

DEVELOPMENT IMPACT REPORT

The Development Impact Report (DIR) is intended to serve as a guide to the applicant in formulating the development proposal, as well as a guide to the Planning Board in its evaluation of the proposed development in the context of existing conditions and planning efforts by the Town. The DIR should be prepared as early in the development process as possible, even if certain aspects are unknown at that time. It is recommended that the various aspects of the DIR, together with a conceptual development plan, are discussed with the Planning Department staff as soon as possible, prior to the filing of an application for approval of a preliminary plan.

The DIR seeks to raise the broad range of issues generally associated with development plans in a form and in a language that is understandable to a layperson. It assesses development impacts which could possibly be avoided or mitigated if recognized early in the development process. Other portions of the DIR request information which will help the Town plan ahead and ensure adequate services in the future. It is the hope of the Planning Board that the use of the DIR, along with early consultations with the Planning Department staff and the applicant's continuing cooperation throughout the development process, will foster a development of excellent quality and design sensitive to Acton's natural and historic heritage and other community concerns.

The DIR shall be filed with an application for approval of a preliminary and a definitive subdivision plan. The DIR shall clearly and methodically assess the relationship of the proposed development to the natural, physical, and social environment. In preparing the DIR, professionals of the respective fields shall be consulted and a systematic, interdisciplinary approach shall be utilized which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning, designing and engineering of the proposed project.

DEVELOPMENT IMPACT REPORT

Please type or print information in blanks below.

1. Name of Proposed Subdivision The Meadows at Acton
2. Location 263 & 265 Great Road
3. Name of Applicant(s) 263 Great Road LLC
4. Brief Description of the Proposed Project: A proposed affordable housing project consisting of two existing single family dwellings, 2 proposed townhouses, and 22 proposed single family dwellings.
5. Name of Individual Preparing this DIR George Dimakarakos, P.E.
Address 1000 Main St. Acton, MA 01720
Business Phone (978) 263-8585
6. Professional Credentials Commonwealth of MA Registered Professional Engineer

A. Site Description

7. Present permitted and actual land uses by percentage of the site.

<i>Uses</i>	<i>Percentage</i>
Industrial	0
Commercial	0
Residential	100
Forest	0
Agricultural	0
Other (specify)	0

8. Total acreage on the site: 5.47 acres.

Approximate Acreage	At Present	After Completion
Meadow or Brushland (non agriculture)	0	0
Forested	1.84	.31
Agricultural (includes orchards, cropland, pasture)	0	0
Wetland	0	0
Water Surface Area	0	0
Flood Plain	0	0
Unvegetated (rock, earth, or fill)	0	0
Roads, buildings and other impervious surfaces	.41	2.16

Other (indicate type) Open Space (lawn)	3.22	3
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9. List the zoning districts in which the site is located and indicate the percentage of the site in each district. *Note: be sure to include overlay zoning districts.*

District	Percentage
Residence 8	66
Limited business	34

10. Predominant soil type(s) on the site: Hinckley Loamy Sand, Merrimac-Urban Land Complex.

Soil drainage (Use the US Soil Conservation Service's definition)

Soil Type	% of the Site
Well drained	100
Moderately well drained	0
Poorly drained	0

11. Are there bedrock outcroppings on the site? yes X no

12. Approximate percentage of proposed site with slopes between:

Slope	% of the Site
0 - 10%	86
10 - 15%	9
greater than 15%	5

13. In which of the Groundwater Protection Districts in the site located? How close is the site to a public well?

Zone(s) 2&3 Proximity to a public well: 1,500+/- feet

14. Does the project site contain any species of plant or animal life that is identified as rare or endangered? (Consult with the Massachusetts National Heritage Program and the Acton Natural Resources Director).

 yes X no

If yes, specify: _____

15. Are there any unusual or unique features on the site such as trees larger than 30 inches D.B.H., bogs, kettle ponds, eskers, drumlins, quarries, distinctive rock formation or granite bridges?

