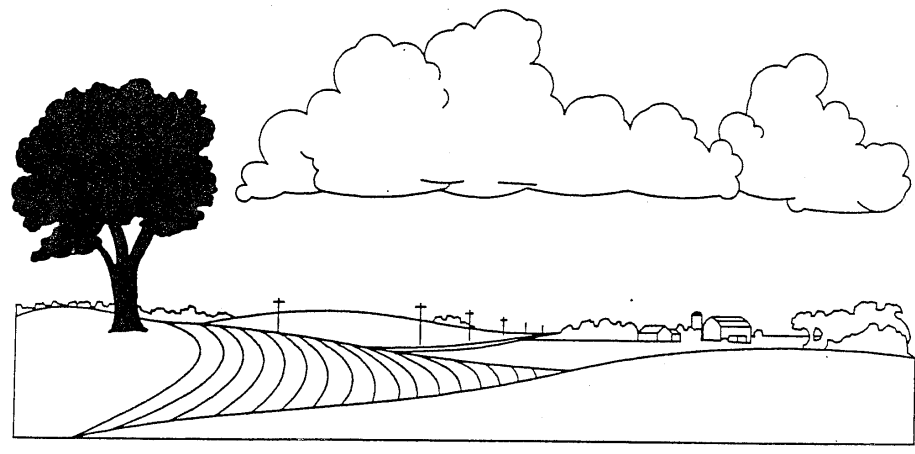


EAST GREENWICH TOWNSHIP

**PRELIMINARY/FINAL
ENVIRONMENTAL IMPACT
WORKSHEET**



EAST GREENWICH TOWNSHIP
PRELIMINARY/FINAL ENVIRONMENTAL IMPACT WORKSHEET

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EAST GREENWICH TOWNSHIP
PRELIMINARY/FINAL ENVIRONMENTAL IMPACT WORKSHEET

The purpose of this worksheet is to assist the East Greenwich Township Planning Board and Environmental Commission in determining the environmental impact of a proposed project. The Board and Commission will review the information as part of the preliminary/final EIS requirements. If the information supplied is insufficient or a high potential for an adverse environmental impact exists, then additional details on specific environmental parameters may be requested.

This worksheet has been formatted so that each question must be answered for BOTH the preliminary and the final stages of plan submission. Consequently, this worksheet must be submitted to the Township prior to preliminary approval and again after final approval is granted by the Planning Board. This procedure is used to monitor the changes that may occur during or as a result of the Township's review process.

Please answer all questions and, where more space is needed, attach additional pages.

1. NAME OF APPLICANT: _____
(Include all shareholders)

Mailing address: _____

Telephone no.: _____

2. NAME OF PROPERTY OWNER: _____

Mailing address: _____

Telephone no.: _____

3. BLOCK AND LOT NUMBER: _____

4. NAME OF AGENT: _____

Mailing address: _____

Telephone no.: _____

5. NAME OF DEVELOPMENT: _____

6. TYPE OF DEVELOPMENT: _____

7. APPLICATION NUMBER: _____

8. APPLICATION STATUS: () Preliminary () Final

9. CONSULTANTS' NAMES, ADDRESSES AND PHONE NUMBERS:

10. GENERAL LOCATION OF PROPOSED PROJECT (street address or nearest intersection). _____

11. AREA OF PROJECT: _____ acres; dimensions: _____

12. GENERAL PLAN AND DESCRIPTION OF PROPERTY: PROPOSED USE OF SITE.
Describe the project, specifying what is to be done during construction and operation. Please provide maps and drawings, said maps and drawings to be drawn on a scale of one (1) inch per fifty (50) feet. The descriptions shall include, but not be limited to, the following: numbers of units, roads, paved areas, contours grading and regrading, existing stands of trees, trees remaining after development, and complete delineation of wetlands.

Preliminary: _____

Final: _____

13. GENERALLY DESCRIBE THE PRESENT USE OF THE SITE:

14. METHOD AND SCHEDULE OF CONSTRUCTION:

14a. Construction dates (months/year) for which permit is requested. If more than one phase is anticipated, give dates for each phase.

Preliminary (Anticipated)	Final (Actual)
Begin _____ end _____	Begin _____ end _____

14b. Describe all phases of grading and clearing operations:

14c. Please describe method of construction: _____

15. LIST ANY OTHER PERMITS FOR THIS PROJECT from federal, state, local, or other governmental agencies for which you have applied or will apply, including the name of the issuing agency, whether the permit has been applied for, and if so, the date of the application (leave blank if not submitted), whether the application was approved or denied (include date) or pending, and the number of the application or permit.

