

DEVAL L. PATRICK Governor

TIMOTHY P. MURRAY Lieutenant Governor

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

IAN A. BOWLES Secretary

LAURIE BURT Commissioner

April 11, 2008

Mr. Thomas Ennis Senior Project Manager Economic Planning & Development Massachusetts Port Authority One Harborside Drive East Boston, MA 02128

RE: Wetland Variance Decision L.G. Hanscom Field Runway 5/23 Safety Area Improvements DEP File No. 103-0635

Dear Mr. Ennis:

Please find enclosed this Department's decision on your request for a Variance from the Wetlands Protection Act for Runway 5/23 Safety Area Improvements at the L.G. Hanscom Field in Bedford, MA. Following a thorough review of the project, I find that the project has an overriding public interest because it will improve the safety at the L.G. Hanscom Field by the construction of Runway Safety Areas in compliance with Federal Aviation Administration standards. I also find that the project design as conditioned, represents the most reasonable alternative that achieves the project objective while minimizing and mitigating wetland resource impacts. Finally, mitigating measures are proposed and the project is conditioned to contribute to the protection of the interests identified in M.G.L. c.131, s. 40 including wetland compensation and stormwater management measures.

Sincerely.

Laurie Burt Commissioner Enclosure: Variance Decision

L.G. Hanscom Field Runway 5/23 Safety Area Improvements

DEP File No. 103-0635

Mr. Thomas Ennis Senior Project Manager Economic Planning & Development Massachusetts Port Authority One Harborside Drive East Boston, MA 02128

Copies to:

Mr. Thomas Ennis Senior Project Manager Economic Planning & Development Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 (Via certified mail)

La Verne F. Ried, Manager Airports Division, New England Region Federal Aviation Administration 12 New England Executive Park Burlington, MA 01803

Jeanne K. Krieger, Chairman Office of Selectmen Town of Lexington 1625 Massachusetts Avenue Lexington, MA 02420

Julian Bussgang/Richard Canale, Co-Chairs Hanscom Area Towns Committee (HATS) Office of Selectmen Town of Lexington 1625 Massachusetts Avenue Lexington, MA 02420

Jed Merrow McFarland-Johnson, Inc. 53 Regional Drive Concord, NH 03301 Jonathan S. Klavens, Esq. Klavens Law Group, P.C. 137 Newbury Street, Suite 600 Boston, MA 02116

Anna West Winter Executive Director Save Our Heritage 57 Main Street Concord, MA 01742

Elizabeth Bagdonas Conservation Administrator Bedford Conservation Commission Town of Bedford, Town Hall 10 Mudge Way Bedford, MA 01730-2144

Margareta Lidskog 60 Quail Run Drive Concord, MA 01742-2750

Rick Dunn, MassDEP Division of Watershed Management

Rachel Freed, MassDEP Northeast Regional Office

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ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

IAN A. BOWLES Secretary

LAURIE BURT Commissioner

April 11, 2008

In the Matter of:

L.G. Hanscom Airport Bedford, Massachusetts Runway 5/23 Safety Area Improvement Project

Wetland Variance Decision
L.G. Hanscom Airport
Runway 5/23 Safety Area Improvement
Bedford, Massachusetts (File No. 103-0635)

DECISION ON REQUEST FOR VARIANCE

A. PROJECT DESCRIPTION

The Massachusetts Port Authority ("Applicant") is proposing improvements to existing Runway Safety Areas ("RSA") situated at the end of Runway 5/23 of the L.G. Hanscom Airport ("Airport"). The Airport is located in Bedford, Middlesex County, Massachusetts ("Site"). The Applicant proposes additional safety improvements at the Site, including relocation of portions of the Airport's perimeter access road and perimeter security fence, (collectively, the "Project"). Applicant states in its application that the Project "will not affect runway operations or types of aircraft that can use the runway, and there will be no runway expansion, no additional pavement, and no increase in airfield capacity."

¹ Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Page 1-1, Section 1.1.

The Airport, which has been in operation at the Site since the 1940's, is owned and operated by Applicant. It is listed under the National Plan of Integrated Airport Systems as a primary and commercial service airport. The Airport serves approximately four hundred (400) based aircraft, numerous corporate aircraft users, two (2) Fixed Base Operators, and commercial service provided by Boston-Maine Airways.²

The Airport is proximate to several wetlands systems, and lies entirely within the Shawsheen River watershed. Four (4) perennial streams flow through the Site, specifically, (i) the Shawsheen River, flowing north to south in the approach area to Runway 29; (ii) the Elm Brook, flowing from south to north in the approach area to Runway 11; (iii) the Kiln Brook, flowing east to west within the approach area to Runway 29; and Hartwell Brook flowing east to west near the north end of Runway 23³ flowing east to west by Runway 23. There are Bordering Vegetated Wetlands, 310 CMR 10.55 ("BVW") located near Runway End 23 that are the headwater wetlands to Hartwell Brook, located north of the Runway End 23.⁴ Areas of BVW exist in the vicinity of the work proposed at Runway End 23.

Runway 5/23 is situated with Runway End 23 at the northeastern end of the Airport in the Town of Bedford. Runway End 5 is located at the southwestern end of the Airport in the Town of Concord. The work proposed for Runway End 23 is within the jurisdiction of the Wetlands Protection Act, M.G.L. c. 131, sec. 40 ("Act"). The work being proposed for Runway End 5 is not within the jurisdiction of the Act.

The Federal Aviation Administration ("FAA") defines an RSA as "a defined surface surrounding the runway prepared for reducing the risk of damage to airplanes in the event of an undershoot (aircraft landing short of the runway), overshoot (aircraft landing on the runway but not able to stop on the runway) or excursion from the runway (aircraft moving off the runway to the right or left." Design requirements for the Airport's RSAs are based on the Airport Reference Code ("ARC"). The ARC includes two (2) components, the first being approach category (speed), and the second being the airplane design group (wingspan). Based on these factors, the FAA established safety design criteria defining the size and shape of the RSA for a C-III ARC, specifically, the RSA should be five hundred (500) feet wide and one thousand (1000) feet long beyond each end of runway.

² Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Page 1-1, Section 1.1.

identified as unnamed brook in MassDEP's <u>Draft Total Maximum Daily Load for Headwaters of the Shawsheen River</u> dated June 9, 2003 (DEP DWM TMDL Report MA83-08-2003-01)

⁴Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Page 4-2 to 4-6, Section 4.2.2.

⁵ Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Page 1-5, Section 1.3

⁶ Ibid, Attachment C Page 1-1, Section 1.2. For Runway 5/23, the Gulfstream V (G-V) was identified as the design aircraft with approach speed of 136 knots and wingspan of 93.5 feet, the G-V has an ARC of C-III.

AC 150/5300-13, 'Airport Design', requires that the RSA shall be:

^{1.} Cleared and graded and have no potentially hazardous ruts, humps, depressions or other surface variations;

The Airport does not meet the FAA's design standards for surfaces and RSAs⁸ because Runway 23 End is three hundred (300) feet wide and eight hundred ninety (890) feet long. The Applicant states that the FAA's national RSA program, established in 1999, requires Applicant to undertake the proposed improvements to the Airport RSAs.⁹ Applicant states that construction of RSAs meeting FAA design standards will increase the safety of the air-traveling public by decreasing the likelihood of aircraft accidents and potential passenger injuries/fatalities. Applicant further states that providing more stabilized ground surfaces will improve and expedite safety area access by aircraft rescue and fire fighting equipment. ¹⁰ To address runway and RSA deficiencies, Applicant proposes to reconstruct Runway 23 by maintaining the current dimensions of the runway and increasing the dimensions of Runway 23 End such that the RSA will measure five (500) feet wide by eight hundred ninety (890) feet long.

No change is proposed to the paved portion of the overrun area. The existing three hundred (300) foot wide turfed area of the RSA only requires minor regrading to meet the FAA standards. The area between the three hundred (300) foot wide RSA limits and the proposed five hundred (500) foot wide RSA limits does not meet FAA standards and is proposed to be re-graded. BVW in this area will be filled with soils capable of supporting aircraft and snow removal and emergency equipment.

Approximately 92,108 square feet (s.f.) (2.11 acres) of permanent BVW alteration and 21,030 s.f. (0.48 acres) of temporary BVW alteration are proposed in the construction of the Project. Since the Project will impact greater than five thousand (5000) s.f. of BVW, it exceeds the 5000 s.f. limit for loss of BVW established under 310 CMR 10.54 (4) of the Wetlands Regulations, 310 CMR 10.00 ("Regulations"). Consequently, as the Project cannot meet the limit for BVW loss under the Regulations, Applicant seeks a Variance for the Project from the provisions of 310 CMR 10.55(4) of the Regulations.

Two (2) BVW compensation sites are proposed adjacent to and in the vicinity of the proposed BVW impact areas. BVW Compensation Site 1 and BVW Compensation Site 2 total 3.8-acres in area which constitute a 1.8:1 ratio of replacement of permanent BVW alterations on the Site. BVW to be temporarily altered will be restored in place and as such is not included in the replacement ratio.

4. Free of objects, except for objects that need to be located in the runway safety area because of their function. Per AC 150/5300-13, design requirements for C-III ARC RSA's are defined.

^{2.} Drained by grading or storm sewers to prevent water accumulation;

^{3.} Capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and occasional passage of aircraft without causing structural damage to the aircraft; and

⁸ FAA standards for surfaces are in 14 CFR Part 77. FAA standards for RSAs are in Advisory Circular 150/5300-13 (Airport Design)

⁹ Guidelines are presented in FAA Order 5200.8 Runway Safety Area Program and cited in Request for Variance Under the Massachusetts Wetlands Protection Act Regulations Runway 5/23 Safety Area Improvements submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Page 1-5, Section 1.3.

¹⁰ Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C page 1-5 Section 1.3

The Project also requires permanent alteration of sixty (60) linear feet of Bank, 310 CMR 10.54, of a stream located at the Runway 23 End, and the temporary alteration of five hundred fifteen (515) linear feet of Bank of the same stream as part of BVW Compensation Site 2. All proposed work is outside of the two hundred (200) foot Riverfront Area ("RA"), 310 CMR 10.58. The work proposed at Runway 23 End will not impact Bordering Lands Subject to Flooding, 310 CMR 10.57 ("BLSF"). While construction of BVW Compensation Site 1 is adjacent to BLSF at Elevation 123 feet NGVD, it will not result in loss of BLSF.

