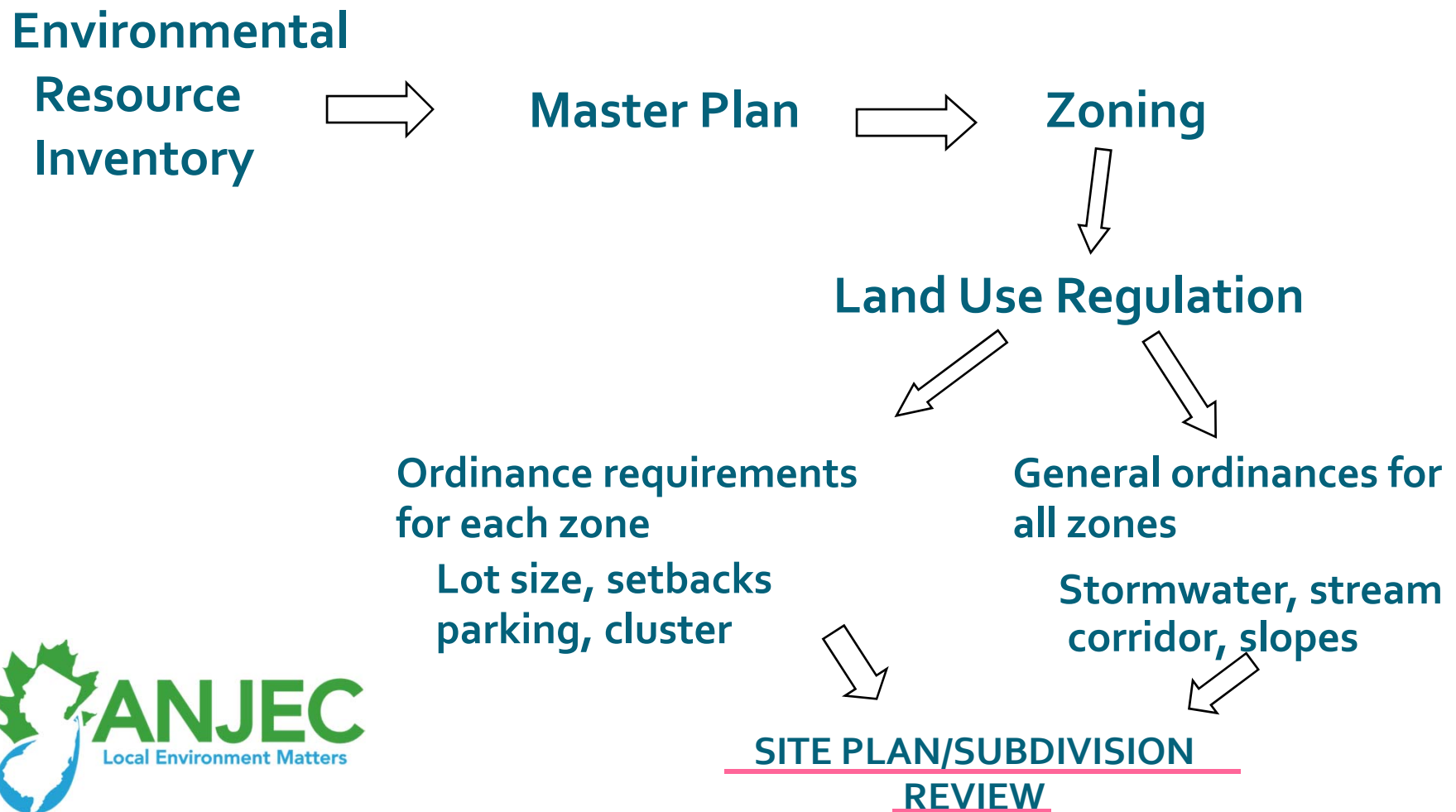


# Site Plan and Subdivision Review



# Municipal Land Use Framework



# Contents of Site Plan Ordinance

Municipal Land Use Law (40:55D-41)