Preliminary:

<u>Agency</u>	<u>Permit Type</u>	<u>Date Submitted</u>	<u>Status</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Final:

<u>Agency</u>	<u>Permit Type</u>	<u>Date Submitted</u>	<u>Status</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

16. TOPOGRAPHIC SLOPE

16a. Do slopes >10% occur on the site: yes no

If yes, give the acreage: 10-15% slope _____ acres
>15% slope _____ acres

16b. Will slopes >10% be developed? If yes, give details.

Preliminary: yes no

Final: yes no

Include comments on slope stability, and mechanisms for maintenance of slopes. Additional details can be presented in the mitigative section, Item 35.

17. FLOOD HAZARD

17a. Do sections of the site lie within floodways or flood hazard areas as delineated in the Federal Emergency Management Act maps? yes no

If yes, how much? _____ acres in flood hazard area

_____ acres in floodway

17b. Does the applicant anticipate any development of the flood hazard area? If so, please describe:

Preliminary: _____

Final: _____

Additional details can be provided in mitigative measures section, Item 35.

18. AQUIFER RECHARGE

18a. As determined by the application of Darcy's Law, how many acres of the following categories are in the site? Please define with gallons of recharge/square foot of recharge area.

Area of Prime Aquifer Recharge: _____ acres
Area of High Aquifer Recharge: _____ acres
Area of Moderate Aquifer Recharge: _____ acres
Area of Low or Minimal Aquifer Recharge: _____ acres

18b. How many acres of prime and high aquifer recharge areas will be covered at full development?

Preliminary: _____ acres-prime recharge
_____ acres-high recharge

Final: _____ acres-prime recharge
_____ acres-high recharge

Measures used to encourage recharge should be discussed in the mitigation measures section, Item 35.

18c. Is there any effort given to consideration to NOT covering aquifer recharge area? Explain.

19. DEPTH TO SEASONAL HIGH WATER TABLE

19a. What is the extent of the following depth to water table categories on the site?

Deep or Usually Deep (>10 feet): _____ acres

Shallow to Moderately Shallow (5 to 10 ft): _____ acres

Very Shallow (<5 feet): _____ acres

19b. How will the areas of shallow, moderately shallow and very shallow depths to water table be developed?

Preliminary: _____

Final: _____

19c. Will areas of the site be artificially drained? Yes No

Preliminary: Yes No

If yes, give details: _____

Final: Yes No

If yes, give details: _____

Additional comments can be presented in the mitigative measures section, Item 35.

20. SEPTIC EFFLUENT DISPOSAL

20a. Describe the soil permeability with specific reference to criteria contained in the Gloucester County Soil Conservation District Standards and Specifications and any other pertinent soil standards:

(1) Geology _____

(2) Soils and properties thereof, including capabilities and limitations _____

(3) Terrain _____

20b. Consult the United States Department of Agriculture Soil Classification Survey to determine how many acres of the following categories are on this site:

Few to slight limitations for septic effluent: _____ acres

Moderate to severe limitations for septic effluent: _____ acres

Severe to very severe limitations for septic effluent: _____ acres

20c. Will the areas having severe or very severe limitations be used for septic effluent disposal?

Preliminary: ___ Yes ___ No

If yes, describe measures which will be used to protect water quality in the mitigative measure section. If any percolation tests have been conducted, please attach details.

Final: ___ Yes ___ No

If yes, describe measures which will be used to protect water quality in the mitigative measures section. If any percolation tests have been conducted, please attach details.

20d. Are there any wells (existing or proposed) within 100 feet of the proposed septic effluent fields?

Preliminary: ___ Yes ___ No Final: ___ Yes ___ No

If yes, are they downslope?

Preliminary: ___ Yes ___ No Final: ___ Yes ___ No

Please describe present uses of wells: _____

What is the distance between the wells and the closest disposal field? _____ yards

Preliminary: _____ yards Final: _____ yards

Additional comments on wells: _____

20e. Wastewater facilities. Please provide and attach information showing that wastewater can be disposed of through facilities adequate to preclude undue inconvenience or expense and water pollution:

- (1) If disposal is by septic system:
 - (a) Data on underlying geology
 - (b) Seasonally high water table
 - (c) Results of representative percolation rate tests for the tract
 - (d) Cation exchange capacity at two (2) feet and six (6) feet below the surface of the ground
 - (e) Adequate test borings to determine the following:
 1. Direction and flow of groundwater
 2. Soil stratigraphy
 3. Analysis of hydrologic soil group for each of the soil types encountered and discuss relative permeability
 4. At what level was each boring terminated
 - (f) Topography and location and depth of aquifers
 - (g) Depth and screened intervals of all wells within one thousand (1000) feet of the site or in the affected area, whichever is greater.