Applicant has conducted a detailed Wildlife Habitat Evaluation that concludes that the Project will have no adverse effect on wildlife habitat. The Massachusetts Natural Heritage Program ("MNHESP") has documented that "this project, as currently proposed, will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species." It is the opinion of the Massachusetts Department of Environmental Protection ("MassDEP"), pursuant to the provisions of 310 CMR 10.59 which in part read, "A written opinion of the Natural Heritage and Endangered Species Program on whether or not a proposed project will have such an adverse effect shall be presumed by the issuing authority to be correct" that the Project meets the statelisted species performance standard for the issuance of an Order of Conditions. ¹²

310 CMR 10.05(6)(b) requires stormwater to be managed according to standards established by the Department in its Stormwater Policy. Applicant provided documentation addressing stormwater management.¹³

The Draft Stormwater Pollutant TMDL referenced in Footnote 3 and the MassDEP Bacteria TMDL for the Shawsheen River Basin, dated August, 2002 (DEP DWM TMDL Report MA83-01-2002-24) identify waters receiving runoff from the Airport as impaired from stormwater runoff. The Draft TMDL proposed a 50% reduction in stormwater pollutant loading from the Airport and a surrogate hydrologic target to meet to normalized flow duration statistics of the reference site (Elm Brook) for flow. The bacteria TMDL contains bacteria limits and percent reductions needed to meet state Water Quality Standards.

B. <u>REGULATORY STANDARDS FOR A VARIANCE</u>

Due to the BVW impacts described above, the Project does not meet the performance standard for BVW established under 310 CMR 10.55(4) (b). As a result, the Project requires a variance from 310 CMR 10.55(4)(b).

The procedures and standards for obtaining a Variance from the Regulations are established under 310 CMR 10.05(10). As provided under 310 CMR 10.05 (10)(a):

¹¹ Ibid; Attachment C Page 5-5, Section 5.1.2.3

¹³ Ibid; Attachment C Page 7-4 to 7-8; Appendix C.

¹² Ibid; Letter from Thomas W. French of the Division of Fish & Wildlife to the Bedford Conservation Commission dated August 1, 2007. Appendix B

¹⁴ 310 CMR 10.55(4)(b) limits BVW impacts to less than 5000 square feet and requires compliance with the specific performance standards contained in this section.

The Commissioner may waive the application of any regulation(s) in 310 CMR 10.21 through 10.60 when he finds that:

- (1) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60
- (2) that mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in M.G.L. c. 131, § 40; and
- (3) that the variance is necessary to accommodate an overriding community, regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking without compensation.

As provided in the Commentary section of 310 CMR 10.05(10), the waiver of these provisions of the Regulations by the Commissioner of MassDEP is intended to be employed only in rare and unusual circumstances. The following sections discuss each of the above conditions and demonstrate that these conditions are being met for this important Project.

C. DISCUSSION AND FINDINGS ON THE REQUEST FOR A VARIANCE

1. Overriding Public Interest

The overriding public interest of the Project is to improve runway safety at the Airport by complying with FAA criteria pertaining to airport design. ¹⁵ Applicant has documented that construction of RSAs at airports is a priority of FAA. ¹⁶ The objective of the program is to bring RSAs at airports such as the Airport into compliance with applicable FAA design standards to the extent practicable.

Applicant proposes to correct existing RSA deficiencies at the Airport to achieve compliance with FAA standards. As described in its application, ¹⁷ Runway End 23 fails to meet RSA criteria ¹⁸ since the RSA is only three hundred (300) feet wide and eight hundred ninety (890) feet long. FAA design requirements call for an RSA that is five hundred (500) feet wide and one thousand (1000) feet long. Thus, the correction of these deficiencies and resulting enhancement of safety is the primary goal of this project.

In light of these documented inadequacies, Applicant has demonstrated that the RSA at Runway End 23 of the Airport constitutes a public safety concern. RSAs are critical features of airport runways since they are designed to reduce the risk of damage to airplanes and loss of life in the

¹⁵ FAA standards for surfaces are in 14 CFR Part 77. FAA standards for RSAs are in Advisory Circular 150/5300-13 (Airport Design). Guidelines are presented in FAA Order 5200.8 Runway Safety Area Program.

¹⁶ Request for Variance Under the Massachusetts Wetlands Protection Act Regulations Runway 5/23 Safety Area Improvements submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Section 1.3, Page 1-5.

¹⁷ Ibid

¹⁸ Ibid; Attachment C Section 1.2, Page 1-4

event of an undershoot, overshoot, or excursion from the runway. Therefore, I find the Project is one of overriding public interest in that the project purpose is to address documented aviation deficiencies essential for meeting FAA airport safety standards.

2. Reasonable Alternatives

In designing the Project, a number of alternatives were evaluated in order to comply with the Massachusetts Environmental Policy Act ("MEPA"), National Environmental Policy Act ("NEPA") and the Act and Regulations. ¹⁹ Alternatives were also designed with consideration of FAA criteria for RSAs. ²⁰ The alternatives proposed in this *Request for Variance* were documented in a 2001 feasibility study, ²¹ and incorporated into the MEPA/NEPA process and this variance request.

The runway alternatives considered included the following: Alternative 1 ("No Build")maintain existing RSA in current configuration at three hundred (300) feet wide by eight hundred ninety (890) feet long; Alternative 2 ("Full Build") - Improve Runway End 23 RSA to FAA standards of five hundred (500) feet wide by one thousand (1000) feet long including access road relocation; Alternative 3 ("Partial Build") - Improve Runway End 23 to five hundred (500) feet wide by one thousand (1000) feet long without relocating the access road at the end of the runway-partial relocation of access road on east side of runway. Alternative 4 ("Improve Existing") - Maintain Runway End 23 at length of eight hundred ninety (890) feet but widen to five hundred (500) feet, including the partial relocation of access road on east side (the Preferred Alternative); Alternative 5 ("Declared Distances") – use declared distances on Runway End 23 and displace existing land threshold by one hundred ten (110) feet southward to meet landing criteria; Alternative 6 ("Runway Shift")- Shift Runway 5/23 northward by one hundred eightyfive (185) feet to provide RSA's of seven hundred five (705) feet by five hundred (500) feet wide at both ends; Alternative 7 ("EMAS") – Construct an EMAS²² arrestor bed one hundred sixty (160) feet long by one hundred sixty eight (168) feet wide, beginning approximately seven hundred (700) feet from the runway end. The arrestor bed would require a payed area eight hundred ninety (890) feet long and two hundred (200) feet wide, with a standard safety area width of five hundred (500) feet.

¹⁹ Ibid; Certificate on Final Environmental Impact Report (FEIR) issued by MEPA on March 15, 2007 and Department of Transportation Federal Aviation Administration Finding of No Significant Impact dated January 29, 2007, both in Attachment A and Attachment C, Section 2.

²⁰ FAA design criteria in AC150/5300-13 state that RSAs shall: be cleared and graded and have no potentially hazardous ruts, humps, depressions or other surface variations; be drained by grading or storm sewers to prevent water accumulation; be capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and occasional passage of aircraft without causing structural damage to the aircraft; and be free of objects.

²¹ Request for Variance Under the Massachusetts Wetlands Protection Act Regulations Runway 5/23 Safety Area Improvements submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C Section 1.3, Page 1-5. Entitled, Runway 5/23 Safety Area Supplementary Feasibility Analysis, this study was a follow up to a feasibility study done in 1999 by Massport recommending the "No-Build" Alternative. FAA rejected this recommendation and required the supplemental analysis. FAA accepted the supplemental analysis in a letter dated March 29, 2002.

supplemental analysis in a letter dated March 29, 2002.

22 Ibid; Attachment C Section 2.1, Page 2-6.EMAS is composed of cellular cement material that crushes under the weight of an aircraft to provide controlled deceleration in the event of an aircraft overrun, and is considered in situations where RSA design requirements are difficult to meet- such as sites with environmental constraints.

The existing RSA at the Airport is three hundred (300) feet wide by eight hundred ninety (890) feet long. Applicant has documented that improvements to Runway End 23 RSA would not only meet FAA requirements to the maximum extent practicable, but would also increase the safety of the traveling public.²³

Alternative 1, the No-Build alternative, would have no direct BVW or intermittent stream impacts but was dismissed since it would not meet the project purpose of bringing the Airport into compliance with the FAA requirements for RSAs. Alternative 2, the Full Build alternative, would have 3.4 acres of permanent wetlands impact, the greatest wetlands impact of all alternatives. Alternative No. 3, the Partial Build alternative, would have 2.1 acres of permanent wetlands impact and would fully meet FAA RSA design requirements. The preferred Alternative 4, the Improve Existing alternative, would also have 2.1 acres of permanent wetlands impact, but would be less costly than Alternative 3. Alternative 5, the Declared Distance alternative, has 2.1 acres of permanent wetlands impact but is discouraged by the FAA because declared distances can adversely affect aircraft performance. Alternative 6, the Runway Shift alternative, has 2.1 acres of permanent wetlands impact but, along with Alternative 5, would not be desirable due to increased tree penetrations of approach surfaces to Bedford Town Forest north of Runway End 23. Alternative 7, the EMAS alternative, also has 2.1 acres of permanent wetlands impact but Applicant has documented that this alternative would be substantially more costly than other alternatives, with additional maintenance and replacement costs.²⁴

In response to public comments on the applicability of FAA Order 5200.9 to provide flexibility in the above alternative analysis, MassDEP requested clarification from the FAA. The FAA responded as follows: "Order 5200.9 is not applicable to the runway safety area project at Hanscom because the runway safety areas (RSAs) for both runway ends do not meet the standard of 500' by 1000'. Order 5200.9 does not provide flexibility. Order 5200.9 requires that EMAS be considered if a standard RSA is met. If a standard RSA is not met (like at Hanscom) then Order 5200.8 is applicable."

As a result of this alternatives analysis, I find that Alternative No. 4 improves existing RSA dimensions, meets Project objectives to the maximum extent practicable while minimizing wetland impacts relative to available alternatives, and represents the most reasonable alternative to meet Project objectives. All other project alternatives resulted in greater BVW impacts, were not desirable for airport operations, or were more costly. As a result, I find that no other reasonable alternative exists which allows the Project to proceed in compliance with the Regulations.