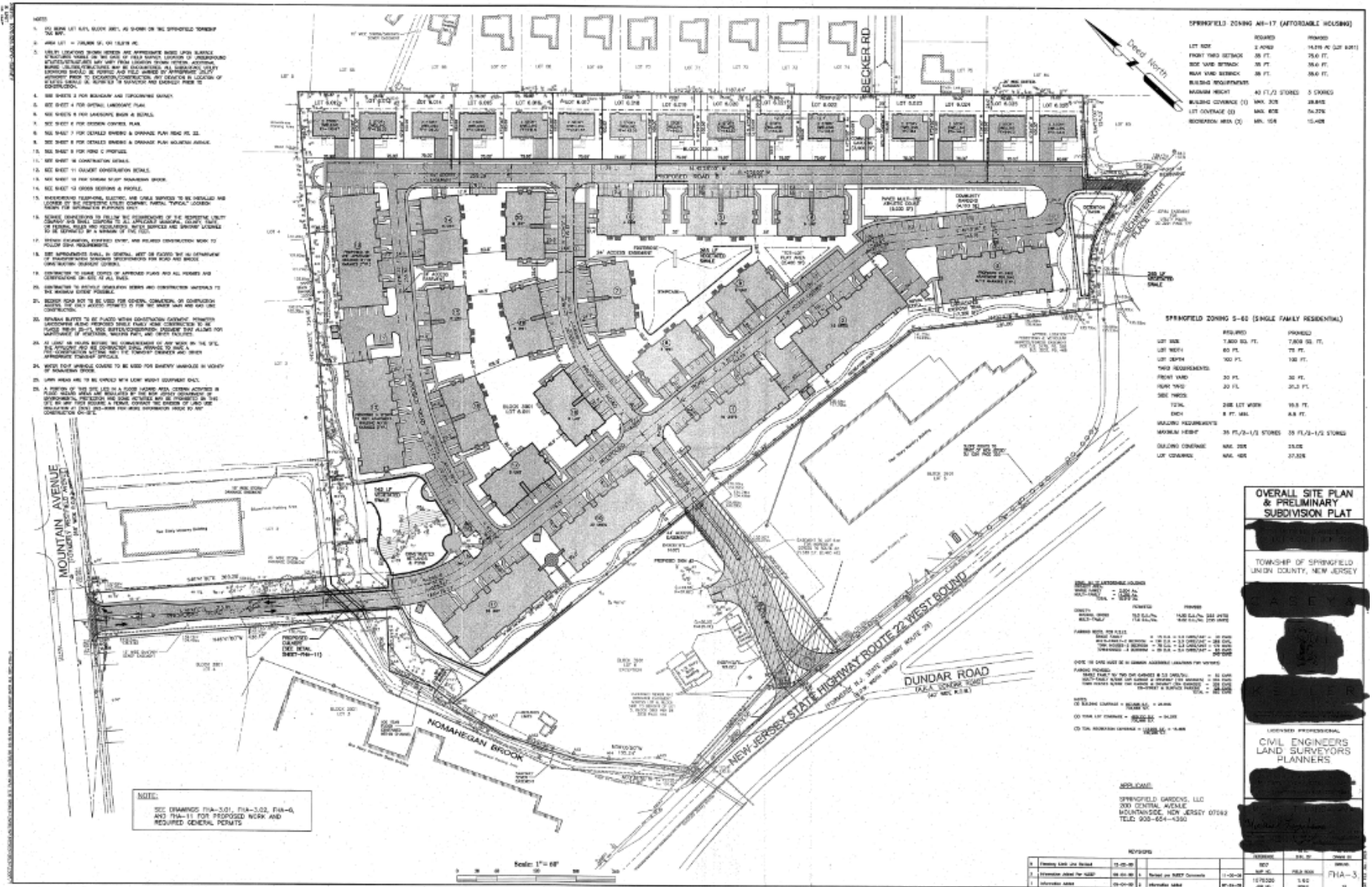
- Preservation of existing natural resources on site
- Safe and efficient vehicular and pedestrian circulation, parking & loading
- Exterior lighting
- Conservation of energy & use of renewable energy resources
- Recycling of designated materials



# Site Plan vs. Subdivision

**Site Plan** - a development plan for an individual lot or tract

**Subdivision** - the division of a piece of land into two or more lots



# Site Plan







# Benefits of Commission's Review

- Protects water quality and habitat
- Lessens impacts on natural resources – trees, slopes, streams, groundwater, open space
- Ensures provisions for recycling and solid waste disposal
- Avoids future costs associated with poor development – uncontrolled stormwater, poor grading, excessive lighting



# Why Perform a Site Plan Review?



Photo Source: Parsippany Focus



# Development impacts water!

- **Stormwater runoff**
  - Quality
  - Volume
  - Quantity
- **Pattern**
- **Drainage**
- **Flooding potential**



# Evaluating Impacts On-Site

## **Development Activities**

---

- Grading
- Landscaping
- Road Building
- Utility Installation

## **Resource Impacts**

---

- Soil Disturbance
- Loss of wetlands
- Runoff - Erosion
- Habitat Loss
- Vegetation Loss

## Evaluating Impacts: Know what is there now

- Existing conditions and critical resources from NRI/ERI
- Geology: Rock type, depth to bedrock
- Soils Suitability
- Water: surface water, wetlands, groundwater, water consumption, water system adequacy, fire protection
- Site contamination potential/Land use history
- Wildlife habitat
- Neighborhood character and setting



# Evaluating Impacts - Off-Site



- Flooding
- Traffic
- Open space loss or degradation
- Loss of farmland, vistas
- Air quality
- Non-point source pollution

