



CAPE COD COMMISSION

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DATE: May 11, 1995
TO: Mashpee High School Building Committee
FROM: Cape Cod Commission
RE: Hardship Exemption
Cape Cod Commission Act, Section 23
APPLICANT: Mashpee High School Building Committee
c/o Mashpee Town Hall
16 Great Neck Road North
Mashpee, MA 02649
PROJECT: Mashpee High School
Route 151/Old Barnstable Road
Mashpee, MA
PROJECT #: HDEX95002
BOOK/PAGE: Book 9520/Pages 80, 86, 92, 98, 99

DECISION OF THE CAPE COD COMMISSION

SUMMARY

The Cape Cod Commission hereby approves with conditions the Development of Regional Impact (DRI) Hardship Exemption application of the Mashpee High School Building Committee pursuant to Section 23 of the Cape Cod Commission Act, c. 716 of the Acts of 1989, as amended, for a proposed senior high school in Mashpee, MA. The decision is rendered pursuant to a vote of the Commission on May 11, 1995.

PROJECT DESCRIPTION

The project consists of the construction of a 183,000 s.f. senior high school building for a total of 1180 students on a 135-acre site. The project includes the construction of several playing fields and parking for approximately 200 vehicles. The site is located at the intersection of Route 151/Old Barnstable Road in Mashpee, MA. Route 151 forms the northern boundary of the site, with the Quashnet River forming the eastern boundary. Land proposed for a national wildlife refuge in the Town of Mashpee is located directly south of the high school site. The property is zoned for residential use and is surrounded by residential land use to the north, east and west. Mashpee Commons and other commercial development is located approximately one mile to the east. The site is located within a Zone II wellhead protection area and the

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Waquoit Bay watershed.

PROCEDURAL HISTORY

An Environmental Notification Form was submitted to the Executive Office of Environmental Affairs (EOEA), MEPA Unit, on August 31, 1994. The Secretary of EOEA issued a Certificate on October 11, 1994 requiring the School Building Committee to file an Environmental Impact Report (EIR). This action by the Secretary of EOEA required Commission review of the project as a DRI pursuant to Section 12(i) of the Act. A subcommittee meeting to discuss the scope of the EIR was held on December 28, 1994.

A Draft Environmental Impact Report (DEIR) was submitted to EOEA on December 30, 1994. A duly noticed public hearing pursuant to Section 5 of the Act was held by an authorized subcommittee of the Commission on February 1, 1995 at the Mashpee Senior Center, Mashpee, MA. The Certificate on the DEIR was issued on February 16, 1995. Subcommittee meetings were held on February 1, 1995 and February 16, 1995. A Final Environmental Impact Report (FEIR) was submitted to EOEA on March 15, 1995. A subcommittee hearing on the FEIR was held on April 13, 1995 at the Mashpee Town Hall, Mashpee, MA. The Certificate on the FEIR was issued on April 28, 1995. Pursuant to Section 13(b) of the Act, a public hearing on the Hardship Exemption request was held on May 4, 1995 at the Cape Cod Commission office and continued to May 11, 1995. Upon adjourning the public hearing, the subcommittee held a public meeting where the subcommittee voted unanimously to recommend to the full Commission that the Hardship Exemption request be granted with conditions. The full Commission held a public hearing on May 11, 1995. The public hearing and written record were closed on May 11, 1995. At the close of the public hearing, the Commission voted unanimously with one abstention to approve the Hardship Exemption request, subject to conditions.

Materials submitted for the Record

From the applicant:

- Development of Regional Impact/MEPA Joint Review application with attachments, dated December 23, 1994
- Plant and Wildlife Habitat Assessment, Lelito Environmental Consultants, January 31, 1995
- Development of Regional Impact Hardship Exemption application, submitted April 19, 1995
- Site plan illustrating Phase 1 limit of work, received February 6, 1995
- Mashpee Senior High School Site Plans, Symmes Maini & McKee, dated December 22, 1994, 7 sheets
- Mashpee Senior High School Site Plans issued for Environmental Impact Report, Symmes Maini & McKee, dated December 30, 1994, 2 sheets
- Early site preparation package, Symmes Maini & McKee, dated February 16, 1995, 4 sheets
- letter from Brian Lawlor, P.E., Symmes Maini & McKee re: early site preparation package, dated January 16, 1995
- letter from Brian Lawlor, P.E., Symmes Maini & McKee to Jan Reitsma, MEPA Unit requesting joint review process dated December 22, 1994
- Mashpee High School Environmental Notification Form, dated August 26, 1994
- Mashpee High School Draft Environmental Impact Report, dated December 30, 1994
- Mashpee High School Final Environmental Impact Report, dated March 15, 1995