3. Mitigation

Mitigation for the Project's impacts includes 3.8 acres of BVW replacement area at two (2) locations on the Site²⁵ and compliance with stormwater runoff requirements.²⁶ BVW

²³ Ibid: Attachment C Section 1.3, Page 1-5.

²⁴ Ibid; Attachment C, Section 2.2.2., Page 2-12.

²⁵ Creation of a 3.8 acres BVW replication area is in compliance with 310 CMR 10.55(4)(b).

Compensation Site 1 is located north of Runway End 11 and is listed in the Massachusetts Wetland Restoration Program's *Final Shawsheen River Watershed Wetlands Restoration Plan* as a "high priority" restoration site. BVW Compensation Site 2 is located adjacent to the proposed Runway End 23 Safety Area

Together, the two (2) BVW compensation sites provide a replacement to impact ratio of 1.8 to 1. Detailed design plans have been submitted to describe how the replacement sites will be constructed, planted and monitored. Both wetland compensation sites will be planted with a mixture of shrubs and herbaceous plant species. Enhancement such as snags and turtle nesting areas will be designed at BVW Compensation Site 1 to improve the site as wildlife habitat. Given its close proximity to Runway End 23, BVW Compensation Site 2 does not include standing water that would attract waterfowl creating hazardous conditions for aircraft and compromise airport safety. Recommendations for controlling invasive species are also proposed. Applicant has submitted a detailed wildlife habitat evaluation and finding that the Project will have no adverse effect on wildlife habitat. MassDEP concurs with this finding and thus a variance is not required for the sixty (60) linear feet of Bank alteration.

310 CMR 10.05(6)(b) of the Regulations (March 11, 2005) requires stormwater to "be managed according to standards established by the Department in its Stormwater Policy to prevent unmanaged stormwater from altering wetlands. The proposed improvements to the Airport described are considered "redevelopment" pursuant to MassDEP's Stormwater Management Policy³⁰ Standard Seven (7) because no net increase in impervious surfaces are proposed. Projects that qualify as redevelopment are required to comply with the nine (9) Stormwater Management Policy standards to the "maximum extent practicable." Maximum extent practicable" means the Applicant has made all reasonable efforts to meet the [stormwater] standards, including evaluation of alternative BMP designs and their locations."³¹

The stormwater runoff from the Airport was specifically identified as impairing the surrounding wetland resource areas.³² Reducing runoff to reduce contaminant loading to the adjacent wetlands dovetails with Stormwater Standards Two (2), Three (3), and Four (4) which require peak rate attenuation, recharge, and water quality treatment. It also dovetails with Stormwater Standard Five (5) which requires Airport uses, defined as Areas of Higher Potential Pollutant

²⁶ The Stormwater standards were revised and promulgated as regulations on January 2, 2008. However, stormwater requirements are based on the filing date of the Notice of Intent with the Conservation Commission, and for this project are detailed in MassDEP's Stormwater Management Policy dated November 18, 1996 and associated Stormwater Technical Handbooks dated March 1997.

²⁷ See Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety</u> <u>Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 – November 2007; Attachment C, Section 6.4.

²⁸ Ibid; Attachment C, Section 6.6, Pages 6-25 to 6-27.

²⁹ Ibid; Attachment C, Section 5.1.2.3, Page 5-5.

³⁰ Stormwater Management Policy (November 18, 1996) and Stormwater Technical Hanbooks (March 1997).

³¹ MassDEP Stormwater Management Policy, March 1997, Footnote 6, page 1-4.

³² See MassDEP 303(d) list of impaired waters, MassDEP <u>Draft Total Maximum Daily Load for Headwaters of the Shawsheen River</u> dated June 9, 2003 (DEP DWM TMDL Report MA83-08-2003-01) and <u>Bacteria TMDL for the Shawsheen River Basin</u>, dated August, 2002 (DEP DWM TMDL Report MA83-01-2002-24).

Loads ("AHPPL"), to implement pollution prevention measures and structural Best Management Practices ("BMPs") to reduce contaminated stormwater discharged to wetlands.

Although the Stormwater Standards need only be met to the maximum extent practicable, the TMDL or Category 4B alternatives need to be fully met. Otherwise, no stormwater discharges are permissible as provided by the anti-degradation provisions since the waters and wetlands at Hanscom are listed as impaired on the state's 303(d) list.

In response to MassDEP's request for additional documentation³³ to confirm compliance with stormwater requirements, Applicant provided limited information. Therefore, MassDEP has conditioned this Variance to require compliance with the applicable Stormwater Standards to the maximum extent practicable. If these Special Condition cannot be fully met due to geotechnical constraints or FAA requirements, the Conditions allow written information to be submitted to MassDEP detailing the specific geotechnical constraints (including boring logs), specific FAA requirements, and the exact peak rate reduction, recharge, and water quality treatment from existing conditions that can be achieved. The TMDL requirements are conditioned to be fully met, from the stormwater runoff associated with the work at Runway End 23.³⁴ Requirements will also be included in the required 401 Water Quality Certification to achieve compliance with the stormwater standards, including TMDL or any similar requirements.

As a result of the mitigation measures proposed, as supplemented by the special conditions of this Variance Decision pertaining to stormwater controls, I find that the Project is conditioned so as to contribute to the protection of the interests of the Act.

C. CONCLUSION

For the reasons discussed herein, I find that: 1) Applicant has demonstrated that the Project as proposed, and as conditioned under this Variance Decision, will contribute to the protection of the interests of the Act; 2) justification for the Project has been established by the documented overriding public interest of the Project; 3) when the amount of wetland resource impacts from the Project is balanced against those of other alternatives, the Project represents the only reasonable alternative to achieve the project purpose; 4) Applicant has presented a comprehensive mitigation plan that will adequately protect the interests of the Act by replicating BVW with enhancements for wildlife habitat; and 5) the special conditions pertaining to stormwater improvements will ensure compliance with the Stormwater Standards and protect the interests of the Act.

FINDINGS PURSUANT TO M.G.L. CH. 30, SEC. 61

The environmental impacts from the Project are described in this Variance Decision. The Project will result in impact to greater than one (1) acre of BVW and to stream Bank. Mitigation

³³ See: MassDEP requested additional information dated February 14, 2008

³⁴ Note that the Bacteria TMDL and Draft TMDLs for the Shawsheen Basin indicate that the existing stormwater runoff from Hanscom causes impairment to local waterbodies and wetlands. As part of the development of the final Stormwater control designs, Massport is required to ensure that the final design for this Project (Runway End 23) is consistent with the TMDL or Category 4B alternatives.

of project impacts as described in this Decision includes project alternatives that minimize wetland impacts and the design of adequate wetland compensation.

The Project incorporates all feasible means and measures to avoid and minimize adverse environmental impacts. This finding is only applicable to activities proposed for the above referenced file number before MassDEP. This finding does not relieve Applicant from complying with the special conditions of this Variance Decision or additional MEPA/NEPA requirements when applying for permits from other applicable departments or agencies.

F. APPEALS

Appeal Rights and Time Limits

Applicant, the landowner, any person aggrieved by this Variance Decision, who previously participated in the proceedings leading to this Variance Decision, the conservation commission, or any ten (10) residents of the city or town where the land is located if at least one (1) resident was previously a participant in the permit proceeding, are hereby notified of their right to appeal this Variance Decision pursuant to M.G.L. c.30A, § 10, provided the request is made by certified mail or hand delivery to MassDEP, along with the appropriate filing fee and a MassDEP Fee Transmittal Form within ten (10) business days of the date of issuance of this Variance Decision, and addressed to:

Case Administrator
Office of Appeals and Dispute Resolution
Massachusetts Department of Environmental Protection
One Winter Street, 2nd Floor
Boston, MA 02108.

A copy of the request (hereinafter also referred to as Appeal Notice) shall at the same time be sent by certified mail or hand delivery to the Conservation Commission, the Applicant, the person that requested the Variance Decision, and the issuing office of MassDEP at:

Massachusetts Department of Environmental Protection Director of Wetlands and Waterways One Winter Street Boston, MA 02108

In the event that a ten resident group requested review of this Variance Decision, the Appeal Notice shall be served on the designated representative of the ten (10) resident group, whose name and contact information is included in this Variance Decision (when relevant).

Contents of Appeal Notice

An Appeal Notice shall comply with the Department's Rules for Adjudicatory Proceedings, 310 CMR 1.01(6) and 310 CMR 10.05(7)(j), and shall contain the following information:

(a) the MassDEP Wetlands File Number, name of the Applicant, landowner if different from Applicant, and address of the project;

- (b) the complete name, mailing address, email address, and fax and telephone numbers of the party filing the Appeal Notice; if represented by consultant or counsel, the name, fax and telephone numbers, email address, and mailing address of the representative; if a ten residents group, the same information for the group's designated representative;
- (c) if the Appeal Notice is filed by a ten (10) resident group, then a demonstration of participation by at least one resident in the previous proceedings that led to this Variance Decision;
- if the Appeal Notice is filed by an aggrieved person, then a demonstration of participation in the previous proceeding that lead to this Variance Decision and sufficient written facts to demonstrate status as a person aggrieved;

(e) the names, telephone and fax numbers, email addresses, and mailing addresses of all other interested parties, if known;

- (f) a clear and concise statement of the alleged errors contained in the Department's decision and how each alleged error in inconsistent with 310 CMR 10.00 and does not contribute to the protection of the interests identified in the Wetlands Protection Act, M.G.L. c.131, § 40, including reference to the statutory or regulatory provisions that the party filing the Appeal Notice alleges has been violated by the Department's Decision, and the relief sought, including any specific desired changes to the Department's decision;
- (g) a copy of the Department's Variance Decision that is being appealed and a copy of the underlying Conservation Commission decision if the Variance Decision affirms the Conservation Commission decision;
- (h) a statement that a copy of the request has been sent by certified mail or hand delivery to the Applicant and the conservation commission; and
- (i) if asserting a matter that is Major and Complex, as defined at 310 CMR 10.04(1), a statement requesting that the Presiding Officer make a designation of Major and Complex, with specific reasons supporting the request.