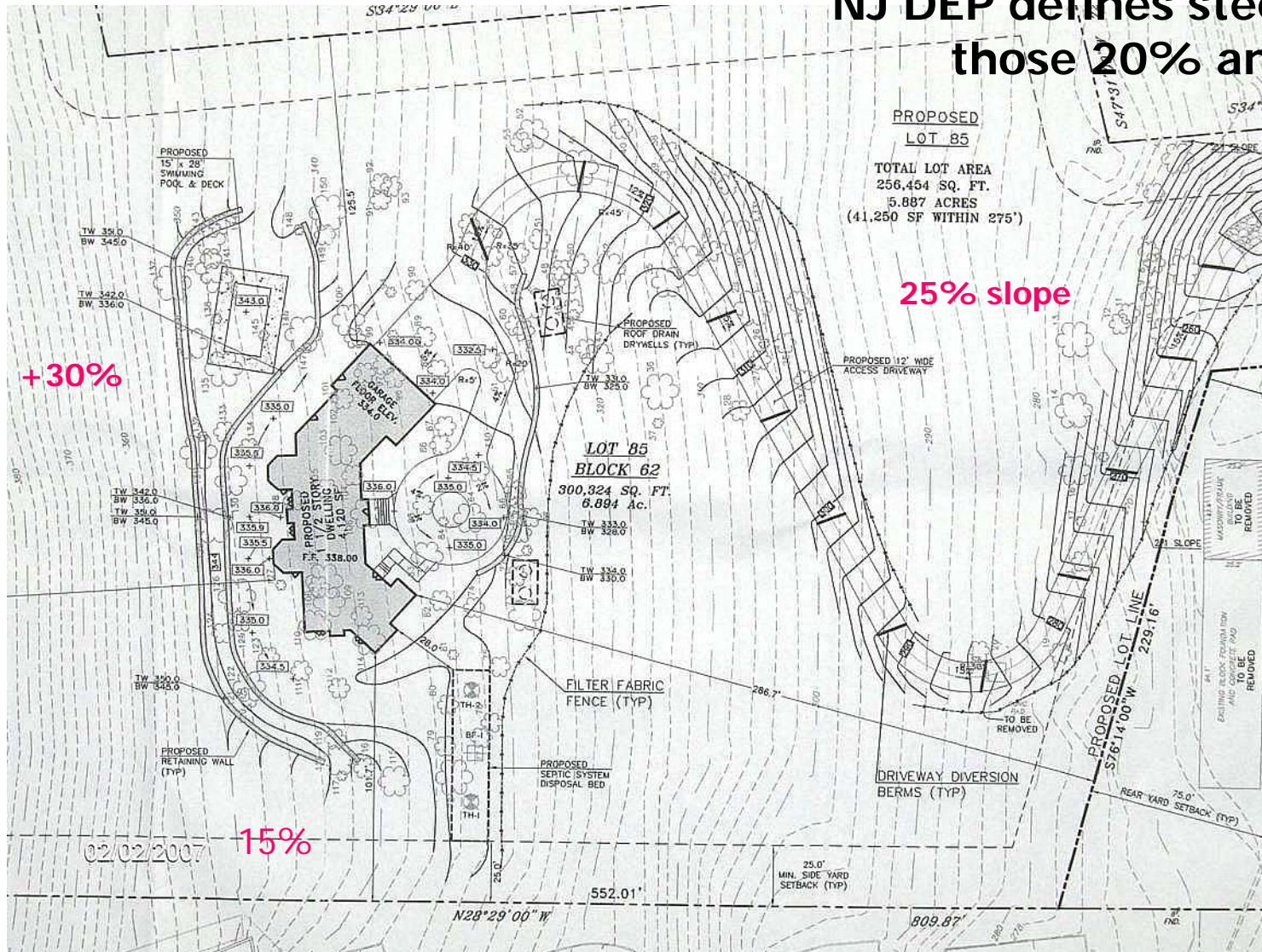
# **General Site Plan /Subdivision Review Process**

- **Pre-Application or Informal Meeting (not for variance applications)**
- **Application submission (including EIS, checklist, and wetlands delineation LOI)**
- **Application completeness determination**
- **Preliminary approval**
- **Final approval**