 yes X no

If yes, specify: _____

16. Are there any established foot paths running through the site or railroad right of ways?

 yes X no

If yes, specify: _____

17. Is the site presently used by the community or neighborhood as an open space or recreation area? ___yes Xno

Is the site adjacent to conservation land or a recreation area? ___yes Xno

If yes, specify: _____

18. Does the site include scenic views or will the proposed development cause any scenic vistas to be obstructed from view? ___yes Xno

If yes, specify: _____

19. Are there wetlands, lakes, ponds, streams, or rivers within or contiguous to the site? Xyes ___no

If yes, specify: There is an Isolated Vegetated wetland contiguous to the Northern lot line.

20. Is there any farmland or forest land on the site protected under Chapter 61A or 61B of the Massachusetts General Laws? ___yes Xno

If yes, specify: _____

21. Has the site ever been used for the disposal of hazardous waste?

Has a 21E Study been conducted for the site? Xyes ___no

If yes, specify results: No Problems found.

22. Will the proposed activity require use and/or storage of hazardous materials, or generation of hazardous waste? ___yes Xno

If yes, specify _____

23. Does the project contain any buildings or sites of historic or archaeological significance? (Consult with the Acton Historic Commission or the Action Historical Society.)

___yes Xno

If yes, please describe _____

24. Is the project contiguous to or does it contain a building in a local historic district or national register district?

___yes Xno

25. Is the project contiguous to any section of the Isaac Davis Trail?

___yes Xno If yes, please describe _____

B. Circulation System

26. What is the average weekday traffic and peak hour traffic volumes generated by the proposed subdivision?

Average weekday traffic		230
Average peak hour volumes	morning	18.5
Average peak hour volumes	evening	29.5
Average peak hour volumes	saturday	22.6

27. Existing street(s) providing access to proposed subdivision:

Name Great Road Town Classification Arterial

28. Existing intersection(s): list intersections located within 1000 feet of any access to the proposed development:

Name of ways Great Road & Davis Rd, Brook St, and Strawberry Hill Road

29. Location of existing sidewalks within 1000 feet of the proposed site? on Great Rd and Davis Rd.

30. Location of proposed sidewalks and their connection to existing sidewalks:
Sidewalk is proposed within the development and will connect to Great Road Sidewalk.

31. Are there parcels of undeveloped land adjacent to the proposed site? yes no

Will access to these undeveloped parcels be provided within the proposed site?
yes no

If yes, please describe _____

If no, please explain why

C. Utilities and Municipal Services

32. If dwelling units are to be constructed, what is the total number of bedrooms proposed?
76 Bedrooms

33. If the proposed use of the site is nonresidential, what will the site be specifically used for and how many feet of Gross floor area will be constructed?

34. Storm Drainage

a. Describe nature, location and surface water body receiving current surface water of the site:
Under current conditions, most of the runoff from the site drains to an isolated wetland along

the northerly property line, which then drains to bordering vegetated wetlands off site and ultimately to Nashoba Brook. Some runoff discharges to the Great Road drainage system, which also drains to Nashoba Brook. A small portion of the site drains to a depression on an abutting property.

- b. Describe the proposed storm drainage system and how it will alter existing drainage patterns: The overall drainage patterns will be maintained. Runoff peaks will be mitigated through the use of infiltration measures. A detailed Stormwater report has been prepared in conjunction with this application.
- c. Will a NPDS Permit be required? X yes ___ no
35. In the event of fire, estimate the response time of the fire department (consult with Fire Dept.)
5 mins
36. Schools (if residential)
- a. Projected number of new school age children: 1.67 x 24 new units = 40.08
- b. Distance to nearest school: 2.3 miles (Luther Conant School)

E. Measures to Mitigate Impacts

Attach brief descriptions of the measures that will be taken to:

37. Prevent surface water contamination.
38. Prevent groundwater contamination.
39. Maximize groundwater recharge.
40. Prevent erosion and sedimentation.
41. Maintain slope stability.
42. Design the project to conserve energy.
43. Preserve wildlife habitat.
44. Preserve wetlands.
45. Ensure compatibility with the surrounding land uses.
46. Control peak runoff from the site so that the post-development rate of runoff will be no greater than the predevelopment rate of runoff for the 10-year storm event.
47. Preserve historically significant structure and features on the site.
48. To mitigate the impact of the traffic generated by the development.