Filing Fee and Address

A copy of the Appeal Notice along with a MassDEP Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts Department of Environmental Protection Commonwealth Master Lockbox P.O. Box 4062 Boston, Massachusetts 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A

person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Laurie Burt,

Commissioner

Service List

Mr. Thomas W. Ennis Senior Project Manager/Senior Planner Economic Planning and Development Massachusetts Port Authority One Harborside Drive, Suite 200S East Boston, MA 02128-2909

La Verne F. Ried, Manager Airports Division, New England Region Federal Aviation Administration 12 New England Executive Park Burlington, MA 01803

Jeanne K. Krieger, Chairman Office of Selectmen Town of Lexington 1625 Massachusetts Avenue Lexington, MA 02420

Julian Bussgang/Richard Canale, Co-Chairs Hanscom Area Towns Committee (HATS) Office of Selectmen Town of Lexington 1625 Massachusetts Avenue Lexington, MA 02420

Jed Merrow McFarland-Johnson, Inc. 53 Regional Drive Concord, NH 03301

Jonathan S. Klavens, Esq. Klavens Law Group, P.C. 137 Newbury Street, Suite 600 Boston, MA 02116

Anna West Winter Executive Director Save Our Heritage 57 Main Street Concord, MA 01742

Elizabeth Bagdonas Conservation Administrator Bedford Conservation Commission Town of Bedford, Town Hall 10 Mudge Way Bedford, MA 01730-2144

Margareta Lidskog 60 Quail Run Drive Concord, MA 01742-2750

Rick Dunn, MassDEP Division of Watershed Management

Rachel Freed, MassDEP Northeast Regional Office

APPENDIX A

Procedural History

The Secretary of Environmental Affairs determined that the Final Environmental Impact Report ("FEIR") complied with MEPA and issued a Certificate on March 15, 2007. MassDEP reviewed the FEIR and submitted comments to MEPA dated March 8, 2007. The FAA accepted the Environmental Assessment under the NEPA and issued a Finding of No Significant Impact (FONSI) on January 29, 2007.

Several meetings/site visits were held over the past two (2) years, with representatives of Applicant, McFarland-Johnson, Inc. (Applicant's consultant), Wetlands & Wildlife, Inc. (also Applicant's consultant), and representatives from MassDEP's Boston and Northeast Region Wetlands Program. The site visits included an overview of the entire proposal as well as review of the specific locations of proposed wetland resource impacts and mitigation sites.

On May 31, 2007, a Notice of Intent ("NOI") was submitted to the Bedford Conservation Commission ("BCC") concerning the Airport Runway 5/23 Safety Area Improvement Project. The NOI described the Project impacts to resource areas and proposed mitigation measures for the Project.

The NOI also indicated that the Project would not be able to meet the performance standards set forth in 310 CMR 10.00 and that Applicant intended to seek a variance from the performance standards in accordance with 310 CMR 10.05(10).

Applicant took part in the required public hearing before the BCC at which Project impacts and mitigation were discussed. The public hearing on the NOI was closed on July 25, 2007.

The BCC denied the project via issuance of the Order of Conditions denial on August 17, 2007.

Within ten (10) business days from the date of issuance of the denial, Applicant appealed the denial to MassDEP's Northeast Regional Office in accordance with procedures for appeal at 310 CMR 10.05(7), and requested a Superseding Order of Conditions ("SOC"). November 6, 2007, the Department issued a SOC denying the Project.

Applicant's request for a Variance was filed with MassDEP on November 14, 2007. Supplemental information in support of the variance request was submitted as detailed in Appendix B.

The public notice was published in the *Bedford Minuteman* on December 6, 2007 and in the *Environmental Monitor*, a publication of the MEPA Unit on December 10, 2007. A public hearing was held on December 17, 2007 at the Civil Air Terminal Building at the Site. The comment period ended on January 14, 2008. Six (6) comment letters were received during the comment period. On February 14, 2008, MassDEP issued a request for response to comments regarding the variance application. Applicant submitted a response to the comments dated March 10, 2008 and received by MassDEP on March 12, 2008.

APPENDIX B

Preliminary Plans and other Documents Submitted as Part of this Variance

- Request for Variance Under the Massachusetts Wetlands Protection Act Regulations <u>Runway 5/23 Safety</u>
 <u>Area Improvements</u> submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA
 02128 November 2007 (i.e. Request for Variance)
- 2. Figures entitled Laurence G. Hanscom Field Runway 5/23 Safety Area Improvements:
 - 1-1 Location Map
 - 1-2 Project Site Locations
 - 2-1 Alternative 1 No Action Runway End 23
 - 2-2 Alternative 2 Full Build Runway End 23
 - 2-3 Alternative 3 Partial Improvements, Runway End 23
 - 2-4 Alternative 4 Improve Existing Runway End 23 (Preferred Alternative)
 - 2-5Alternative 5 Declared Distances, Runway End 23
 - 2-6 Alternative 6 Runway Shift Runway End 23
 - 3-1 Runway 23 Existing Conditions Plan
 - 3-2 Runway 23 Site Plan
 - 3-2 Runway 23 Proposed Improvements
 - 3-3 Runway 23 Site Plan
 - 3-4 Runway 23 Grading Plan
 - 4-1 Endangered or Threatened Species
 - 4-2 Limits of Recommended Grassland Management Area
 - 6-3 Wetland Compensation Site 1 Plan
 - 6-4 Wetland Compensation Site 2 Grading Plan
 - 6-5 Wetland Compensation Site 1 Planting Plan
 - 6-6 Wetland Compensation Site 2 Grading Plan
 - 6-7 Wetland Compensation Site 2 Planting Plan
 - 6-8 Wetland Compensation Sites 1 and 2 Planting Details
 - 6-9 Wetland Compensation Sites 1 and 2 Typical Sections
- 3. Wildlife Habitat Assessment Forms Appendix A Request for Variance
- 4. MA Natural Heritage & Endangered Species Correspondence Appendix B Request for Variance
- 5. Stormwater Pollution Prevention Plan Appendix C Request for Variance
- 6. Massport response to comments, letter from Thomas W. Ennis to Michael Stroman, Mass DEP dated March 10, 2008 and associated enclosures.
- 7. Email to Michael Stroman of MassDEP from Michelle Ricci of the Federal Aviation Administration dated March 25, 2008 regarding FAA Orders 5200.9 and 5200.8.
- Plan entitled, Massachusetts Port Authority Boston, Massachusetts Laurence G. Hanscom Field Bedford Massachusetts 2002-2004 Airfield Improvement Program Runway 5/23 Safety Area Improvements Compensation Site 1 Existing Conditions Site Plan Sheet No. 5 of 41 dated February 29, 2008 by McFarland Johnson.
- Five-Year Review Report Third Five-Year Review Report for Hanscom Field/Hanscom Air Force Base Superfund Site Bedford, Concord, Lexington, Lincoln, Middlesex County, Massachusetts August 2007; Prepared by 66th Mission Support Group/Civil Engineering Hanscom Air Force Base, Massachusetts.
- 10. Summary Third Five-Year Review Report Hanscom Field/Hanscom Air Force Base Superfund Site September 2007 by Wetlands & Wildlife, Inc.
- 11. Stormwater Pollution Prevention Plan for Massachusetts Port Authority at Laurence G. Hanscom Field January 31, 2000 Prepared by Environmental Management Unit Massachusetts Port Authority One Harborside Drive, East Boston MA 02128 [Includes Appendices]
- 12. MPA Contract Final Report L.G. Hanscom Field Runway 5-23 Safety Area Supplementary Feasibility Analysis. Submitted to: The Massachusetts Port Authority Capital Programs Department Boston-Logan International Airport Logan Office Center East Boston MA 02128 Submitted by: The Louis Berger Group Inc., Needham MA; HNTB Corporation, Boston MA.

VARIANCE SPECIAL CONDITIONS

- 1. This Variance regulates proposed activities in jurisdictional resource areas ("resource areas") and within the one hundred (100) foot buffer zone adjacent to said resource areas in connection with the Runway 5/23 Safety Area Improvements at the Airport ("Project") in the Town of Bedford pursuant to the Act. Final plans shall be submitted to the MassDEP Boston and its Northeast Regional Office and the BCC. Disturbance within wetland resource areas and the adjacent 100-foot buffer zone, including clearing and grubbing, may not proceed until the final plans are approved in writing by MassDEP and other pre-construction conditions are met as hereinafter set forth in Variance Special Conditions 6, 7, 8, 11, 15, 16, 31, 35, 36, 39, 40, and 41.
- 2. In the event of a conflict between the Variance Special Conditions contained in this Decision and the commitments described in Applicant's Request for Variance, the Special Conditions contained herein shall be controlling.
- 3. When changes are sought to any plans or to the conditions contained in this Variance, including changes to existing plans to comply with the Special Conditions contained herein, the proposed changes shall be shown on a revised plan or described in a table and provided for review and written approval to MassDEP prior to implementation. A copy shall be provided at the same time to the BCC. In seeking written approval for plan changes, Applicant must provide sufficient supporting information, explanation and documentation to MassDEP and the BCC, including detail on changes in impacts from previous submittals and the proposal for mitigation. MassDEP reserves the right to require an amendment to this Variance for major changes to the Project, taking into account the nature and/or relative magnitude of the change to the Project. In the event that MassDEP amends the Variance, only that portion of the Variance being amended may be appealed in accordance with the procedures of 310 CMR 10.00. Proposed amendment submissions shall include, at a minimum: a transmittal sheet; revised design sheets at a scale of at least 1:10 to 1:40 and a plan showing the original design at the same scale; and a table showing the original impacts for each resource area for this design/segment compared to the proposed revised design. In addition, a narrative shall be included describing the proposed modification and the reasons the modification is being sought; any additional or lessened impact to wetland resource areas; a discussion of all temporary impacts, including those associated with construction, stockpile areas, wheel wash stations and impacts related to the equipment being used; a construction sequence with approximate time periods for completing each task; site-specific erosion and sedimentation control strategy; effect of the revised design on MassDEP's Stormwater Standards; and at least one other alternative design that has been considered or is possible. Once all information is complete, the BCC shall have twenty-one (21) days for review and written comment to MassDEP on the submitted information. Whenever possible, Applicant is encouraged to discuss possible plan changes informally with the assigned MassDEP staff prior to submitting a written formal plan change request.