# Slopes and Grading

## NJ DEP defines steep slopes as those 20% and over

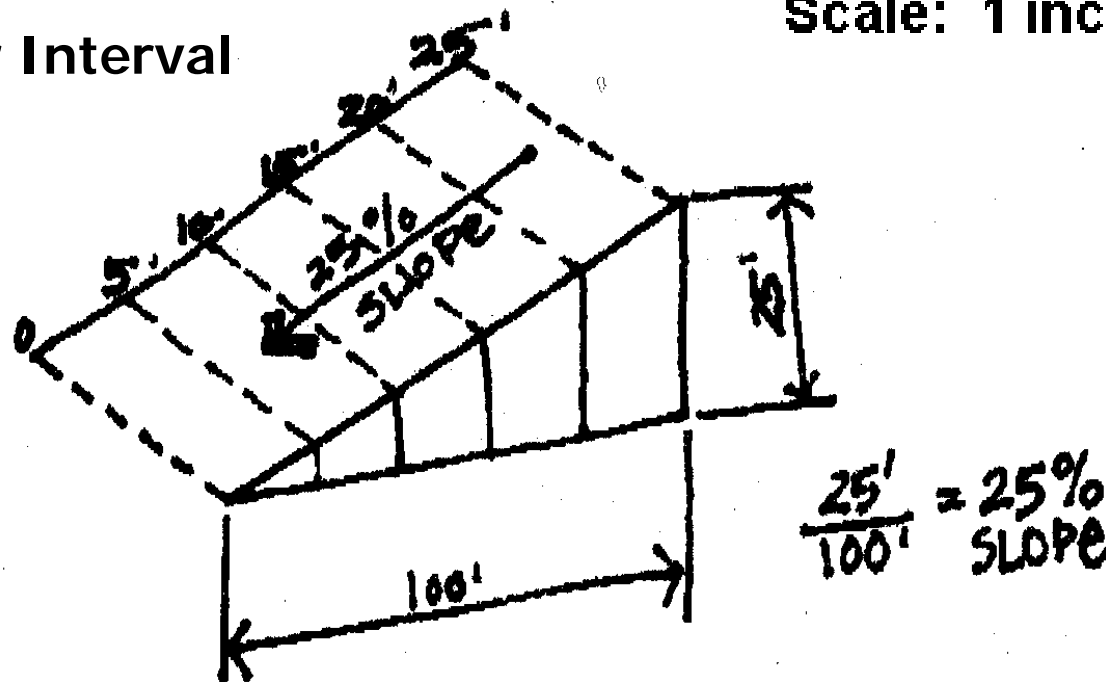




# Measuring Slope

Contour Interval

Scale: 1 inch = 30 feet

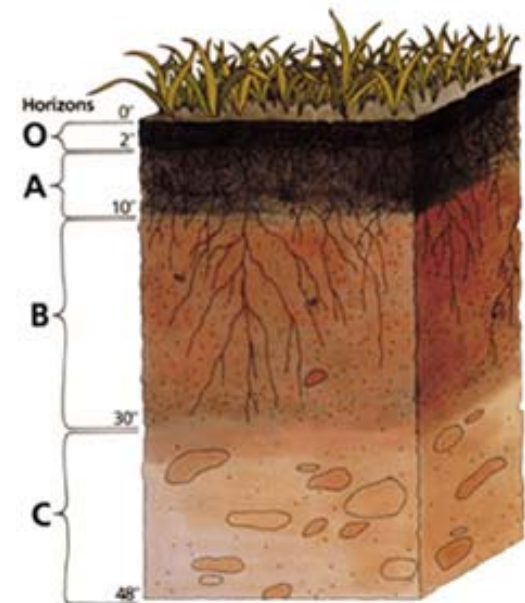


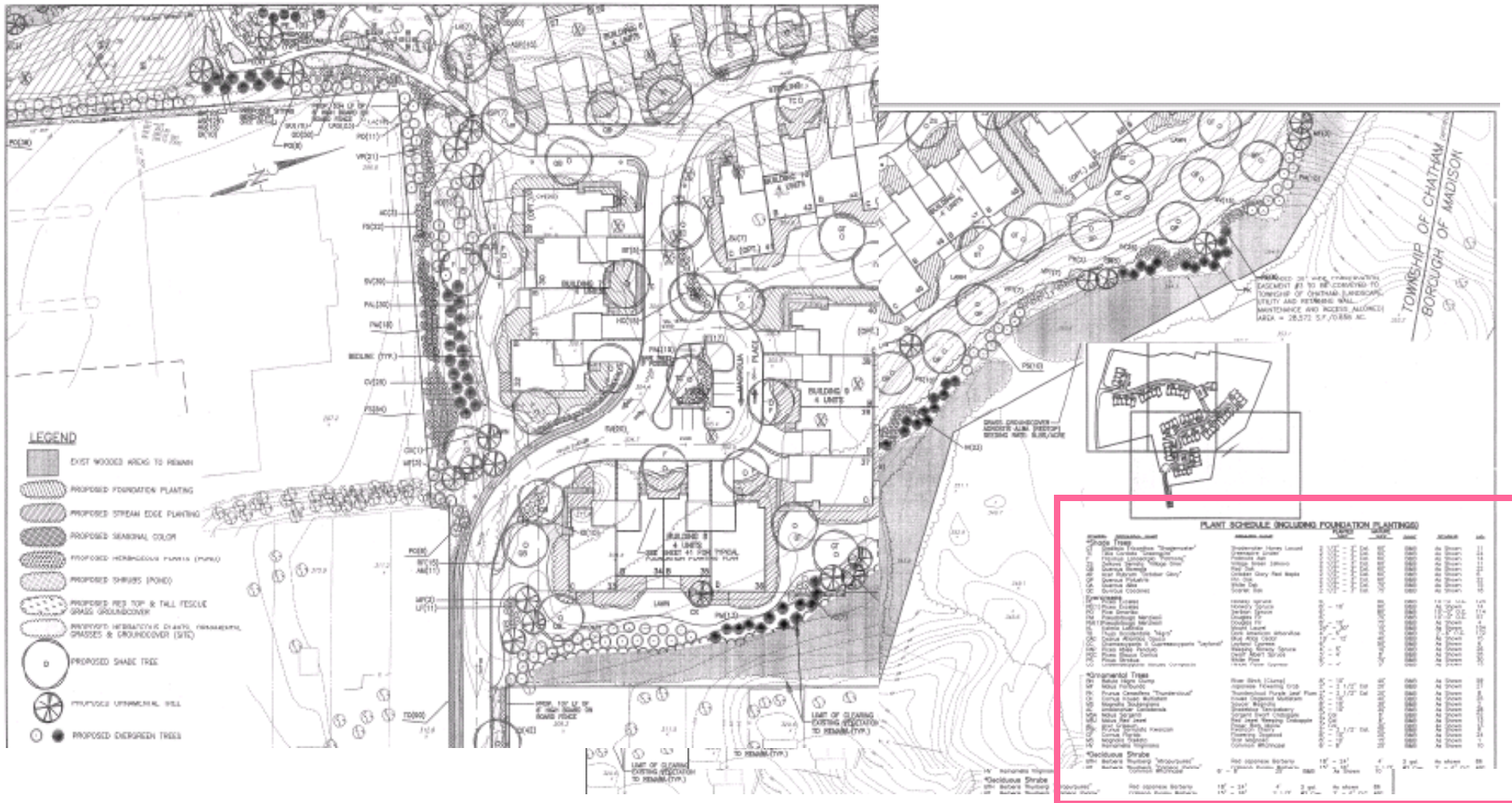
NJ DEP defines steep slopes as those  
20% and over



# SOILS

- Do they drain well?