Please use layman's terms where possible while still being accurate and comprehensive. Where appropriate, graphics shall be used. List sources of data, reference materials, and methodology used to determine all conclusions. Use additional sheets as necessary.

Development Impact Report

Section E: Measures to Mitigate Impacts

37. Prevent surface water contamination: The Stormwater Management system will be constructed prior to the discharge of runoff from the site. During construction, any silt, construction debris, etc. Shall be removed from the public way or abutting property immediately upon discovery and all sediment spilled, dropped, or washed into public right-of-ways shall also be removed immediately. Fill material used shall be free of hazardous material and construction debris. The developer shall comply with the Stormwater Pollution Prevention Plan.
38. Prevent groundwater contamination: Groundwater will be protected by state of the art Stormwater and Wastewater management Systems. The Stormwater Management System has been designed in accordance with the MADEP Stormwater Management Handbook and the Wastewater System has been designed in accordance with MADEP Title 5 regulations with the addition of an Innovative and Alternative Technology for advanced treatment.
39. Maximize groundwater recharge: Recharge of runoff for the site will be provided several ways. Clay-lined bioretention basins, subsurface infiltration trenches and roof drain drywells have been incorporated into the design.
40. Prevent erosion and sedimentation: During construction, any silt, construction debris, etc. Shall be removed from the public way or abutting property immediately upon discovery and all sediment spilled, dropped, or washed into public right-of-ways shall also be removed immediately. Fill material used shall be free of hazardous material and construction debris. The developer shall comply with the Stormwater Pollution Prevention Plan. Also, the project will comply with the strict guidelines of the EPA NPDES Construction General Permit.
41. Maintain slope stability: Cut and fill slopes, if any, will be stabilized immediately with six inches (6") of loam and seed during the growing season (April 1 to November 1) or with hay-mulch during the non-growing season (November 1 to April 1). A Stormwater Pollution Prevention Plan has been prepared which will provide the necessary details.
42. Design the project to conserve energy: The proposed dwellings will meet the stringent requirements of the state and local building codes. The Town of Acton has adopted the "Massachusetts Residential Stretch Code", which dramatically improves the efficiency of new residential building.

43. Preserve wildlife habitat: The site is not located within an area of estimated habitat of rare wildlife. Existing vegetation shall be preserved wherever possible. The development will largely occur within existing yard area, therefore impact on wildlife habitat will be minimal.
44. Preserve wetlands: A Stormwater Pollution Prevention Plan has been prepared that will delineate the limit of work and also provide the necessary details for protecting the wetlands. The project is located within 100 feet of an isolated wetland located to the north of the site and has been designed to be consistent with the Acton Wetland Bylaw.
45. Ensure compatibility with the surrounding land uses: The proposed project was designed to be congruent with the goals of the Acton Comprehensive Permit Policy. The design of the project was developed in conjunction with the Acton community Housing Corporation and received conceptual approval from the Board of Selectmen. The site is surrounded by uses ranging from conventional single family housing to apartments to commercial uses. This project of clustered housing, all single family with the exception of one duplex, will provide a suitable transition between the existing uses.
46. Control peak runoff from the site so that the post-development rate of runoff will be no greater than the predevelopment: Control of peak rates of runoff will be realized using subsurface infiltration best management practices including subsurface infiltration trenches and roof drain drywells. Detailed calculations are included in the Stormwater Report.
47. Preserve historically significant structures and features on the site: N/A
48. To mitigate the impact of the traffic generated by the development: The vehicle trips generated from this proposed development are insignificant and will not require mitigation. The trip generation is also below the typical thresholds requiring traffic studies in the town of Acton.