- 4. If Applicant proposes additional and permanent impacts to wetland resource areas and associated buffer zone beyond what has been identified in the plans referenced in this Variance, Applicant will be required to request an amendment and provide mitigation as part of the written submittal seeking such amendment. MassDEP may impose monitoring and reporting requirements associated with such additional replication/mitigation areas.
- 5. Any member of the BCC, or its agents, and MassDEP, or its agents, shall have the right to enter the Site and conduct site inspections throughout the land/wetland disturbance and construction process to evaluate compliance with the Special Conditions set forth in this Variance. Such visits may be scheduled with the Resident Engineer or other individual designated by Applicant. MassDEP may require Applicant to submit any additional or different plans, data, or mitigation deemed necessary by MassDEP relative to this Variance. Applicant and its Contractor shall respond in writing to all requests made by MassDEP within ten (10) business days, or sooner if directed to do so by MassDEP to comply with the terms of this Variance or to prevent potential environmental damage to resource areas. Applicant and/or its Contractor are encouraged to contact MassDEP or the BCC with any problems or questions that arise during construction.
- 6. Applicant shall employ an Environmental Monitor ("EM"). The EM shall have a minimum of five (5) years experience in wetlands protection, erosion and sedimentation control, monitoring and maintenance, site drainage and general site construction. The EM shall verify the placement and performance of erosion control measures and shall have the authority to halt construction for erosion control purposes or for other threats to public health, safety, or the environment. The name and phone number(s) of the EM and any assistant, if needed, shall be provided to MassDEP and the BCC so that s/he may be contacted on a twenty-four (24) hour basis, seven (7) days a week to address any emergency situation. The EM shall be authorized to contact MassDEP or the BCC directly for any matter involving wetland protection. The EM shall submit bi-weekly reports during active construction, and monthly reports during off-season to MassDEP Boston and it Northeast Regional Office and the BCC following the commencement of construction and continuing until completion of work in wetland resource areas and buffer zones. These written reports shall summarize the status of construction, the condition of the site, the weather conditions and shall report any erosion, sedimentation or pollution problems and how they were corrected, along with recommendations on how to prevent similar problems in the future. The EM shall immediately report any erosion, sedimentation or pollution problems to the Resident Engineer(s), who shall take immediate steps to correct those problems. The EM shall immediately report any unauthorized discharges of sediments to MassDEP, the BCC and the Resident Engineer(s). The Resident Engineer(s) shall take immediate steps to correct those problems. The EM shall submit annual written reports for a minimum of five (5) years to MassDEP and the BCC following completion of replication area construction.
- 7. Applicant shall require its Contractor to employ a Wetlands Scientist ("WS") with experience in inland wetland matters for the duration of the design, construction and monitoring of the work in resource areas. The qualifications of the WS shall be provided to MassDEP and the BCC. The WS shall review all aspects of field work which may

have an adverse impact on aquatic resources, including but not limited to: erosion control; sediment retention from surface water; cofferdam installation and removal; dewatering activities; hazardous waste remediation; and shall oversee all activities involving wetland resource areas, including but not limited to: removal of wetland soils from areas to be filled; transportation of soils and plant materials; planting; and monitoring of wetland replication areas. The WS shall submit weekly written reports to the EM on the above activities during fieldwork and shall have the responsibility in conjunction with the EM to recommend to the Resident Engineer remedial action. The WS shall be authorized to contact MassDEP and the BCC directly for any matter involving wetland protection.

- 8. This Variance Decision shall be made part of all construction-related documents for the Project. All members of Applicant and all Contractor personnel working at the Site shall be aware of the provisions contained within this Variance Decision and shall adhere to the provisions contained herein. At all times Applicant, the Contractor, the Resident Engineer, EM and the WS shall have a copy of this Variance Decision on-site and shall ensure compliance.
- 9. Applicant and its Contractor(s) are obligated to comply with all conditions contained within this Variance Decision and no contract or subcontract of Applicant and its Contractor(s) shall require or allow unauthorized work in wetland resource areas or buffer zone. Applicant is responsible for all activities undertaken by its Contractor(s).
- 10. In order to effectively monitor the development of the wetland compensation areas, the Final Order of Conditions to be issued for the Project by MassDEP is valid for five (5) years from the date of issuance by MassDEP pursuant to 310 CMR 10.05 (6)(d).
- 11. No work within jurisdictional areas subject to review pursuant to the Act and shall be undertaken, including within the 100-foot buffer zones, and this Variance Decision shall not be recorded, until all administrative appeal periods from this Variance have elapsed, or if such an appeal is taken, until the proceedings before MassDEP have been completed. This Variance does not grant property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
- 12. All assurances and conditions contained in Applicant's Request for Variance application submittals detailed in Appendix B are herein incorporated.
- 13. Prior to the start of construction, and on a monthly basis thereafter during performance of activities in resource areas and buffer zones, the Resident Engineer or EM shall provide a written construction schedule to MassDEP and the BCC. Any changes in the schedule shall be noted in writing and provided to MassDEP and the BCC as they occur.
- 14. Any fill used in wetland resource areas and adjacent buffer zones shall comply with all provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. Said fill shall also contain no trash, refuse, rubbish or debris, including but not limited to asphalt, brick, concrete, lumber, plaster, construction materials, wire, lath,

paper, cardboard, pipe, tires, ashes, metal, plastic, motor vehicles or parts of any of the foregoing, hazardous waste, hazardous materials, or oil.

- 15. Prior to undertaking any site activity within a wetland resource area or buffer zone, including but not limited to site preparation and clearing, a pre-construction conference shall be scheduled on-site with MassDEP's Northeast Regional Office and the BCC. Applicant shall notify and invite other environmental permitting and resource agencies involved in reviewing and permitting the project including the Army Corps of Engineers. The agencies will be given at least fourteen (14) days notice prior to the meeting. Attendance at the meeting will be mandatory for Applicant, the Resident Engineer, appropriate representatives of the Contractor, the EM, and the WS. The purpose of the meeting will be to review the conditions of this Variance Decision to the Act and Regulations, and other relevant state and federal permit requirements, so that all parties are aware of all requirements. The mitigation plans, the design plans, and placement of erosion and sedimentation controls shall also be reviewed at that time. The Contractor shall develop a contact list of the names, phone numbers and e-mail addresses of Applicant's supervisor, Contractor, Resident Engineer, EM, WS, MassDEP (Boston and Northeast Regional Contacts), Army Corps of Engineers (ACOE) staff and BCC representatives. The list will be distributed to all parties. Applicant is required to notify MassDEP in writing and obtain written concurrence for all activities that Applicant considers to be exempt or otherwise not subject to jurisdiction of the Act.
- 16. Prior to the start of the proposed work, and prior to the pre-construction conference required by Special Condition 15, the edge of Bank, BVW, Land Under Water, BLSF, and RA (if any) shall be located within fifty (50) feet of the estimated limits of work area and shall be identified with stakes or flags. All wetland boundary markers, once in place, shall be maintained in place throughout construction until all disturbed surfaces have been permanently stabilized and written permission to remove the controls has been given by MassDEP. All construction personnel shall be made aware of these markers.
- 17. All disturbed surfaces are to be revegetated after construction within the 100-foot buffer zones with sufficient topsoil, to a minimum depth of six (6) inches. All temporary BVW impacts shall be restored in place. Where necessary for stabilization, a rapid-growing temporary ground cover shall be used. If permanent stabilization cannot be achieved due to seasonal conditions, then appropriate temporary stabilization measures will be applied to control erosion and sedimentation until vegetative cover can be established during the next growing season. A plan to stabilize all disturbed ground shall be submitted to MassDEP for written approval by October 15 of each successive calendar year during construction and recommendations shall be implemented prior to December 1. Other than embankments or areas over buried piping that may be mowed, plantings on slopes that exceed three (3) horizontal to one (1) vertical (3H: 1V) shall be covered with a properly installed erosion control blanket, similar product or a dense ground cover that does not require mowing or applications of fertilizers or pesticides.

Bordering Vegetated Wetland Compensation Areas

- 18. Two (2) BVW compensation areas shall be constructed at the on-site locations and pursuant to the methodology described in the Request for Variance Under the Massachusetts Wetlands Protection Act Regulations Runway 5/23 Safety Area Improvements submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 November 2007; Attachment C, Section 6.3 and 6.4. BVW Compensation Site 1 shall be no less than 2.2 acres in size. BVW Compensation Site 2 shall be no less than 1.6 acres in size. Any deviation from the methodology approved by this Special Condition must be made in writing per Special Condition 3 of this Variance, and must be approved in writing by MassDEP. Soils and plantings shall not be placed within the BVW Compensation Areas until such time as the WS has verified that the final excavated grade for the BVW Compensation Areas is consistent with the BVW Compensation Area Plans specified above. MassDEP reserves the right to modify the aforementioned BVW Compensation Area Plans and any other plan(s) necessary in order to meet the General Performance Standard specified at 310 CMR 10.55(4)(b).
- 19. MassDEP hereby approves the planting plan specified on page 6-20 of the Request for Variance Under the Massachusetts Wetlands Protection Act Regulations Runway 5/23

 Safety Area Improvements submitted by: Massachusetts Port Authority One Harborside Drive East Boston, MA 02128 November 2007; Attachment C, Section 6.4.
- 20. All plantings shall occur at the beginning or the end of the growing season. Fall plantings shall be done before the first frost (not the first snowfall). Shrubs and trees, however, may be planted up to November 15, weather permitting. Figure 6-5 Planting Note 2 shall be modified accordingly and submitted to MassDEP.
- 21. The WS shall monitor the status of the BVW Compensation Areas in each of the first five (5) full growing seasons following construction, and then until such time as the BVW Compensation Areas function in accordance with 310 CMR 10.55(4)(b), as established by data collected during monitoring. Monitoring shall include, at a minimum, the data described within this Request for Variance, as well as the collection of all data required in Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetland Protection Act MA Department of Environmental Protection Division of Wetlands and Waterways Sections I and II of "Appendix G: DEP Field Data Forms and Instructions" dated March 1995. Data required in Appendix G shall be collected for at least ten (10) distinct "Observation Plots" within the each BVW Compensation Area. Vascular plants within the observation plots, shall be identified to the species level whenever possible. Sampling shall take place at least twice in each growing season in the years specified in this Special Condition.
- 22. Each sampling event shall include hydrologic data collected from "observation holes." These observation holes shall be at least twenty-four (24) inches deep, as measured from the surface of the mineral soil horizon. At a minimum, the WS shall record depth to apparent water table and/or depth of surface inundation, both as measured from the soil

surface [see Delineating Bordering Vegetated Wetlands Under the Massachusetts, Wetlands Protection Act (DEP 1995) for definition of terms] during each observation.