Cape Cod Commission:

- Commission staff comment letter on ENF, dated September 29, 1994
- letter from Commission staff to Paul Griffin, chair of Mashpee School Building Committee, dated October 31, 1994
- letter from Commission staff to Secretary of EOEA, dated November 8, 1994

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- memorandum from Commission staff to subcommittee members dated December 15, 1994
- memorandum from Commission staff w/attachments dated February 13, 1995
- letter from Commission staff to Paul Griffin, chair of Mashpee School Building Committee, dated December 16, 1994
- memorandum from Commission staff to Mashpee officials, dated December 16, 1994
- letter from Herbert Olsen, subcommittee chair to Secretary of EOE, dated December 29, 1994
- Commission staff reports dated January 26, 1995, April 10, 1995, and April 20, 1995
- Commission staff report on Hardship Exemption request dated April 21, 1995
- Subcommittee Review Reports w/cover letter to Secretary of EOE, dated February 7, 1995, and April 20, 1995
- letter from Herbert Olsen, subcommittee chair, to Brian Lawlor, to Symmes Maini & McKee re: early site preparation work dated March 2, 1995
- facsimile cover w/attachments from Commission staff to Brian Lawlor, to Symmes Maini & McKee re: micro-scaling chemistry programs, received March 8, 1995

Additional materials:

- facsimile from Robert Whritenour, Mashpee Executive Secretary, re: town meeting article received May 10, 1995
- memorandum from Greg Taylor, Mashpee Department of Public Works Director, May 4, 1995
- MEPA meeting notice, dated September 15, 1994
- Certificate of the Secretary of EOE on the ENF dated October 11, 1994
- letters from Massachusetts Historical Commission dated September 29, 1994, January 31, 1995
- comment letter from Sharon Stone, Mass. DEP, dated February 2, 1995
- Certificate of the Secretary of EOE on the DEIR dated February 16, 1995
- Certificate of the Secretary of EOE on the FEIR dated April 28, 1995

The application and notices of public hearings relative thereto, the Commission's staff notes, exhibits and correspondence, the transcript and minutes of the hearings and all written submissions received in the course of our proceedings are incorporated into the record by reference.

TESTIMONY

At the February 1, 1995 public hearing, Mr. Brian Lawlor, representing the Applicant, described the project. He explained the MEPA scope. Vicky Lowell asked about potential funding for proposed transportation improvements. Lev Malakhoff reviewed the transportation issues with the Subcommittee. Ed Eichner discussed water resources concerns, including nitrogen loading to Waquoit Bay and a Zone II wellhead protection area. Andrea Adams stressed the chemistry program should scale down the use of hazardous chemicals. Comments from the public were limited to Grace Swierk, representing Mashpee Village, who expressed concern about traffic impacts to Old Barnstable Road. The Subcommittee moved to close the joint hearing and the record.

At the April 13, 1995 public hearing, Mr. Brian Lawlor, representing the Applicant, described the project and changes to the site plan. Vicky Lowell asked about the plan to manage the on-site wastewater treatment plant. Richard Prince asked about the additional soccer field and 100 parking spaces being bid as an Alternate. Vicky Lowell asked about parking for special events and peak demand times. Andrea Adams, Hazardous Waste Planner with the Cape Cod Commission, commented on the area of hazardous materials and wastes in the Staff Report. Lev Malakhoff, a Transportation Planner with the Commission, commented on transportation-related issues in the Staff Report. Greg Taylor, Director of the Mashpee Department of Public Works, commented on the adequacy of parking and proposed roadway improvements with respect to the Southport development. Ed Eichner, Water Resources Scientist with the Commission, presented water resources issues

on the project including the proposed on-site irrigation well and operation of the wastewater treatment plant. Vicky Lowell asked about analyses done for the on-site irrigation well. Public comment on the project was limited to Grace Swierk, representing Mashpee Village, who expressed concern about children from the Village walking to the High School.