- (2) If disposal is by a central treatment facility, a certification of adequate capacity prior to final approval, from the municipal or county sewerage authority, municipal utilities authority or other applicable treatment facility.
- (3) Compliance with all state and local sewage and health regulations.

21. DRAINAGE: STORMWATER RETENTION AND DETENTION

21a. Are there any existing ponds, proposed stormwater management basins or streams in the vicinity of the proposed septic fields?

Preliminary: Yes No Final: Yes No

If yes, what is the distance between the water body and the closest disposal field?

Preliminary: Yes No Final: Yes No

Please include map or schematic drawing to aid explanation if necessary.

21b. Provide information showing that stormwater runoff from the site is so controlled that on- and off-site erosion is not significantly caused nor significantly worsened and that the potential of downstream flooding is not significantly increased, and the following:

- (1) Volume and peak flow rates of stormwater runoff expected from both the undeveloped site and developed site and to be generated by new improvements, which shall include volumes and rates for 2-, 10-, 25-, and 100-year storm frequencies having durations producing maximum flow rates before and after the proposed development.
- (2) Data on landscaping, vegetation, trees and ground cover existing on the site, compared with that proposed.
- (3) Changes of runoff rates and volumes to be caused by changes in land use and the time of concentration.
- (4) Plans for disposition of stormwater, whether by retention on the site or by means of channeling so as to protect downstream property.
- (5) Disposition of storm water on site via retention/detention will require submission of the following information:

- (a) At least one test pit per each 10,000 square feet will be dug including one located within each area designated as a detention and retention basin.
- (b) Install test pits to a depth below which groundwater is encountered.
- (c) Provide a written log of each test pit recording the following:
 - 1. Depth and description of each soil horizon using standard Munsell soil colors and standard soil textures determined via the field classification process.
 - 2. Depth and type of soil components.
 - 3. Depth and type of restrictive layers encountered which may inhibit infiltration of stormwater.
 - 4. Estimate depth of seasonal high water table based on soil matrix color and/or predominance of low chromo mottling.
 - 5. Record depth at which groundwater is encountered.
- (d) Record approximate location of each test pit on a site map and mark the same location in the field with lath and ribbon.
- (e) Include stabilized groundwater depth and date of second test.
- (f) Provide calculations and information regarding shape, depth, side slopes, volume of basin.
- (g) Describe configuration of outfall structure.

22. SUITABILITY FOR BUILDINGS WITH BASEMENTS

22a. Are any buildings with basements to be located within the 100-year flood plain? (Basement must be located one (1) foot above flood plain.)

Preliminary: Yes No Final: Yes No

22b. Are any buildings with basements to be located in areas with basement limitations (i.e., prone to flooding, slope considerations, drainage problems, etc.)?

Preliminary: Yes No Final: Yes No

Please describe: _____

23. VEGETATION AND WILDLIFE HABITAT

23a. What are the predominant vegetation categories on the site and their acreage before and after development?

Preliminary:

<u>Vegetation Type</u>	<u>Existing Acres</u>	<u>Post Development Acres</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Final:

<u>Vegetation Type</u>	<u>Existing Acres</u>	<u>Post Development Acres</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

23b. List and locate on a site plan the number and species of trees on the site having a diameter at breast height (dbh) of 8 inches or greater. Such trees should be identified on the site plan.

<u>Number</u>	<u>Species</u>
_____	_____
_____	_____
_____	_____
_____	_____

23c. Will any of these large diameter trees be removed due to construction?

Preliminary: ___ Yes ___ No Final: ___ Yes ___ No

23d. Does the woodlands area cross the proposed development site?

___ Yes ___ No

If yes, how many acres does it cover? _____ acres

If yes, will it be disturbed by the development plan?

___ Yes ___ No

Preliminary: ___ Yes ___ No Final: ___ Yes ___ No

23e. How many acres of woodland areas will be lost to development?

Preliminary: _____ acres Final: _____ acres

23f. Do you plan to propose that any of these woodlands areas be preserved and protected? If so, by what means will it be maintained?

Preliminary:

___ Conservation easements _____ acres
___ Dedication to Township _____ acres
___ Deed restrictions to lots _____ acres
___ Creation of homeowners association _____ acres
___ Other proposal: _____

Final:

___ Conservation easements _____ acres
___ Dedication to Township _____ acres
___ Deed restrictions to lots _____ acres
___ Creation of homeowners association _____ acres
___ Other proposal: _____

24. LAND SUITABILITY FOR DEVELOPMENT

24a. Check all factors which may cause soils on site to be unsuitable for development:

_____ slope
_____ drainage
_____ depth to seasonal high water table

suitability for septic drainage field
 erosion hazard
 runoff potential

- b. If development is proposed on areas considered unsuitable for development, what corrective measures will be taken?

Preliminary: _____

Final: _____

ENVIRONMENTALLY SENSITIVE AREAS

- a. Does the proposed development site include any environmentally sensitive areas?

Yes No

- b. If yes, check the environmentally sensitive area category which occurs on the site and give acreage:

<u>Sensitive Areas</u>	<u>Preliminary Acreage</u>	<u>Final Acreage</u>
<input type="checkbox"/> Freshwater Marshes	_____	_____
<input type="checkbox"/> Floodprone Acres	_____	_____
<input type="checkbox"/> Prime Aquifer Recharge Area	_____	_____
<input type="checkbox"/> Woodland and Wildlife	_____	_____
<input type="checkbox"/> Prime Agricultural Land	_____	_____
<input type="checkbox"/> Historical Sites & Routes (number)	_____	_____
<input type="checkbox"/> Streams*	_____	_____

*If a stream(s) is present, please submit September, December, March and June velocity calculations to Township Engineer for review.

25c. Will ~~be~~ these environmentally sensitive areas be impacted by development?

Preliminary: Yes No Final: Yes No

Explain: (more details can be given in the mitigative measures section) _____

26. HISTORIC/ARCHAEOLOGIC SITES

26a. Is the proposed project located within 500 feet of an area or structure having recognized historic, cultural or archaeological value? Yes No

26b. What information determined the classification?

27. WATER QUALITY, including water supply hydrology, groundwater level and condition

27a. Do any streams run through the property? Yes No

27b. What is the distance to the nearest stream off the property? _____ feet

27c. Are there point or nonpoint water pollution sources on or near the site? Yes No

If yes, give details, including distances: _____

27d. If a stream exists on the property, give a brief description of its condition including details on, but not limited to, flow, nutrient levels, aquatic community, substrate, bank stability: _____

- 27 e. If any surface water impoundments exist on the site, indicate below their present surface area and average depth. Will these dimensions be changed after site development?

	<u>Surface Area</u>	<u>Average Depth</u>
Impoundment 1		
Existing condition	_____	_____
Post development	_____	_____
Impoundment 2		
Existing condition	_____	_____
Post development	_____	_____

- 27 f. What types of fish are found in the impoundments?

- 27 g. Is the impoundment(s) _____ natural or _____ man-made?

If impoundment(s) is man-made, is there drainage failure potential based on undersized outflow pipes? _____

- 27 h. Is the impoundment(s) used for _____ fishing
 _____ irrigation
 _____ other?

- 27 i. Additional comments on impoundment quality: _____

- 27 j. Provide groundwater studies from new wells or data on existing wells from the Gloucester County Department of Health Environmental Quality Section. Include the analysis of the following:

- (a) pH
- (b) Nitrates
- (c) Total suspended solids
- (d) Total phosphates
- (e) BOD
- (f) Fecal coliform
- (g) Chlorides
- (h) Turbidity
- (i) Existing flora
- (j) Existing fauna

27k. Any applicant whose property lies in a watershed affected by any upstream manufacturing or commercial establishment or whose property itself is such a manufacturing or commercial establishment shall include the analysis, but not be limited to, the following:

- (a) Arsenic
- (b) Cadmium
- (c) Chromium
- (d) Copper
- (e) Iron
- (f) Lead
- (g) Zinc
- (h) Mercury

28. WATER SUPPLY

28a. What is the anticipated daily/peak demand for water:

Preliminary: _____ average; _____ peak

Final: _____ average; _____ peak

Please describe: _____

28b. What is the proposed source of water for the project?

28c. Are there known groundwater pollution problems on or near the site? _____ Yes _____ No

Is there a groundwater supply problem? _____ Yes _____ No

If yes, give details: _____

28d. If a development of fifty (50) or more dwelling units is proposed, certification of adequacy (of proposed water supply) must be obtained from the NJ Department of Environmental Protection. (List permit number on Question 15.)