- 23. During each sampling event, color photographs or color reproductions of photographs (digital photographs or color photocopies) shall be taken of each of the ten (10) separate Observation Plots within the BVW Compensation Areas, and of the observation holes established by Special Condition 22 hereof. All data collected pursuant to Special Conditions 21 and 22 hereof shall be submitted each successive calendar year specified in Special Condition 21 hereof, in a written report entitled "Bordering Vegetated Wetland Replacement Area Plan, Runway End 5/23 Safety Area Improvements, L.G. Hanscom Airport, Bedford, Massachusetts." A copy of said written report shall be submitted to MassDEP and the BCC on or before December 15th of each successive calendar year specified by Special Condition 21 hereof. If desired, this report may be combined with the mitigation monitoring report required by the Army Corps of Engineers pursuant to the Section 404 Permit for the Project. However, in addition to specific requirements detailed in this Variance Decision, all replacement area monitoring submittals specified in the Section 404 permit application documents shall be copied to the MassDEP Wetlands Program, Boston and Northeast Regional Office, and the BCC.
- 24. Based upon the data collected during sampling events, the WS, or MassDEP upon its own discretionary initiative, shall render a written conclusion within each report required by Special Condition 23 hereof, as to the success of the BVW Compensation Areas in terms of the standards specified at 310 CMR 10.55(4)(b). If, at the end of the second growing season, the WS or her/his designee(s), or MassDEP upon its own discretionary initiative, renders a conclusion that the BVW Compensation Areas have failed to meet the performance standards at 310 CMR 10.55(4)(b), the WS shall prepare and submit a written "corrective plan of action" no later than the end of that calendar year to MassDEP for its written approval. The approved "corrective plan of action" shall be implemented the next growing season under the supervision of a wetland scientist approved by MassDEP (see Special Condition 7 hereof), and shall be monitored via the requirements specified in Special Conditions #21-24, of this Variance.
- 25. The proposed BVW Compensation Areas shall not be maintained beyond what is already approved in the Vegetation Management Plan, including mowing, planting of non-indigenous ornamental plantings, or any other activity, as defined at 310 CMR 10.04 Activity, except as approved by MassDEP as necessary to maintain the "mitigation area" as such. This requirement is ongoing and does not end upon the completion of the Project or the issuance of a Certificate of Compliance, and will be a continuing and perpetual condition of any Certificate of Compliance as is required at 310 CMR 10.58(5)(h).
- 26. All woody and herbaceous plantings (other than grasses) used in landscaping, replication, erosion control or revegetation activities within wetland resource areas and within the 100 foot buffer zone thereto, shall consist of species indigenous to the northeastern United States. Invasive species are those identified in MassDEP's "Massachusetts Inland Wetland Replication Guidelines", March 2002 (including Lythrum salicaria, Phragmites australis, Rhamnus Frangula alnus, Lonicera spp., Alliaria petiolata, Polygonum

cuspidatum or Fallopia Japonica, Microstegium vimineum, Phalaris arundinacea, Celastrus Orbiculatus, Cynanchum nigrum, Cynanchum rossicum). Control of Invasive Species in both the BVW Compensation Areas shall be conducted in accordance with Section 6.6 of the Request for Variance except described in Conditions 27, 28, 29 and 30. Each annual report (specified in Special Conditions 23 and 24 hereof) shall include written documentation of invasive species observed, written discussion of measures taken to control invasive plant species, a written estimate of how successful those measures were, and a written plan for the upcoming year. MassDEP may impose additional conditions as necessary to ensure that invasive species are successfully eradicated, and the Applicant and its Contractors shall comply with such additional conditions. If invasive species are present in proposed mitigation areas at the time of a request for Certificate of Compliance, a written plan shall be submitted including commitments to control such species. The written plan shall be implemented until MassDEP concurs in writing that that the commitments have been met.

- 27. Herbicides shall not be used to control the spread of non-native, invasive species within one hundred (100) feet of bordering vegetated wetland or bank, with the exception of spot application or painting to individual cut stems during late fall.
- 28. Applicant shall consult with the BCC regarding the adequacy of the research provided in Applicant's Request for Variance on non-native invasive species control without the use of herbicides prior to beginning any control program in existing or replacement wetlands. Written evidence of such consultation shall be submitted to MassDEP. In the event of a conflict, MassDEP shall determine if additional research is required.
- 29. The timing of herbicide treatment shall be confirmed by consultation with the New England Wildflower Society or related organization acceptable to the BCC. Written evidence of such consultation shall be submitted to MassDEP and the BCC. In the event of a conflict, MassDEP shall decide the acceptability of the organization referenced in this condition.
- 30. With the exception of post-construction hydroseeding, no blanket applications of herbicides, pesticides or inorganic chemical fertilizers will be permitted on this site within one hundred (100) feet of any wetland resource area. Lime and organic slow-release fertilizers may be used. This shall not preclude spot treatment by hand-painting or controlled spraying of non-native invasive species.
- 31. Fencing along the right-of-way and especially around the end of the Runway End 23 Safety Area shall be installed in a manner that is protective of wildlife habitat and wetlands. Written details of such fencing shall be depicted on the final plans required by Special Condition 1 hereof and submitted to MassDEP for written approval at least thirty (30) days prior to commencing construction. All fencing (other than erosion and siltation fencing) must be at least six (6) inches above the ground to provide wildlife passage, and must be demonstrated to be sufficient height to provide wildlife passage unless otherwise approved in writing by MassDEP. In wetland resource areas, fencing shall be located

- outside the wetland resource areas unless avoidance is not feasible and written documentation of such is submitted to and approved in writing by MassDEP.
- 32. Applicant shall consult with a soil scientist acceptable to MassDEP and the BCC to determine how compressed wetland soils will function as restored wetland soils, to be carried out in conjunction with the proposed boring logs in final development of the BVW Compensation Areas. In the event of a conflict, MassDEP shall decide on acceptability of the soil scientist.
- 33. A functional analysis shall be performed that evaluates existing, proposed and actually achieved wetland functions in the existing and final BVW Compensation Areas. This analysis shall be conducted annually for the five (5) year term of this Variance Decision, must be submitted in writing to MassDEP and the BCC, and must be approved by MassDEP. Applicant shall propose, and MassDEP reserves the right to require additional remediation or monitoring if the written analysis of replaced wetlands does not reveal functions equal to or better than those in the lost/altered wetlands.

Wildlife Habitat

- 34. With the exception of BVW Compensation Areas planting, construction shall not take place during the breeding season of either obligate or facultative vernal pool species. If circumstances warrant, Applicant may request modification of this condition by consulting with the MNHESP for recommendations for impact minimization, by submitting a written request to MassDEP with a copy to BCC, and by obtaining written approval of MassDEP. Water quality must be protected during all stages of land and wetland disturbance, clearing, grubbing, and construction; and stabilization of all disturbed areas must be complete prior to the commencement of each breeding season.
- 35. A written water quality monitoring plan shall be submitted within forty-five (45) days of issuance of this Variance Decision (and prior to commencement of any land or wetland disturbance or construction) and approved by MassDEP to ensure that no adverse effects occur to Hartwell Brook or surrounding wetland resource areas. This monitoring shall be conducted throughout construction of the Project, including during non-native invasive species control periods and during post-construction activities. Monitoring shall be conducted for the same period described in Special Condition 21 hereof.

Stormwater

36. Prior to disturbance of any wetland resource area or buffer zone, a written *Erosion and Sedimentation Control Plan* ("E&S Plan") shall be submitted to MassDEP and the BCC. No disturbance shall occur until the E&S Plan is approved in writing by MassDEP. The E/S Plan shall address measures to stabilize any stockpiles stored within a wetland resource area or buffer zone. Thereafter, the E&S plan shall be implemented. E&S controls shall be implemented and maintained in good repair, until all disturbed surfaces are fully stabilized.

- 37. A Notice of Intent shall be submitted to the U.S. EPA to obtain coverage under the National Pollutant Discharge Elimination System ("NPDES") Construction General Permit ("CGP") for the land disturbance of one-acre and more for runway safety clearing. The construction period Stormwater Pollution Prevention Plan ("SWPPP") required to be prepared by the CGP shall be submitted to MassDEP for review and written approval. The construction period SWPPP so approved may serve as E&S Plan required by Special Condition 36 hereof. A written inspection log of the erosion and sedimentation controls shall be maintained. The inspection log shall be available for review by the BCC or MassDEP staff upon request. Any changes proposed to the construction period SWPPP shall be submitted in writing to the MassDEP for approval.
- 38. The BVW Compensation Areas approved herein are not stormwater management structures. Stormwater shall be treated prior to discharge to all regulatory and compensatory wetlands at the project site.
- 39. Stormwater runoff from Runway 5/23 within the Project locus identified in Figure 3-3 in the Request for Variance shall be recharged to the groundwater. The volume to be recharged shall be the first one (1) inch of runoff times the impervious area. Details regarding how this Special Condition will be met must be submitted to MassDEP for written approval on the final plans required by Special Condition 1 hereof, with an accompanying narrative. If this Special Condition can not be fully met due to geotechnical constraints or FAA requirements, then Applicant must submit written information to MassDEP detailing the specific geotechnical constraints (including. boring logs), specific FAA requirements, and the exact volume of stormwater recharge that can be provided to the maximum extent practicable.
- 40. Stormwater runoff from Runway 5/23 within the Project locus identified in Figure 3-3 in the Request for Variance, in excess of the first one (1) inch of runoff shall be routed to a Water Quality Swale and sheeted across designated turf areas adjacent to Runway 5/23 to treat the runoff and reduce the peak rate of discharge lower than existing conditions. A written plan, including computations, shall be submitted to MassDEP for review and written approval, demonstrating that the water quality treatment and peak rate attenuation are being achieved to the maximum extent practicable. The computations shall evaluate reducing the peak rate of stormwater discharge for the 2-year, 10-year, and 100-year, 24hour storms. The structures or methods for water quality treatment ands peak rate attenuation approved by MassDEP shall thereafter be specifically depicted on the final plans required by Special Condition 1. The Water Quality Swale and designated turf areas shall be designed to comply with written standards contained in MassDEP's Stormwater Handbook, Volume II. Further measures shall be implemented within the Water Quality Swale to attenuate the peak rate of stormwater discharge, such as, but not limited to, flattening the longitudinal slope of the swale or installing check dams. Scour protection must be provided at all Stormwater outlets. If this Special Condition cannot be fully met due to geotechnical constraints or FAA requirements, then Applicant must submit written information to MassDEP detailing the specific geotechnical constraints (including boring logs), specific FAA requirements, and the exact volume of stormwater

treatment and peak rate reduction from existing conditions that can be provided to the maximum extent practicable.