Sharon Rooney explained the review process upon certification of the FEIR. The Subcommittee voted unanimously to continue the Hearing and keep the Record open until May 11, 1995 at 3:00 p.m. at the Assembly of Delegates chambers in Barnstable.

An additional subcommittee hearing was noticed for the subcommittee to consider the Hardship Exemption request. At the May 4, 1995 public hearing, Brian Lawlor of Symmes Maini & McKee made a presentation on the hardship exemption request. He noted that the project was designed to not cause a detriment to the public good. Richard Prince noted that a project change notice through MEPA will be required if the irrigation well is constructed. Vicky Bebout asked whether 300 parking spaces would be sufficient for normal school operations, and she and Richard Prince supported the inclusion of Travel Demand Management (TDM) strategies.

Sharon Rooney gave a staff report on the Hardship Exemption request, noting that staff recommended that the applicant had demonstrated a hardship, with proposed conditions designed to address issues not fully resolved through the joint review process. Richard Terry asked if a signal was proposed for the Route 151/Old Barnstable Road intersection. Sharon Rooney responded that the south leg of Old Barnstable Road was proposed to be constructed by the school and that the complete design of the intersection did include signalization.

Greg Taylor, Mashpee Department of Public Works Director, expressed concern for providing adequate parking for special events at the school and discussed current efforts by the Town in pursuing funding for transportation and bicycle path improvements. Robert Whritenour, Mashpee Executive Secretary, noted a recent town meeting vote to place a conservation easement on the buffer proposed for a conservation restriction by staff. Sheldon Hamblin, Deputy Fire Chief for the Town of Mashpee, expressed concern if inadequate parking for special events is not provided due to the need for emergency vehicle access. The Subcommittee voted unanimously to continue the public hearing and keep the Record open until May 11, 1995 at 3:00 p.m. at the Assembly of Delegates chamber.

At the May 11, 1995 public hearing, subcommittee chair Herbert Olsen gave an overview of the review process held by the subcommittee, and discussed draft findings and conditions. Sumner Kaufman recommended that Hazardous Materials condition #4 be amended to include a requirement for labels containing the date and person ordering hazardous materials. Brian Lawlor, of Symmes Maini & McKee, representing the applicant, agreed to this amendment. Sumner Kaufman moved to close the hearing and the record. Tom Broidrick seconded the motion. All voted in favor of the motion, with William Riley abstaining. Donald LeBlanc made a motion to accept the subcommittee report. Vicky Bebout seconded the motion. All voted in favor of the motion, with William Riley abstaining. Donald LeBlanc made a motion to accept the draft decision to approve the project as a Development of Regional Impact Hardship Exemption with conditions as amended on May 11, 1995, and with the amendment proposed by Mr. Kaufman. Sumner Kaufman seconded the motion. All voted in favor of the motion, with William Riley abstaining.

JURISDICTION

The Mashpee high school qualifies as a DRI under Section 12(i) of the Cape Cod Commission Act which states that ...“any proposed development for which the Secretary of Environmental Affairs (EOEA) requires the preparation of an Environmental Impact Report (EIR) in accordance with the provisions of Sections 61-

62(h), inclusive, of Chapter 30 M.G.L. shall be deemed a Development of Regional Impact.”

FINDINGS

The Commission has considered the application of the Mashpee High School Building Committee for the proposed Mashpee high school, and based on consideration of such application, the information presented at the public hearings and submitted for the record, the Commission makes the following findings subject to Section 23 of the Act:

General

1. The applicant has demonstrated a hardship based on the Town of Falmouth's decision not to allow students from Mashpee after September, 1996, placing a severe time constraint on the Town to complete a site selection, permitting and construction process for Mashpee's first public high school within a very short time frame.
2. There are numerous constraints in siting a public high school, including population distribution and site acreage requirements set by the State for funding. A total of fifteen sites were originally studied by the Town as options for the proposed high school site. Only two of the fifteen sites met the initial siting constraints. A comprehensive analysis of the two remaining sites eliminated a site on Route 130 at Meetinghouse Road based on possible contamination as a result of its former use as a landfill. Therefore, the Route 151/Old Barnstable Road site was determined to be the most appropriate site for the proposed high school.
3. The design and permitting of the high school at this location was constrained by the need to protect very sensitive environmental resources, including a Zone II wellhead protection area, the Quashnet River and the Waquoit Bay watershed. The Town of Mashpee has made a significant capital investment in securing the currently proposed site including provisions to protect the above environmental resources.
4. The high school is a publicly financed project which imposes constraints on the school's ability to currently commit to off-site improvements such as traffic mitigation.