28e. Provide information showing that an adequate potable water supply is available and not threatened by nearby use of other land, and the following:

- (1) If the supply is from off-site public facilities, including private water companies, a certification of availability prior to final approval, from the public or private facility; or

(2) If the supply is from on-site sources:

- (a) Location and depth, insofar as such information is practically available, of all private and public water supplies within one thousand (1000) feet of the site or in the affected area, whichever is greater.
- (b) Location, depth and adequacy of proposed private or public water supplies to serve the proposed project.
- (c) Geologic description of subsurface conditions, including expected groundwater yields, using published geologic reports or a report by a geologist.

(3) Compliance with all State and local regulations.

29. AIR QUALITY (answer only if commercial or industrial development is proposed)

List sources and air pollutants which will be generated by the project (including heating units, power generators, but not limited to): _____

30. LANDFILLS

30a. Has any part of the proposed development site ever been used as a landfill or dump (hazardous, municipal, private, etc)?

_____ Yes _____ No

If yes, provide detail on any possible pollution impact:

30b. What types of landfills or polluted sites are located within two miles of the proposed project? _____

(1) How do they impact as a nonpoint source of pollution?

31. NOISE LEVELS (Answer if nonresidential use is proposed or if proposed residential development has more than five (5) dwelling units.)

31a. Describe sources, location and decibel rating for noise generation on-site during and post-construction, with reference to the following standards promulgated by the NJ Department of Environmental Protection, as the same may be amended from time to time, and NJAC 7:9, 7:27 and 7:29.

32. LAND USE

32a. What is the project's relation to surrounding property lines, gas pipelines, and high voltage power transmission lines?

32b. Check types of land use occurring on parcels adjacent to project site.

<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Vacant
<input type="checkbox"/> Industrial	<input type="checkbox"/> Recreational	
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Institutional	

32c. What are the effects (detrimental and beneficial) of proposed development on adjacent land uses? _____

33. ARCHITECTURAL DESIGN

Describe architectural attributes of proposed buildings.

34. ASSESSMENT OF ENVIRONMENTAL IMPACT OF PROJECT

34a. An assessment supported by environmental data of the environmental impact of the project upon the factors described hereinabove shall be submitted and shall include an evaluation of water use, liquid and solid waste disposal and the effects of liquid and solid waste on the quality and quantity of surface and groundwaters. The assessment shall include an evaluation of the compatibility in use and scale of the project with employment, shopping, schools, roads, open space and police and fire protection. All potential impacts are to be defined to include but not be limited to:

- (1) Impact on geological and soil stability
- (2) Impact on soil erodibility
- (3) Impact on groundwater, the aquifer and the aquifer recharge area
- (4) Impact on streams and lakes within or without the site, whether man-made or natural
- (5) Impact on vegetation and wildlife
- (6) Displacement of families and individuals

34b. Any data submitted by the applicant with the application or to other agencies, including but not limited to the Department of Environmental Protection, the Gloucester County Board of Health, and the Gloucester County Soil Conservation Service, having jurisdiction over one (1) or more of the environmental elements specified in this section shall be accepted by the Board as fulfilling the data requirements of this Article, to the extent applicable.

35. MITIGATION MEASURES (To be described on separate sheet of paper)

35a. Describe the methods that will be used during and after construction to avoid or minimize adverse environmental impacts associated with the project. Include the following factors in your evaluation:

- (1) Unusual environmental impacts and damages to natural resources both on the project tract and in the area affected.

- (2) A description of steps to be taken to minimize such impacts during construction and operation, with particular emphasis upon air or water pollution. The description of steps to be taken shall be accompanied by appropriate maps, schedules and other explanatory data as may be needed to clarify the actions to be taken.
- (3) Increase in noise
- (4) Damage to plant, tree and wildlife systems
- (5) Displacement of people and businesses
- (6) Displacement of existing farms
- (7) Increase in sedimentation and siltation
- (8) Increase in municipal services

35b. Alternatives. The applicant may be required to provide a statement of alternatives to the proposed project, consistent with the zoning on the site, which might void some or all of the unusual environmental effects of the proposed project. The statement shall include the reasons for the acceptability or nonacceptability of each alternatives.

ENVIRONMENTAL COMMISSION
COMMENT SHEET

Question No.

Comment

EAW:CHECKL5

9/28/89 EAST GREENWICH TOWNSHIP