- 41. Applicant has proposed a new catch basin at Runway End 23 draining the southeastern corner of the RSA to Wetland B through a 15" outfall with an energy-dissipating apron, to prevent stormwater runoff from flowing across the relocated gravel service road. Said proposed catch basin shall not be constructed until MassDEP makes a determination, in writing, whether the stormwater recharge, water quality treatment, and peak rate attenuation measures required by Special Conditions 39 and 40 hereof eliminate the need for the catch basin. If the need for the catch basin is not eliminated, then the new catch basin shall include a deep four (4) foot sump and hood to provide Total Suspended Solid ("TSS") removal, configured to operate "off-line," and suitable measures must be depicted on the final plan at the end of the outfall to reduce the runoff velocity so as to not scour wetland resource areas. The final plan required by Special Condition 1 hereof shall depict whether the catch basin is incorporated or eliminated from the design.
- 42. Applicant has developed a post-construction SWPPP entitled "Stormwater Pollution Prevention Plan for Massachusetts Port Authority Operations at Laurence G. Hanscom Field" dated January 31 2000 to comply with the NPDES Multi-Sector General Permit (MSGP) (EPA Permit No. MAR05C135). The SWPPP shall be updated to address herbicide use to control vegetation, fertilizer use for turf/swale specified in Special Condition 40 hereof, and snow removal operations on Runway 5/23. Herbicide use shall be minimized to the extent possible and be consistent with the Vegetation Management Plan VMP. Fertilizers shall not be used on the turf/swale specified in Special Condition 40 hereof, unless the SWPPP determines the fertilizers can be applied in such a manner so as to not contribute nutrients to Stormwater runoff. All stormwater requirements included within this Variance Decision shall be included in the pollution prevention SWPPP and/or SPCC plan required to be prepared pursuant to the MSGP. Any changes proposed to the SPCC Plan or the post-construction SWPPP shall be submitted in writing to MassDEP for written approval. All pollution prevention and source reduction practices specified in these plans must be implemented. Failure to implement the pollution prevention and source reduction measures specified shall constitute non-compliance with the Regulations. This shall be a continuing condition and included in the Certificate of Compliance.
- 43. Chemical deciers shall not be applied to Runway 5/23 during snow removal operations. A written snow management plan for Runway 5/23 shall be submitted to MassDEP for review and written approval. At a minimum, the plan must not allow snow to be plowed into or stockpiled within wetland resource areas, and must otherwise comply with the written MassDEP Snow Disposal Guidance dated March 8, 2001, as may be amended The approved snow management/deicer plans shall be incorporated into the Stormwater Pollution Prevention Plan or SPCC plan required pursuant to Special Condition 42 hereof.
- 44. A written operation and maintenance ("O/M") plan shall be submitted to MassDEP for review and written approval for all post construction man-made stormwater structures

> including, but not limited to, the stormwater recharge required by Special Condition 39 hereof, the Water Quality Swale and turf runoff areas required by Special Condition 40 hereof, and the deep catch basin, outlet pipe, and energy dissipation device at the outlet, if determined to be needed pursuant to Special Condition 41 hereof, at least ninety (90) days prior to completion of construction. Said O/M plan shall also be provided to the BCC at least ninety (90) days prior to completion of construction. The O/M plan shall identify each specific stormwater recharge, water quality treatment, and peak rate attenuation practice for drainage from Runway 5/23, its specific location, schedule of routine and non-routine maintenance tasks, measures to eradicate any invasive species that begin growing within the stormwater practices, identify the specific entity responsible for implementing the maintenance, emergency telephone contacts, a written maintenance log, and specify the location where the written maintenance log is to be kept. The maintenance log shall be available for inspection upon request by the BCC and/or MassDEP staff. Any changes proposed to the O/M plan shall be submitted in writing to the MassDEP for written approval. All stormwater practices must be maintained in accordance with the approved O/M plan. No NOI under the Act and Regulations shall be required to maintain the stormwater structures approved herein, provided said maintenance is conducted in accordance with the approved O/M plan. Failure to maintain the construction and post-construction stormwater drainage structures and practices in accordance with the O/M plan shall constitute noncompliance with the Act and Regulations. This shall be a continuing condition and included in the Certificate of Compliance.

- 45. Downstream and off-site wetland resource areas shall be protected by staked haybales, silt fence or compost socks located between the work area and these downstream wetland resource areas, with the specific control practices identified in the E&S Plan/construction period SWPPP required by Special Conditions 36 and 37 hereof. The method of installation of the staked haybales, silt fence or compost socks shall be submitted in the E&S Plan/construction period SWPPP required by Special Conditions 36 and 37 hereof. Haybales shall be replaced when deteriorated or if soils within the work area are not stabilized within one (1) year of the date of the start of work.
- 46. All exposed soils within wetlands resource areas or the 100-foot buffer zone shall be immediately mulched with hay or other erosion control blanket practice until seeding can occur. Said measure must be included in the E&S Plan/post construction SWPPP required by Special Conditions 36 and 37 hereof. The hay shall be uniformly spread in a blanket of sufficient thickness to completely hide the soil from view or blanket properly staked in accordance with the manufacturer's specifications. All slopes greater than 3H: 1V shall be stabilized with erosion control biodegradable matting, with specifications subject to written approval by MassDEP in the E&S Plan/construction period SWPPP.
- 47. Erosion control barriers shall be inspected prior to a forecasted rainfall event of significant duration or intensity. Such measures shall be included in the E&S Plan/construction period SWPPP. Subsequent to each event, the barrier shall be inspected and repaired, to include removal of sediments, within one (1) week of the event

and prior to the next forecasted event. Evidence of such action shall be documented in the EM bi-weekly report.

- 48. Applicant shall utilize the site stabilization methods as approved in writing by MassDEP pursuant to Special Conditions 36 and 37 hereof so that these methods do not result in sediment migration to Land Under Waterway or BVW. Should the proposed methods fail to contain erosion and sedimentation within the limits of construction, these methods must be augmented by other mitigating measures.
- 49. The Project shall not result in any increase in turbidity to existing or replacement wetland resource areas during either normal or significant rainfall events. Excessive turbidity in wetlands or flowing water outside the project area shall be presumed to have unacceptable adverse impacts on wetland resource areas. Additional runoff best management practices may be required beyond those specified in the E&S Plan/construction period SWPPP in the event of excess turbidity or the visible accumulation of sediments form project activity within wetland resource areas.
- 50. Refueling, washing or other maintenance of vehicles and construction equipment and storage of hazardous materials shall not take place within wetland resource areas or the 100-foot buffer zone. This measure shall be incorporated into the E&S Plan/construction period SWPPP. Hazardous materials storage shall be documented in the SPCC plan.
- 51. Applicant shall demonstrate compliance with any TMDL requirements and/or any approved Category 4B submittal for the stormwater discharge from Runway End 23. Said demonstration shall include submittal of a stormwater management plan for the Department's review and written approval prior to the commencement of construction. Compliance includes, but is not limited to, any waste load allocations, load allocations, or surrogate flow measures to conform stormwater runoff impacts to receiving water bodies and wetlands to the requirements of any TMDL.



Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return

Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 5 — Variance Order of Conditions Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

NE 103-0635

| | | 4.5 | | | | | | |
|------|---|------------------------|--------------|-------------------------------------|-----------------------------|--|--|--|
| Α. | General Informa | tion | | | | | | |
| Fro | | s Department of | Environmer | ntal Protection | 4 | | | |
| | 1. Issuing Authori | | | | | | | |
| 2. 7 | This issuance is for (chec | k one): a. x C | Order of Cor | nditions b. | Amended Order of Conditions | | | |
| з. Т | Fo: Applicant: | | | | | | | |
| J. I | 2.5 | _= | | Managabasa Ma Day | 4 A. Ab. a wife . | | | |
| | Thomas a. First Name | Ennis b. Last Name | | Massachusetts Por | T Authority | | | |
| • | One Harborside Drive | D. Last Name | | o. Company | | | | |
| | d. Mailing Address | | | | | | | |
| | East Boston | * | | MA | 02128 | | | |
| | e. City/Town | | | f. State | g. Zip Code | | | |
| | Owner (if differen | at from applicant) | ١. | | | | | |
| 4. F | Property Owner (if differer | it irom applicant, |). | | | | | |
| | a. First Name | b. Last Name | | c. Company | | | | |
| | a, i listivanie | D. LOST NAME | | 5. 55.//pai/y | | | | |
| | d. Mailing Address | | | | | | | |
| | | | | | | | | |
| | e. City/Town | | | f. State | g. Zip Code | | | |
| 5. | Project Location: | | | e " | | | | |
| | L. G. Hanscom Field | | | Bedford | | | | |
| | a. Street Address | | - | b. City/Town | | | | |
| | 023 | | | Block 087/Lot 0001 | | | | |
| | c. Assessors Map/Plat Number | er | | d. Parcel/Lot Number | | | | |
| | Latitude and Longitude, | if known (note: | | | | | | |
| | electronic filers will click | | | e. Latitude | f. Longitude | | | |
| 6. | Property recorded at the Registry of Deeds for (attach additional information if more than one parcel): | | | | | | | |
| - | Middlesex | | , | | | | | |
| | a. County | | | b. Certificate (if registered land) | | | | |
| | 24880 | | | 037 | | | | |
| | c. Book | | | d. Page | | | | |
| _ | November | 14, 2007 | Januar | y 14, 008 | April 11, 2008 | | | |
| 7. | Dates: a. Date Varia | | | Public Hearing Closed | | | | |
| 8. | Final Approved Plans a | nd Other Docume | ents (attach | additional plan or d | ocument references as | | | |
| | needed): | _ | | O. | 9 | | | |
| | See Variance Appendix | В | | | | | | |
| | a. Plan Title | | | | 2 | | | |
| | b. Prepared By | | | c. Signed and Stamped | l by | | | |
| | | | | - × · | | | | |
| | d. Final Revision Date | | | e. Scale | | | | |
| | | | | | | | | |
| | f. Additional Plan or Documer | it Title | | | g. Date | | | |



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| IVIC | 133 | acitascus vvcuarias i re | rectic | | | • | | | |
|------|--------------------|--|---|--|--|--------------------------------|----------------------|--|--|
| B. | Fi | ndings | | **** | | | | | |
| 1. | Fin | ndings pursuant to the Massa | achuse | etts Wetlands | Protection Act: | | | | |
| | in t wo | llowing the review of the about it is application and presente rk is proposed is significant ply: | ed at th | e public hear | ring, this Comm | issic | on fi | nds that the | areas in which |
| a. | x | Public Water Supply | b | Land Conta | aining Shellfish | c. | x | Prevention | of Pollution |
| d. | x | Private Water Supply | e. X | Fisheries | | f. | x | Protection Habitat | of Wildlife |
| g. | X | Groundwater Supply | h. x 5 | Storm Damaç | ge Prevention | i. | x | Flood Con | trol |
| 2. | Thi | is Commission hereby finds th | ne proje | ect, as propos | ed, is: (check or | ne of | the | following bo | xes) |
| Ар | prov | ved subject to: | | | | | | | |
| a. | acc oth diff | the following conditions whath in the wetlands regulations cordance with the Notice of later special conditions attached for from the plans, specification shall control. | s. The ntent r ed to th | Department eferenced ab nis Order. To | orders that all wove, the following the extent that the following the extent that the following the following the following the extent that the following th | ork ng C the f | sha Sene follo | ll be perforn eral Condition wing condition | ned in ons, and any ons modify or |
| Dei | nied | l because: | | | | | | | D |
| b. | | | | | | | | | |
| .C. | pro suf fina | the information submitted bect of the work on the interes ject may not go forward unle ficient information and includal Order of Conditions is issu y it is necessary is attache | ets ider ess and les me ed. A (| ntified in the Note of the Not | Wetlands Protect ed Notice of Inter are adequate to of the specific | tion ent i to pr info | Act s su oteo | . Therefore, bmitted whi at the Act's i ation which | work on this ch provides nterests, and a |
| Inla | ınd | Resource Area Impacts: C | heck a | ill that apply t | below. (For App | rova | als C | nly) | |
| 3. | | Buffer Zone Impacts: Short wetland boundary (if availal | | tance betwee | en limit of projec | t dis | sturb | ance and | a. linear feet |
| Res | our | ce Area | Alte | posed eration | Permitted Alteration | R | | posed acement | Permitted Replacement |
| 4. | X | Bank | a. line | ear feet | b. linear feet | | c. lin | ear feet | d. linear feet |
| 5. | | Bordering Vegetated | 92,1 | | A amount foot | | | ,379 | 165,379 |
| 6. | \Box | Wetland Land Under Waterbodies | a. squ | uare feet | b. square feet | | c. sq | uare feet | d. square feet |

a. square feet

b. square feet

c. square feet

and Waterways

d. square feet



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| | e. cu.yd dredged | f. cu.yd dredged | | |
|--|--|-----------------------------|---------------------------------------|--------------------------|
| B. Findings (cont.) | | | 3 | |
| Resource Area | Proposed Alteration | Permitted Alteration | Proposed Replacement | Permitted Replacement |
| Bordering Land Subject to Flooding | a. square feet | b. square feet | c. square feet | d. square feet |
| Cubic Feet Flood Storage | e. cubic feet | f. cubic feet | g. cubic feet | h. cubic feet |
| Isolated Land Subject to Flooding | a. square feet | b. square feet | | |
| Cubic Feet Flood Storage | c. cubic feet | d. cubic feet | e. cubic feet | f. cubic feet |
| 9. Riverfront area | 76,960 (incl. 58,560 exempt) a. total sq. feet | 76,960 b. total sq. feet | | 18,400 s.f. |
| Sq ft within 100 ft | c. square feet | d. square feet | e. square feet | f. square feet |
| Sq ft between 100-200 ft | g. square feet | h. square feet | i. square feet | j. square feet |
| Coastal Resource Area Impacts: | Check all that apply | below. (For Ap | provals Only) | |
| 10. Designated Port Areas | Indicate size und | der Land Under th | ne Ocean, below | |
| 11. Land Under the Ocean | a. square feet | b. square feet | _ | |
| | c. cu.yd dredged | d. cu.yd dredged | _ | |
| 12. Barrier Beaches | Indicate size und | ler Coastal Beac | hes and/or Coasta | al Dunes below |
| 13. Coastal Beaches | a. square feet | b. square feet | c, c/y nourishmt. | d. c/y nourishmt. |
| 14. Coastal Dunes | a. square feet | b. square feet | c. c/y nourishmt. | d. c/y nourishmt |
| 15. Coastal Banks | a. linear feet | b. linear feet | | |
| 16. Rocky Intertidal Shores | a. square feet | b. square feet | 34 | |
| 17. Salt Marshes | a. square feet | b. square feet | c. square feet | d. square feet |
| 18. Land Under Salt Ponds | a. square feet | b. square feet | | |
| to D Land Containing | c. cu.yd dredged | d. cu.yd dredged | 2 | |
| 19. | a. square feet | b. square feet | c. square feet | d. square feet |
| 20. Fish Runs | | | s, inland Bank, La Waterbodies and | |
| 41 | | | _ | 3 |
| | a cu vd dredged | b. cu.vd dredged | | |



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

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| | | | |

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| 21. | Land Subject to Storm Flowage | | l | a sn | uare feet | e - | guare f | eet | - 17 | | | |
|-----|-------------------------------|-----|---|-------|-----------|----------------|---------|-----|-----------------|--|--|--|
| | Otomin i lowage | | | w. 04 | 4410 1001 | 5, 0 | quaioi | | | | | |
| | | 114 | | | | | | | | | | |

C. General Conditions Under Massachusetts Wetlands Protection Act

(only applicable to approved projects)

- 1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
- 2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
- 3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
- 4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
- 5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
- 6. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
- 7. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
- 8. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to this Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
- 9. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MA DEP"]

"File Number NE 103-0635"



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C. General Conditions Under Massachusetts Wetlands Protection Act

- 10. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before DEP.
- 11. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
- 12. The work shall conform to the plans and special conditions referenced in this order.
- 13. Any change to the plans identified in Condition #12 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
- 14. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
- 15. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
- 16. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
- 17. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
- 18. All work associated with this Order is required to comply with the Massachusetts Stormwater Policy Standards.

| | Special Conditions: | | | |
|--|---------------------|---|---|----|
| f you need more | 1-51 | | 5 | |
| space for additional conditions, | | | | |
| select box to | | | | |
| locument | | 9 | | 11 |



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| |). Findings Under Municipal Wetlands Bylaw or Ord | inance | | | | |
|---|---|---------------------------------------|--|--|--|--|
| 1. | Is a municipal wetlands bylaw or ordinance applicable? Yes x No | | | | | |
| 2. | The Conservation Commission hereby finds (check | ck one that applies): | | | | |
| 3. | that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically: | | | | | |
| | a. Municipal Ordinance or Bylaw | b. Citation | | | | |
| | Therefore, work on this project may not go forward unless and until a revise submitted which provides measures which are adequate to meet these star Conditions is issued. | | | | | |
| 4. | that the following additional conditions are necessary to comply with a bylaw: | municipal ordinance or | | | | |
| | a. Municipal Ordinance or Bylaw | b. Citation | | | | |
| ¥ | The Commission orders that all work shall be performed in accordance with and with the Notice of Intent referenced above. To the extent that the follow differ from the plans, specifications, or other proposals submitted with the Notice conditions shall control. | ring conditions modify or | | | | |
| If you need more space for additional conditions, | c. The special conditions relating to municipal ordinance or bylaw are as f | ollows: | | | | |
| select box to attach a text | f) | ** | | | | |
| document | | · · · · · · · · · · · · · · · · · · · | | | | |
| | | | | | | |
| .25 | | | | | | |



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| E. Issuance | al al |
|---|---|
| his Order is valid for three years, unless otherwise ondition pursuant to General Conditions #4, from the | |
| opy also must be mailed or hand delivered at the s | eceipt requested) or hand delivered to the applicant. As same time to the appropriate Department of a gelectronically, and the property owner, if different |
| In Du | |
| Commissioner | = |
| Notary Acknowledgement | C 11 01 |
| Commonwealth of Massachusetts County of On this | Suffalls 2008 |
| Before me, the undersigned Notary Public, personally appeared | Name of Document Signer |
| proved to me through satisfactory evidence of ice | Jentification, which was/were |
| | preceding or attached document, and acknowledged to purpose. |
| | Signature of Notary Public PHILD NEIWBEACT Printed Name of Notary Public |
| Place notary seal and/or any stamp above | /// 20/12_ My Commission Expires (Date) |
| This Order is issued to the applicant as follows: | |
| by hand delivery on | by certified mail, return receipt requested, on |
| Date | Date |

F. Appeals

SEE VARIANCE SECTION F. FOR APPEAL INSTRUCTIONS



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G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on Page 7 of this form shall be submitted to the Conservation Commission and Massachusetts Department of Environmental Protection listed below.

Department of Environmental Protection listed below. North Adams, Williamstown Conservation Commissions and MassDEP Issuing Authority Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission To: Conservation Commission Please be advised that the Order of Conditions for the Project at: **Project Location DEP File Number** Has been recorded at the Registry of Deeds of: County Book Page for: Property Owner and has been noted in the chain of title of the affected property in: Book Page In accordance with the Order of Conditions issued on: Date If recorded land, the instrument number identifying this transaction is: Instrument Number If registered land, the document number identifying this transaction is: **Document Number** Signature of Applicant