Water Resources

1. The high school site is located within the watershed to Waquoit Bay. Waquoit Bay is overloaded with nitrogen from development within its watershed. Wastewater from the high school will increase the amount of nitrogen within the watershed. The applicant has agreed to reduce nitrogen impacts from the site to a minimum by implementing a detailed turf management plan which minimizes potential nitrogen additions from landscaped areas around the high school, and by committing to a denitrifying treatment plant to reduce nitrogen from wastewater. The Town has also made a formal commitment to participate in regional watershed planning efforts for Waquoit Bay.
2. A portion of the high school site is located within a state approved Zone II (wellhead protection area) for the Mashpee Water District well P-1. The proposed wastewater treatment facility is located outside of this wellhead protection area.
3. The high school site abuts the Quashnet River. The Quashnet River supports an active sea-run brown trout fishery and a herring run. These fisheries are sensitive to water-quality and water levels.

Natural Resources

1. The project site is bordered by the Quashnet River which is identified by the Natural Heritage Critical Habitat Atlas as having potential Rare and Endangered Species Habitat. A plant and wildlife habitat

assessment completed by the applicant has ruled out the presence of rare and endangered species on the project site.

2. The applicant has agreed to permanently protect a 500-foot buffer between the development and the Quashnet River to ensure the protection of this valuable ecosystem. This buffer area will be designated as a conservation restriction as outlined in condition #1, Natural Resources, below.

Hazardous Materials/Waste

1. Section 4.2.2.1 of the RPP requires that development make reasonable efforts to minimize their hazardous waste generation through source reduction, reuse, material substitution, employee education and recycling.

2. The system of waste transfer and holding tanks discussed in the DEIR have been eliminated and the School Department is committed to minimizing the quantity of hazardous materials used at the school through implementation of a micro-scaling chemistry program.

3. Hazardous materials at the school will be limited to cleaning chemicals, lab chemicals including darkroom chemicals, materials used at the on-site waste water treatment plant and fertilizers.

4. Information submitted by the Applicant indicates the school will develop an inventory of hazardous materials and operations/maintenance procedures for hazardous materials management, including laboratory chemicals, upon commencement of school operations.

5. The overall school curriculum will include a darkroom facility.

6. The on-site waste water treatment plant will require the use of caustic soda, sodium hydroxide and methanol in the treatment process. Information submitted by the Applicant indicates the supplies of these chemicals will be stored in quantities as required on a monthly basis and will be handled by trained plant operators. The emergency generator for the on-site wastewater treatment plant will be fueled by natural gas.

7. The Applicant has indicated that school staff will be trained in an emergency response plan for the facility.

Transportation

1. The proposed high school is expected to generate 1,590 vehicle trips per typical weekday of operation based on a total of 1180 students. This number includes 484 vehicle trips during the morning peak hour and 265 vehicle trips during the afternoon peak hour.

2. The Route 151/Old Barnstable Road intersection ranks in a tie for third of intersections experiencing the highest number of accidents town-wide. This intersection is also expected to operate at failure (Level-of-Service F) under the Build scenario. The applicant has proposed to design and construct structural mitigation for the south leg of Old Barnstable Road and to design improvements for the Route 151/Old Barnstable Road intersection to offset traffic impacts of the proposed project and to improve safety at this intersection.

3. The intersections of Route 151/Job's Fishing Road and Great Neck Road North/Lowell Road are expected to operate at poor Levels of Service (E and F, respectively) under the Build scenario. The Town of Mashpee has committed to pursuing funding for improvements to these intersections to mitigate impacts from the proposed project.