- Are they sandy or more like clay?
- Are they lying over high water table?
- Are they on steep slopes?
- What is the depth to bedrock?
- What is the erosion potential?





# Landscape Plan –

## 56 townhouse units on 30 acres

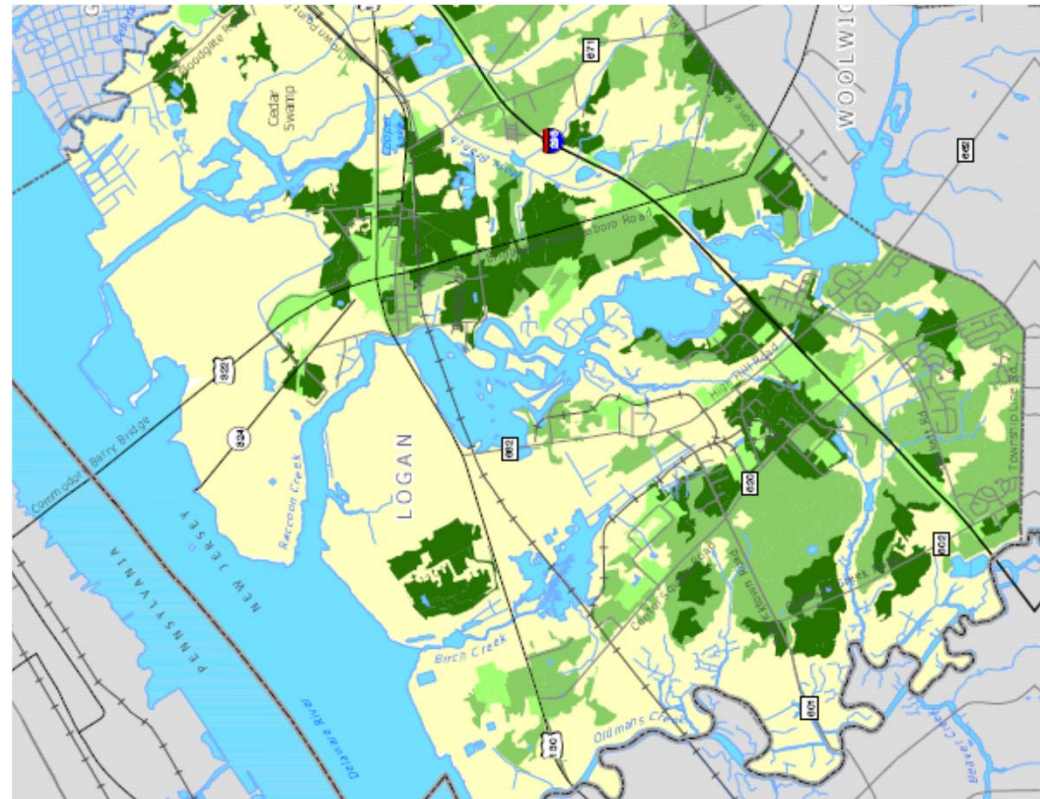
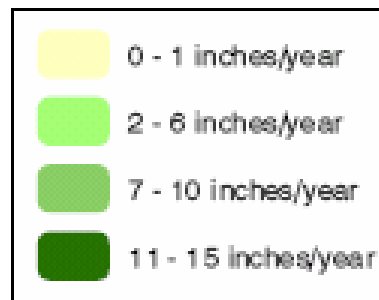
## PLANT SCHEDULE (INCLUDING FOUNDATION PLANTINGS)

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANTED SIZE	NATURE SIZE	ROOT	SPACING	NO.
<b>*Shade Trees</b>							
T	Gleditsia Tricanthos "Shademaster"	Shademaster Honey Locust	1 1/2" - 3"	Cell	60'	B&B	As Shown 11
C	Tilia Cordata "Greenspire"	Greenspire Linden	1 1/2" - 3"	Cell	60'	B&B	As Shown 24
	Fraxinus Lanceolata "Palmore"	Palmore Ash	1 1/2" - 3"	Cell	60'	B&B	As Shown 14
S	Zelkova Serrata "Village Gree"	Village Green Zelkova	1 1/2" - 3"	Cell	60'	B&B	As Shown 11
QB	Quercus Borealis	Red Oak	1 1/2" - 3"	Cell	60'	B&B	As Shown 22
AR	Acer Rubrum "October Glory"	October Glory Red Maple	1 1/2" - 3"	Cell	60'	B&B	As Shown 6
QP	Quercus Palustris	Pin Oak	1 1/2" - 3"	Cell	60'	B&B	As Shown 22
QA	Quercus Alba	White Oak	1 1/2" - 3"	Cell	75'	B&B	As Shown 15
QC	Quercus Coccinea	Scarlet Oak	1 1/2" - 3"	Cell	75'	B&B	As Shown 16
<b>Evergreens</b>							
PE	Picea Excelso	Norway Spruce	8' - 10'		60'	B&B	10'-0" O.C. 124
PE(1)	Picea Excelso	Norway Spruce	8' - 10'		60'	B&B	As Shown 14
PO	Picea Omorika	Serbian Spruce	8' - 10'		60'	B&B	10'-0" O.C. 114
PM	Pseudotsuga Menziesii	Douglas Fir	8' - 10'		75'	B&B	10'-0" O.C. 57
PM(1)	Pseudotsuga Menziesii	Douglas Fir	8' - 10'		75'	B&B	As Shown 4
KL	Kalmia Latifolia	Mount Laurel	24" - 30"		15'	B&B	As Shown 104
TO	Thuja Occidentalis "Nigra"	Dark American Arborvitae	4' - 5'		15'	B&B	2'-6" O.C. 172
CAG	Cedrus Atlantica Gaucha	Blue Atlas Cedar	10' - 12'		40'	B&B	As Shown 15
CC	Chamaecyparis X Cupressocyparis "Leylandi"	Leyland Cypress	6' - 8'		50'	B&B	As Shown 6
PAP	Picea Abies Pendula	Weeping Norway Spruce	4' - 5'		10'	B&B	As Shown 26
PGC	Picea Glauca Conica	Dwarf Albert Spruce	3' - 4'		8'	B&B	As Shown 26
PS	Pinus Strobus	White Pine	6' - 8'		75'	B&B	As Shown 30
CG	Chamaecyparis Obtusa Compacta	Hinoki False Cypress	3' - 4'		6'	B&B	As Shown 13
<b>*Ornamental Trees</b>							
BN	Betula Nigra Clump	River Birch (Clump)	8' - 10'		40'	B&B	As Shown 58
MF	Malus Floribunda	Japanese Flowering Crab	2' - 2 1/2"	Cell	20'	B&B	As Shown 27
PK	Prunus Cerasifera "Thundercloud"	Thundercloud Purple Leaf Plum	2' - 2 1/2"	Cell	20'	B&B	As Shown 8
CK	Cornus Kousa Multistem	Kousa Dogwood Multistem	8' - 10'		40'	B&B	As Shown 25
MS	Magnolia Soulangiana	Saucer Magnolia	8' - 10'		30'	B&B	As Shown 2
AC	Amelanchier Canadensis	Shadeblow Serviceberry	8' - 10'		30'	B&B	As Shown 28
MSA	Malus Sargentii	Sargent Dwarf Crabapple	2 1/2" Cell		8'	B&B	As Shown 52
MRJ	Malus Red Jewel	Red Jewel Weeping Crabapple	2 1/2" Cell		8'	B&B	As Shown 13
AG	Acer Griseum	Paper Bark Maple	2 1/2" Cell		30'	B&B	As Shown 13
PSK	Prunus Serrulata Kwanzan	Kwanzan Cherry	2 1/2" - 3"	Cell	20'	B&B	As Shown 6
CF	Cornus Florida	Flowering Dogwood	8' - 10'		20'	B&B	As Shown 24
MS	Magnolia Stellata	Star Magnolia	8' - 10'		15'	B&B	As Shown 1
HW	Hamamelis Virginiana	Common Witchhazel	6' - 8'		25'	B&B	As Shown 10



# Groundwater

- Recharge
- Recharge areas
- Septic disposal
- Potable drinking water



**Mapped Recharge Areas**



# Freshwater wetlands

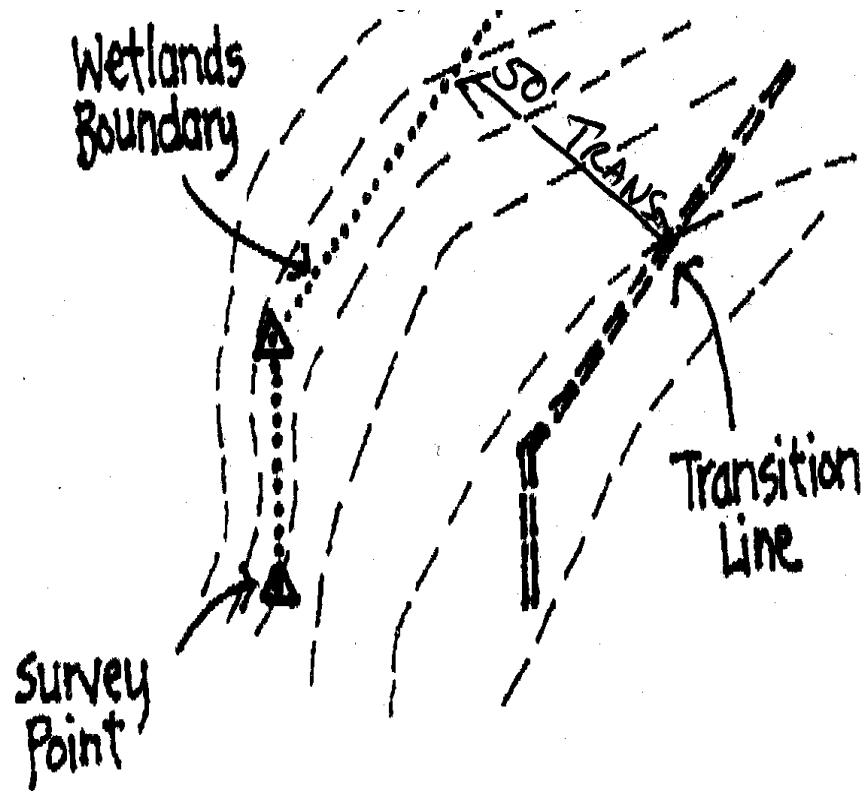
Regulated by the State (NJDEP)

Municipalities cannot pass wetlands ordinances, but they can help insure State regulations are followed.

- REQUIRE SUBMISSION OF LOI (NJDEP Letter of Interpretation)  
The application “checklist” should require LOI if the property or adjacent property indicates possible wetlands.
- CHECK to see if LOI is merited. What do ERI maps show? A site walk may reveal wetlands vegetation, signaling need for an LOI.
- CHECK SITE PLAN to see if it shows wetlands and transition areas (protected buffer areas)
- Applications are approved *contingent on obtaining State permits.*

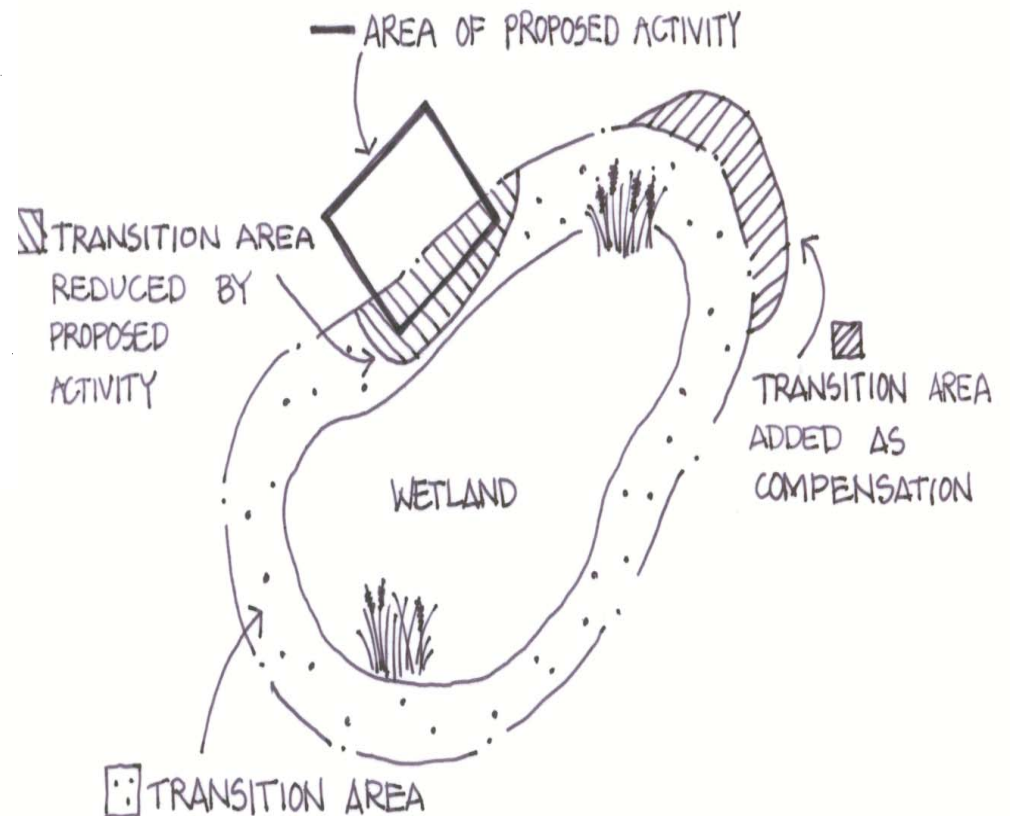


# Identification of Wetlands



## TRANSITION AREA AVERAGING

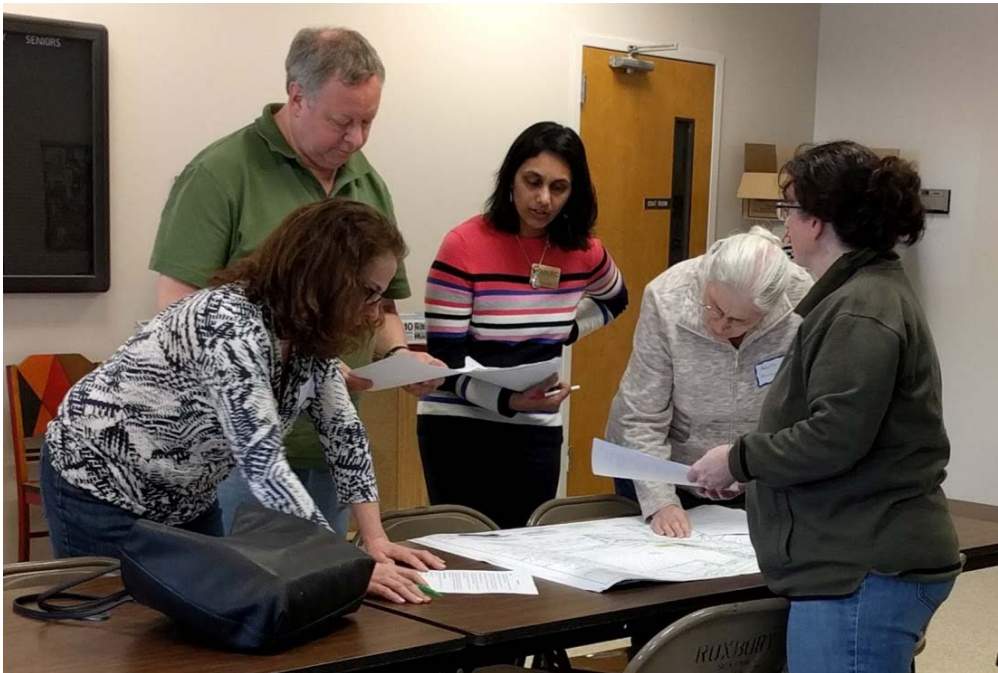
75%



# Site Visit Is Important

- **Notify applicant**
- **Ask applicant to mark site boundaries, building footprints, wetlands**
- **Bring site plan**
- **Take photographs**
- **Determine points of concern**
- **Include site visit notes as part of the Commission's report**

# Analysis of Application



- Consistency with Master Plan
- Compliance with ORDINANCES
- Existing site and constraints, site during construction and upon completion
- Ability to provide basic services

# Written Report by EC

- Findings of Fact
- Findings of Environmental Impacts
- Recommendations
- Questions and Testimony at hearing