4. Section 4.1.2.1 of the RPP requires DRI's to provide for alternate transportation modes to offset at least 20% of their projected traffic volumes. In order to achieve conformance with this performance standard, the applicant is committed to participating in a travel demand reduction program, which is expected to achieve a

29% reduction in site traffic. This program will inform faculty and students on the advantages of car-pooling, and decreasing "drop-off/pick-up" trips. The applicant has indicated that the demand reduction program will result in an average daily trip generation of 538 trips inbound to the site, which will result in a total of 1076 daily trips to and from the site.

5. The success of the ride-sharing program directly affects the need for on-site parking. The applicant has agreed to limit parking to 300 spaces. The Town has agreed that providing 300 parking spaces will not reduce the emphasis on implementation of travel demand management strategies.

6. Section 4.1.2.2 requires DRI's to incorporate provisions for bicyclists and pedestrians. Site plans submitted on the project include a bicycle/pedestrian path from the high school building to the Route 151/Old Barnstable Road intersection. The applicant has agreed to incorporate additional provisions for bicyclists and pedestrians in final design plans for improvements to the Route 151/Old Barnstable Road intersection.

Archaeological Resources

1. The Massachusetts Historical Commission has determined that the proposed project is unlikely to result in significant impacts to historic or archaeological resources.

CONCLUSION

Based upon the findings above, the Cape Cod Commission hereby concludes:

A literal enforcement of the provisions of the Act would involve substantial hardship, financial or otherwise, to the Applicant. This conclusion is supported by the following findings: The applicant has demonstrated a hardship based on the Town of Falmouth's decision not to allow students from Mashpee after September, 1996, placing a severe time constraint on the Town to complete a site selection, permitting and construction process for Mashpee's first public high school within a very short time frame; numerous constraints in siting a public high school; the design and permitting of the high school at the Route 151/Old Barnstable Road location was constrained by the need to protect very sensitive environmental resources. The Town of Mashpee has made a significant capital investment in securing the currently proposed site including provisions to protect these environmental resources; the high school is a publicly financed project which imposes constraints on the school's ability to currently commit to off-site improvements such as traffic mitigation.

Barnstable County Assembly of Delegates Ordinance No. 94-12, Section 3(c) allows for the Commission to waive application of Minimum Performance Standards where the project complies, to the maximum extent feasible, with the Minimum Performance Standards and where any relief granted from the requirements of the Minimum Performance Standards are directly related to the nature of the identified hardship and is the minimum relief necessary to address the hardship. Any relief granted shall not nullify or substantially derogate from the intent and purposes of the Act, and shall not result in a substantial detriment to the public good. The Commission concludes that the project will not result in a substantial detriment to the public good or derogate from the intent and purposes of the Act provided the following conditions are met:

General

1. The plans as submitted and listed in this decision, as modified by the following conditions, shall become part of the written decision and any changes shall be approved by the Cape Cod Commission or its designee.

2. The applicant shall obtain a Certificate of Compliance from the Cape Cod Commission or its designee before the local official responsible for issuing Certificates of Occupancy may issue a permanent or temporary Certificate of Occupancy for any portion of the proposed project. All conditions attached to this decision, unless otherwise indicated, must be met prior to the issuance of a Certificate of Compliance from the Cape Cod

Commission.

3. The applicant shall obtain all necessary State and local permits for the project.

Water Resources

1. The Town of Mashpee shall actively participate in the preparation and implementation of a study for determining nitrogen management strategies for Waquoit Bay.
2. The High School shall have a wastewater treatment plant with denitrifying capabilities. The treatment plant shall be managed and operated to minimize the total nitrogen concentration in the effluent. The operators of the plant shall strive to consistently achieve a total nitrogen effluent concentration of 5 parts per million or lower. Chlorination shall not be used as the effluent disinfectant process. The hydrogeologic study of the site shall be submitted to the Commission upon its completion.
3. Turf areas on the high school site shall be managed to minimize potential impacts of fertilizers and pesticides on the groundwater. This management shall be in a manner consistent with the turf management plan described in the Draft Environmental Impact Report.
4. If an irrigation well is installed on the high school site, the well shall be operated such that water levels in the Quashnet River do not interfere with the productive utilization of the river by the brown trout and herring fisheries.
5. The stormwater system shall be maintained on a regular basis as described in Section 4 of the Final Environmental Impact Report.

Natural Resources

1. The applicant shall provide a 500-foot buffer to the Quashnet River as delineated on the site plan dated December 22, 1994 as permanent open space by placing a Conservation Restriction on said area as specified in the Mashpee May, 1995 Town Meeting Article #24. Prior to the issuance of a Certificate of Compliance, a copy of the executed restriction shall be submitted to the Commission.

Hazardous Materials/Waste

1. The school shall make every effort to minimize the amount of hazardous materials and hazardous waste used, handled, generated or stored on the school site at any time.
2. The school shall investigate the possibility of using alternatives to hazardous materials used in the operation of the school, maintenance of the grounds and operation of the on-site waste water treatment plant.
3. The school shall implement a micro-scaling chemistry program.
4. The operations/maintenance program and/or emergency response plan for the school facility shall include components specific to safety and emergency response awareness for students, school faculty and staff in connection with the micro-scaling chemistry program and darkroom facility. This program and/or plan shall include a requirement for labels on all hazardous materials stating the date and person ordering these materials.
5. Any hazardous waste generated by the operation of the darkroom facility shall be handled and managed by trained personnel and removed by a licensed hazardous waste transporter.
6. The school shall register as a user of hazardous materials with the local health department and the Barnstable County Hazardous Materials Users program.

7. Upon completion of the first full school year occupancy, the school shall submit a report to the Cape Cod Commission which details the methods by which the school has complied with the above conditions specific to hazardous materials and wastes management. This report shall also address any local or state permits or requirements met within the areas of hazardous materials or waste management.

Transportation

1. Compliance with all conditions below which refer to design or construction shall be shown on conceptual plans to be submitted to the Commission for approval.

2. Prior to the issuance of a Certificate of Compliance, the applicant shall:

- 1) ensure the design and construction of improvements to the Old Barnstable Road south leg as shown in the DEIR.
- 2) ensure the design of overall intersection improvements identified in the DEIR to the Route 151/Old Barnstable Road intersection.

3. The Town of Mashpee shall pursue funding for improvements identified in the FEIR for the following intersections:

- Lowell Road/Great Neck Road North
- Route 151/Job's Fishing Road

4. Prior to the issuance of a Certificate of Compliance, the applicant shall construct the bicycle/pedestrian path as shown on the site plan dated December 22, 1994 from the school buildings to the Old Barnstable Road/Route 151 intersection.

5. Prior to the issuance of a Certificate of Compliance, the Town shall submit for approval to the Commission a conceptual plan which illustrates proposed bicycle/pedestrian path from the school buildings to the Old Barnstable Road/School access drive intersection. Within one year of the issuance of a Certificate of Compliance, construction of bicycle/pedestrian improvements shall be completed.

6. The school shall perform site drive automatic traffic recorder counts for a period of one school week (Monday - Friday) on an annual basis. Dates selected shall coincide with a "normal" school week. The average two-way traffic volumes of the five 24-hour periods shall define the site's "Average Daily Traffic."

7. The school shall develop and provide informational materials to students and faculty on the purpose and benefits of ride-sharing. These materials shall include information relating to both car-pooling and drop-off trips.

8. The high school shall utilize signage and pavement markings to segregate parking into distinct areas: handicapped, visitor, faculty carpool, faculty, student carpool, and student. The high school shall issue and require permits for the above categories (except for handicapped). The supply of permits for each year shall be restricted based on the results of the previous year's monitoring program. The restriction shall be based on the following formula:

$$\begin{aligned} &\text{Maximum \# of Permits to be Issued} \\ &= \text{Prior Year \# of Permits} \times (\text{Average Daily Traffic} / 1076) \end{aligned}$$

9. The high school shall be limited to a total of 300 parking spaces as shown on plans submitted in the DEIR.

The Commission hereby grants the Mashpee High School Building Committee an approval with conditions as a Development of Regional Impact Hardship Exemption pursuant to Section 23 of the Act for the proposed Mashpee High School in Mashpee, MA.

Ken Brock
Ken Brock, chair

5/16/95
Date

Commonwealth of Massachusetts

Barnstable, ss.

Subscribed and sworn to before me this 16th day of May 1995

Katharine G Peters
Name, Notary Public

My commission expires: