



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental Affairs*  
 100 Cambridge Street, Suite 900  
 Boston, MA 02114

Charles D. Baker  
 GOVERNOR

Karyn E. Polito  
 LIEUTENANT GOVERNOR

Kathleen A. Theoharides  
 SECRETARY

Tel: (617) 626-1000  
 Fax: (617) 626-1181  
<http://www.mass.gov/envir>

June 14, 2019

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
 ON THE  
 ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Route 143 Road Improvements and Related Work  
 PROJECT MUNICIPALITY : Worthington  
 PROJECT WATERSHED : Westfield River  
 EEA NUMBER : 16029  
 PROJECT PROPONENT : Worthington Highway Department/Massachusetts Department  
 of Transportation Highway Division  
 DATE NOTICED IN MONITOR : May 8, 2019

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project is proposed by the Town of Worthington (Town) in conjunction with the Massachusetts Department of Transportation (MassDOT) to rehabilitate and expand the entire segment of Route 143 (Old North Road and Williamsburg Road) in Worthington (7.5 miles). The project will be phased based on availability of funding through the Transportation Improvement Program (TIP). Phase 1 will include 3.9 miles and Phase 2 will include 3.6 miles. The project is proposed to extend the service life, improve traffic flow, and increase safety for pedestrians, bicyclists, and vehicles. Proposed improvements include: widening the roadway (the existing centerline will be maintained); rehabilitating pavement; replacing and/or repairing storm drainage system structures along Old North Road (drop inlets/culverts/headwalls) and Williamsburg Road (repairing/replacing deep sump catch basins); replacing the Route 143/Route 112 intersection (Worthington Corners) with a mini-roundabout; and installing signage and thermoplastic pavement markings throughout the Route 143 road corridor to improve safety. In addition, measures to

address sight distances will include cutting back slopes, removing ledge, and clearing roadside vegetation.

Old North Road will have two 11-foot lanes with two-foot shoulders. Williamsburg Road will have two 11-foot lanes with three-foot shoulders. Granite curbing will be replaced at the intersection and legs of Route 143 and Route 112 in Worthington Center. The improvements are proposed within or immediately adjacent to existing rights-of-way and designed to minimize impacts to private property. The project will require 38 temporary easements in Phase 1, 19 temporary easements in Phase 2 and two permanent easements in Phase 2. Roadway widening will improve access and safety by providing adequate space for vehicles, bicycles, and pedestrians.

Phase 1 will include activities within the roadway corridor from the Chesterfield Town Line west to Cold Street (western intersection with Old North Road). Construction is anticipated to commence in the fall of 2019. Phase 2 will extend from Cold Street west to the Peru Town Line.

### Project Corridor

Route 143 is the primary east-west route through the Town of Worthington. The project corridor extends from the Peru Town Line east to the Chesterfield Town Line for a total length of approximately 7.5 miles. Old North Road (approximately 5.3 miles long) is classified as a rural major collector and extends from the Peru Town Line to Worthington Corners (Town center) at the western junction of Route 112. The western segment of Old North Road is approximately 22 feet wide for one mile and then increases to approximately 23 feet until Worthington Corners. Williamsburg Road (approximately 2.2 miles long) is classified as a rural minor arterial that extends from Worthington Corners east to the Chesterfield Town Line. Williamsburg Road varies from 26 feet to 32 feet (average width of approximately 27 feet). The project corridor does not include sidewalks.

The project corridor includes variable terrain such as level fields/agricultural areas and steep hills/side slopes (ranging from 1,100 feet to 1,700 feet above sea level). Abutting land uses include predominantly forested areas/open space, agricultural lands, residential areas, and some limited commercial uses. The project corridor is adjacent to protected public lands including the Worthington State Forest which is managed by the Massachusetts Department of Conservation and Recreation (DCR) and private lands under the Massachusetts Agriculture Preservation Restriction Program. State-listed historic buildings/structure/sites are located along Route 143, which do not include any listed on the National Register of Historic Places.

The project corridor traverses a number of perennial and intermittent waterbodies. Trout Brook/Middle Branch of the Westfield River in the western part of the corridor is a designated National Wild & Scenic River (NWSR) and a designated Class A public drinking water supply/outstanding resource water (ORW) with a Zone A protection zone. The project corridor includes numerous wetland resource areas including Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW), Bank, Bordering Land Subject to Flooding (BLSF), Riverfront Area (RFA), and associated buffer zones. The project corridor does not include designated habitats of state-listed species or certified vernal pools (CVP).<sup>1</sup> Priority Habitat occurs northwest of the town center/western intersection of Route 112 (Phase 1) for Vesper Sparrow (*Pooecetes gramineus*).

---

<sup>1</sup> Based on the Massachusetts Division of Fisheries and Wildlife Natural Heritage Endangered Species Program (NHESP) Massachusetts Natural Heritage Atlas (October 2014 edition) and MassGIS Website for the Estimated and Priority Habitat Layers (2016 and 2019).

The majority of road shoulders are unimproved and stormwater runoff occurs primarily via country drainage. Some drainage systems are present along Williamsburg Road in the eastern half of the project corridor. Open drainage systems consist of drop inlets and/or gutter flow with some outfalls discharging directly to adjacent wetland areas and stream channels. Closed drainage systems consist of catch basins, manholes and concrete and/or corrugated metal pipe.

### Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include: alteration of 23.7 acres of new land; creation of 3.1 acres of impervious area; removal of 31 public shade trees over 14 inches in diameter breast height (dbh); alteration within 0.74 acres of the Zone A of a Class A waterbody; and alteration of 1,672 linear feet (lf) of Bank, 9,303 square feet (sf) of BVW, 24 sf of IVW, 274 sf of LUW, 123,755 sf (2.84 acres) of BLSF, and 390,713 sf (8.97 acres) of RFA.

Measures to avoid, minimize, and mitigate environmental impacts include: improvements to stream crossings; restoration of wetland resource areas; replication of BVW; provision of compensatory flood storage and 87 cubic yards of new flood storage for impacts to floodplain; revegetation of disturbed roadside areas with an indigenous grass species mix to avoid adverse impacts to Vesper Sparrow; improvements to drainage; and implementation of construction-period erosion and sedimentation best management practices (BMPs).

### Jurisdiction and Permitting

This project is undergoing review and requires the filing of an ENF pursuant to Sections 11.03(3)(b)(1)(b), 11.03(3)(b)(1)(d), 11.03(3)(b)(1)(f), 11.03(6)(1)(b), 11.03(6)(b)(2)(a), and 11.03(6)(b)(2)(b) of the MEPA regulations because it requires a State Agency Action and will alter 500 or more lf of Inland Bank; will alter 5,000 or more sf of BVW; will alter one-half or more acres of other wetlands (BLSF and RFA); will widen an existing roadway by four or more feet for one-half or more miles; will alter bank or terrain located ten more feet from the existing roadway for one-half or more miles; and will remove five or more living public shade trees of 14 inches or more dbh. Phase 2 requires a Section 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP).

The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the U.S. Environmental Protection Agency (EPA), review by the Massachusetts Historical Commission (MHC) acting as the State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800), and review pursuant to the National Environmental Policy Act (Categorical Exclusion Exemption).

The Worthington Conservation Commission issued an Order of Conditions (OOC) for Phase 1 on May 28, 2019, which was not appealed. Phase 2 requires an OOC from the Worthington Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP), a Section 404 General Permit Pre-Construction Notification pursuant to the Federal Clean Water Act Regulations from the U.S. Army Corps of Engineers (ACOE),

Because the project is being undertaken by a State Agency and will receive Financial Assistance, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

### Review of the ENF

The ENF provides a description of existing and proposed conditions, a discussion of project alternatives, and preliminary project plans. It identifies measures to avoid, minimize, and mitigate project impacts. For purposes of clarity, references to the ENF include supplemental information provided by the Proponent to clarify project impacts and mitigation measures.<sup>2</sup>

### *Alternatives Analysis*

The ENF describes several alternatives that were analyzed including: No Action; Resurfacing/Limited Roadway; Storm Drainage Improvements; Culvert Replacement; Rerouting; and the Preferred Alternative. The No Action Alternative represents the status quo with no proposed road improvements. While it would not create any impacts to wetland resource areas or the Zone A, it would not meet the project goals of extending the service life of the road and enhancing safety for all users.

The Resurfacing/Limited Roadway Alternative would limit the project to resurfacing the roadway. The pavement along the project corridor has deteriorated (cracking, rutting and heaving along some sections) to the extent this alternative is no longer practical. Excavation of pavement and portions of the roadbed and repair/replacement of culverts, drop inlets, and headwalls are necessary to stop deterioration of the road foundation and adjacent side slopes. This alternative would not meet project goals of restoring storm water quality/control or improving traffic flow and safety along Route 143.

The Storm Drainage Improvements Alternative included upgrading the country drainage system along sections of the project corridor. This alternative did not include constructing closed drainage systems for the entire project due to insufficient funding. A closed drainage system would require new outlets with direct discharges to resource areas because of limited space for stormwater BMPs. The Proponent also considered adding stormwater retention/detention basins to improve stormwater collection and water quality in some areas including in the vicinity of cold-water fisheries and/or public water supplies. However, it is not deemed economically feasible due to private property constraints, lack of public land, and costs associated with acquiring easements and constructing stormwater structures. In addition, the ENF indicates that soils along Route 143 are classified primarily as C and D soils with moderately poor infiltration rates; therefore, detention/infiltration basins would be ineffective in many of these areas.

The Culvert Replacement Alternative would upgrade the 12 culverts/headwalls associated with intermittent and perennial streams in accordance with the Massachusetts River and Stream Crossing Standards (MRSCS). Many of these riparian systems are connected to the country drainage systems. The ENF indicates that a box culvert would not be feasible for perennial stream Channel 2 (Sta. 27+50) because there is inadequate cover between the culvert and the road base and insufficient roadway width to meet the openness ratio. The ENF indicates that neither replacement of existing corrugated metal culverts with three-sided concrete box culverts or identification of appropriate culvert sizing was incorporated into this alternative due to costs.

---

<sup>2</sup> Emails from John Morgan, CHA on behalf of the Proponent on May 5, 2019 and June 4, 2019.

The Proponent did not consider modification of the bridge over Trout Brook/Middle Branch in the western end of the project corridor. Improvements to the bridge are limited to resurfacing the road surface/bridge deck. The project includes resurfacing of Williamsburg Road and repair/replacement of deteriorating catch basins as necessary; it will not include culvert replacement. Side slopes along the Bronson Brook/West Falls Branch will be restored with retaining walls instead of rock riprap/mechanically stabilized slopes to minimize impacts to the wetland resources in this area.

The ENF indicates that rerouting Route 143 to avoid protected land and wetlands would be impractical, cost prohibitive and could result in greater environmental impacts. Acquisition of private property and/or protected land would be necessary. The linear nature of roadways precludes avoidance of certain features such as streams and wetlands, areas of significant acreage such as the Worthington State Forest and private/conservation agricultural properties north and east of Worthington Corners, and historic properties. In addition, new road ROWs in undisturbed areas could create greater impacts and subdivide intact wetland resource areas into smaller parcels.

Lane widths (11 feet) are proposed to meet MassDOT minimum requirements for minor arterials and major collectors. The Town secured a waiver of the standards for the shoulder widths through the MassDOT design exception process. It was determined that the widening of the roadway to 26 feet will improve safety for vehicles, bicyclists, and pedestrians while maintaining the roadway's rural character and avoiding increased impacts to wetlands.

Environmental impacts associated with the Preferred Alternative have been minimized throughout the project corridor to the maximum extent practical while obtaining the project goals. The centerline will be maintained for the majority of the route and road widening will occur by a few feet on either side. Sidewalks are not proposed along Route 143 and retaining walls have been proposed in a number of locations in lieu of riprap to minimize additional impacts to adjacent environmental resource areas.

Comments from MassDEP did not identify any concerns with the alternatives analysis or request analysis of additional alternatives.

### *Wetlands and Stormwater*

The project includes permanent and temporary impacts to BVW, IVW, Bank, BLSF, RFA, and associated buffer zones. The Worthington Conservation Commission issued an OOC for Phase 1 on May 28, 2019 that was not appealed. The Worthington Conservation Commission will also review Phase 2 to determine its consistency with the Limited Project provisions of the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00) and associated performance standards, including stormwater management standards (SMS).

MassDEP will review Phase 2 to determine its consistency with the 401 WQC Regulations (314 CMR 9.00). Comments from MassDEP provide guidance on submission of permitting applications and identify issues that will be addressed in permitting.

The ENF and the supplemental information that was provided (Table 1A) identify the impacts to wetland resource areas for each phase of the project; describe restoration and mitigation for temporary and permanent impacts; and demonstrate that alteration of BLSF and RFA do not exceed 10 acres. Cumulative impacts are estimated at 9.35 acres and include 2.68 acres of overlapping resource areas.

The project will create 3.1 acres of impervious area. The project is a redevelopment project and will comply with the SMS to the maximum extent practicable. The project will modify the storm drainage system to improve sediment removal and drainage within the project corridor. The majority of catch basins along Williamsburg Road within the closed drainage system will be replaced. Fifteen failing cross culverts will be replaced in Phase 1 and 42 failing cross culverts will be replaced in Phase 2 along Old North Road. Associated drop inlets and head walls will be relocated/replaced. Culvert improvements/replacements were designed for consistency with current stormwater runoff volumes within existing structures to avoid increases in flooding to downstream properties or wetland resource areas. Roadside ditches will be cleaned and reshaped and new or replacement ditches will be constructed. Structures will be cleaned, repaired and/or replaced as necessary. No new drainage is proposed within the NWSR Trout Brook/Middle Fork of the Westfield River.

In Phase 2, an additional 12 culverts that cross Route 143 and are associated with perennial and intermittent streams will be replaced. The majority of these stream channels also function to collect stormwater runoff from the open country drainage associated with Route 143. Culverts/headwalls associated with these streams will be replaced in-kind. Stream crossings will be constructed to avoid or mitigate for: inlet/outlet drops, flow constrictions that create significant turbulence, tail-water armoring and/or scour pools and other physical barriers to fish and wildlife passage that impact overall continuity of the waterbodies. Comments from MassDEP indicate that the replacement of one or more of these stream crossings may not conform with the General Performance Standards pursuant to 310 CMR 10.54(4)(a)(6) and 310 CMR 10.56(4)(a)(5). The Proponent may demonstrate that conformance with the MRSCS has been achieved to the maximum extent practicable, and consider site constraints, undesirable effects of risk, and the environmental benefit of meeting the MRSCS compared to the costs pursuant to 310 CMR 10.53(8). MassDEP advises the Proponent to demonstrate which culverts convey jurisdictional streams under the WPA, which are distinct from cross over culverts that connect BVW or otherwise convey stormwater from upland areas. In addition, MassDEP advises the Proponent to document perennial versus intermittent streams.

The well in the project area is located upgradient of the work area. MassDEP comments advise the Proponent to ensure that drainage is directed away from the well.

According to the ENF, roadway widening will require removal of 31 public shade trees 14 inches or more dbh. Clearing of an additional 3.6 acres of mixed forested areas along Route 143 will require removal of additional trees. The ENF indicates that removal of public shade trees has been avoided to the greatest extent practicable. Because clearing occurs predominantly within/adjacent to existing forested areas and there is insufficient space to replant between existing trees lining the road, the project does not include planting of new trees.

### *Climate Adaptation and Resiliency*

I understand the Town has applied for a planning grant from the Massachusetts Municipal Vulnerability Preparedness (MVP) grant program. The MVP program is a community-driven process to define natural and climate-related hazards, identify existing and future vulnerabilities and strengths of infrastructure, environmental resources and vulnerable populations, and develop, prioritize and implement specific actions to reduce risk and build resilience. Upon completion of the planning process, the Town will be eligible for MVP Action grant funding and other opportunities.

I encourage the Town to meet with MassDEP prior to submitting its permit application regarding the vulnerability of the project to the effects of climate change and how the design can support the project's resiliency and adaptability to these vulnerabilities. The Town should analyze the potential impact of more frequent and severe storms on the roadway based on its design life.

### *Rare Species*

Comments from the NHESP indicate that the project will not result in a prohibited Take of state-listed rare species or adverse affect on the actual resource area habitat of state-listed species. Any changes to the proposed project or any additional work beyond what is shown on the site plans may require additional filing with NHESP pursuant to the Massachusetts Endangered Species Act (MESA).

### *Construction Period*

The project must comply with Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54. All construction activities should be undertaken in compliance with the conditions of all State and local permits. Consistent with the GreenDOT policy directive, MassDOT requires that contractors install emission control devices in all off-road vehicles. MassDOT's Revised Diesel Retrofit Specification also requires that emissions control standards must be met or technology must be used for non-road, diesel-powered construction equipment in excess of 50 horsepower. Contractors will be instructed to limit engine idling and use ultra-low sulfur diesel fuel. Stormwater BMPs must be implemented during the construction period to reduce potential erosion. If oil and/or hazardous materials are identified during construction, notification must be provided to the Massachusetts Department of Environmental pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000). The Proponent should prepare and enforce a spills contingency plan.

### Conclusion

Based on a review of the ENF and comments received, and in consultation with State Agencies, I have determined that the ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and demonstrated that the project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable. No further MEPA review is required.

June 14, 2019

Date



Kathleen A. Theoharides

### Comments received:

05/13/2019 Massachusetts Natural Heritage and Endangered Species Program (NHESP)  
 06/04/2019 Massachusetts Department of Environmental Protection (MassDEP) –  
 Western Regional Office (WERO)  
 06/04/2019 Massachusetts Board of Underwater Archaeological Resources (BUAR)

KAT/PPP/ppp



## DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581  
p: (508) 389-6300 | f: (508) 389-7890  
MASS.GOV/MASSWILDLIFE

February 26, 2019

Worthington Conservation Commission  
P.O. Box 247  
Worthington MA 01098

Timothy Dexter  
Massachusetts Department of Transportation  
10 Park Plaza  
Boston MA 02116

Albert Nugent  
Town of Worthington Highway Department  
64 Huntington Road  
Worthington MA 01098

RE: Applicant: Timothy Dexter, Massachusetts Department of Transportation  
Albert Nugent, Town of Worthington Highway Department  
Project Location: Route 143, Cold Street to Chesterfield Town Line  
Project Description: Road rehabilitation and expansion  
DEP Wetlands File No.: Unavailable  
NHESP File No.: 19-38325

Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with site plans (dated 11/16/18, revised 2/6/19) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.58(4)(b), 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18).

### WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of **rare** wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

**MASSWILDLIFE**

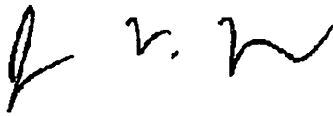


**MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)**

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not result in a prohibited Take** of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Melany Cheeseman, Endangered Species Review Assistant, at (508) 389-6357.

Sincerely,



Jonathan V. Regosin, Ph.D.  
Deputy Director

cc: MA DEP Western Region  
Melissa Lenker, Massachusetts Department of Transportation  
John Morgan, CHA Consulting, Inc.

**Patel, Purvi (EEA)**

---

**From:** Paulson, David (FWE)  
**Sent:** Monday, May 13, 2019 10:04 AM  
**To:** Patel, Purvi (EEA)  
**Cc:** Cheeseman, Melany (FWE)  
**Subject:** Route 143 Road Improvements and Related Work (16029/19-38325)  
**Attachments:** Worthington\_19-38325.pdf

Secretary Kathleen A. Theoharides  
Executive Office of Environmental Affairs  
Attention: MEPA Office  
Purvi Patel, EEA No. 16029  
100 Cambridge St. Suite 900  
Boston, Massachusetts 02114

**Project Name:** Route 143 Road Improvements and Related Work  
**Proponent:** Worthington Highway Department – Albert Nugent MassDOT  
**Location:** Route 143  
**Document Reviewed:** Environmental Notification Form  
**EEA No.:** 16029  
**NHESP No:** 19-38325

Dear Secretary Theoharides:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the Division) has reviewed the Environmental Notification Form for the proposed Route 143 Road Improvements and Related Work and would like to offer the following comments regarding state-listed rare species and their habitats.

On February 26, 2019, the Division issued the following determinations for the above referenced project. Attached is a copy of the determination letter for your review and reference.

**WETLANDS PROTECTION ACT (WPA)**

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of rare wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

**MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)**

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not result in a prohibited Take** of state-listed rare species. This determination is a final decision of the Division of



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Kathleen A. Theoharides  
Secretary

Martin Suuberg  
Commissioner

June 4, 2019

Kathleen A. Theoharides, Secretary  
Executive Office of Energy & Environmental Affairs  
Massachusetts Environmental Policy Act Office  
Purvi Patel, EEA No. 16029  
100 Cambridge Street, 9<sup>th</sup> Floor  
Boston, MA 02114-2524

Re: Route 143 Improvements & Related  
Work, Worthington - ENF

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office appreciates the opportunity to comment on the Environmental Notification Form (ENF) submitted for the Route 143 Improvements & Related Work, (EEA #16029) - Worthington. Applicable MassDEP regulatory and permitting considerations regarding wetlands, air pollution, hazardous waste, solid waste, and waste site cleanup are addressed.

### **I. Project Description**

The project Proponents are the Town of Worthington and MassDOT; the project is being funded through MassDOT. The overall project length is approximately 7.5-miles from the Peru Town line to the Chesterfield Town line. The project will be conducted in 2 Phases and funded under the Transportation Improvement Program. The project includes full depth pavement reconstruction, widening to include a bike lane, drainage improvements, catch basin replacement, culvert replacement and repair/relocation of outfall headwalls. Some blasting may be necessary in the ledges area. Phase 1 involves 3.9 miles of upgrades from Chesterfield to Cold Street, including a roundabout at the intersection of Routes 143 and 112 and replacement of 15 cross culverts requiring an Order of Conditions from the Worthington Conservation Commission. Phase 2 involves 3.6 miles of improvement and includes replacement of 42 cross culverts and additional 12 culverts related to 2 perennial and 10 intermittent streams. Phase 2 will require a 401 Water Quality Certificate from MassDEP, review by the Army Corps of Engineers and an Order of Conditions from the Conservation Commission (Superseding Order of Conditions, if appealed).

Environmental impacts are as follows:

- 3.1 acres (ac) New Impervious Surface,

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370  
MassDEP Website: [www.mass.gov/dep](http://www.mass.gov/dep)

Printed on Recycled Paper

- 23.7 ac land alteration

### **Wetland Impacts**

#### **Phase 1 -**

- 399 square feet (sf) Bordering/Isolated Vegetated Wetlands (BVW/IVW),
- 625 feet (ft) Bank (Temporary),
- 2.01 Acres (ac) Riverfront Area (RA) – (0.26 ac Permanent, 1.75; ac Temporary)
- 1.07 ac Bordering Land Subject to Flooding (BLSF) – (0.17 Permanent; 0.9 ac Temporary),

#### **Phase 2**

- 8,910 sf, BVW/IVW,
- 1,047 ft Bank - (528 ft Permanent; 519 Temporary),
- 2.40 ac RA – (0.36 ac Permanent; 2.04 ac Temporary),
- 0.23 ac BLSF – (0.02 Permanent; 0.11 ac Temporary), and
- 275 sf Land Under Water – (145 sf Permanent; 129 sf Temporary)

## **II. Required Mass DEP Permits and/or Applicable Regulations**

### Wetlands

310 CMR 10.000

314 CMR 9.00

### Air Pollution

310 CMR 7.00

### Solid Waste

310 CMR 19.00

### Bureau of Waste Site Cleanup

310 CMR 40.0000

## **III. Permit Discussion**

### **Bureau of Water Resources**

#### Wetlands

As proposed the two Phases of the project will impact wetland resource areas requiring review by MassDEP, Army Corps of Engineers and local Conservation Commission. The Notice of Intent has been submitted to the Worthington Conservation Commission for Phase 1 and MassDEP provided comments which may be reviewed at the following portal:

<https://eeaonline.eea.state.ma.us/Portal#!/wire/171593>.

MassDEP advises Conservation Commissions to hold open any hearing for Phase 2 until the Secretary's Certificate has been issued and permits from other State and Federal agencies have been issued, to avoid conflicts.

The Site appears to contain Bank (Inland), Bordering and Isolated Vegetated Wetland, Land Under Water Bodies and Waterways (LUWW), Buffer Zone and Riverfront Area.

#### Limited Project Provisions

The Proponent has indicated the project, or portions of the project's Phase 1 and Phase 2, will be filed as a Limited Project; MassDEP concurs the proposed work may be

eligible for review under the limited project provisions at 310 CMR 10.53. Proposed work must, where possible, meet *General Performance Standards*; work that cannot meet *General Performance Standards* may be approved as a limited project. Limited project status requires the Proponent to demonstrate practicable avoidance and minimization of alteration to jurisdictional resource areas, and then describe appropriate mitigation measures for remaining, unavoidable alteration.

#### Massachusetts River and Stream Crossing Standards

Phase 2 of the project proposes the replacement of one or more stream crossings, that may not conform with the General Performance Standards at 310 CMR 10.54(4)(a)(6) and 310 CMR 10.56(4)(a)(5). Per 310 CMR 10.53(8), the applicant may demonstrate that conformance with the *Massachusetts River & Stream Crossing Standards* (Standards) has been achieved to the maximum extent practicable, and shall consider site constraints in meeting the Standards, undesirable effects of risk in meeting the Standards, and the environmental benefit of meeting the Standards—compared to the costs.

MassDEP advises the Proponent to demonstrate which culverts convey jurisdictional streams under the WPA (as defined at 310 CMR 10.04 "Stream") versus cross over culverts merely connecting BVWs bisected by the road or otherwise accommodating upland-generated stormwater. In addition, the Proponent is advised to document perennial versus intermittent streams. MassDEP staff are available to provide technical assistance if necessary.

#### 401 Water Quality Certification

As proposed, this project will require a 401-water quality certification (WQC). Under the 401 WQC regulations, impacts are to be avoided, minimized and mitigated; the Proponent is required to provide sufficient information to adequately describe cumulative impacts to "Waters of the United States within the Commonwealth" (Bordering and Isolated Vegetated Wetlands and Land Under Waterbodies).

#### Stormwater

The project is a redevelopment project and the Proponent has committed to complying with the *Stormwater Management Standards* to the extent practicable. Proposed improvements include cleaning of storm water drainage and improvements to connectivity of stormwater conveyance infrastructure.

#### Drinking Water and Wastewater

The Proponent has identified a Public Water System well Zone 1 protective radius within the work area. The well is physically upgradient of the work area and MassDEP has advised that the Proponent ensure all drainage be directed away from the well.

#### Bureau of Air and Waste

##### Air Pollution Control

##### Construction and Demolition Activities

The work activity must conform to current Air Pollution Control Regulations. The Proponent acknowledges work practices will implement measures to alleviate dust,



noise, and odor nuisance conditions that may occur. Such measures must comply with the MassDEP's regulations 310 CMR 7.01, 7.09, and 7.10.

#### Construction Period Air Quality Mitigation Measures

The Proponent has acknowledged compliance with MassDEP Diesel Retrofit Program and the use of ultra-low sulfur diesel (ULSD) with a sulfur content of 15 ppm on all non-road engines.

#### Solid Waste

The proponent shall properly manage and dispose of all solid waste generated by this proposed project pursuant to 310 CMR 16.00 and 310 CMR 19.000, including the regulations at 310 CMR 19.017 (waste ban).

The Proponent has stated their intent to reuse asphalt on site or recycle off site. Asphalt, brick and concrete (ABC) generated through crushing and reuse on-site must be handled in accordance with regulation and policy. Otherwise, the proponent would need to obtain a site assignment and facility permit for the crushing activity and a Beneficial Use Determination (BUD) for the reuse of the crushed material of site. More information regarding the handling of ABC, and a copy of the 30-day notification form may be found at the following website:

- <https://www.mass.gov/files/documents/2018/03/19/abc-rubble.pdf>

The BUD regulations at 310 CMR 19.060 establish levels of assessment for four categories of beneficial use. These regulations would be applicable to reuse of any materials generated by this project that would otherwise be considered solid waste. Some urban soil encountered along the roadbed, may be managed in accordance with MassDEP policy *COMM-97-001 "Reuse and Disposal of Contaminated Soil at Massachusetts Landfills"*.

The project proponent should be advised that construction activity at the site must comply with both Solid Waste and Air Quality Control regulations. The appropriate Solid Waste provisions addressing this include M.G.L. Chapter 40, Section 54.

#### **Bureau of Waste Site Cleanup**

##### Massachusetts Contingency Plan

The Massachusetts Contingency Plan (MCP) and regulation 310 CMR 40.0000 governs the cleanup of confirmed oil and hazardous material releases in Massachusetts. The Proponent has correctly identified that there are no confirmed release sites in the immediate proposed work area. However, the Proponent is cautioned about the potential to encounter urban fill areas during construction.

If oil/hazardous material contamination is encountered, or a release occurs during construction activities, a Licensed Site Professional (LSP) should be retained to manage the contaminated media in compliance with the provisions of the MCP. MassDEP staff will be available for consultation.

A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential future on-site activity releases.

**IV. Other Comments/Guidance**

If you have any questions regarding this comment letter, please do not hesitate to call Catherine Skiba at (413) 755-2119 or Email: [catherine.skiba@state.ma.us](mailto:catherine.skiba@state.ma.us).

Sincerely,

**This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.**

Michael Gorski  
Regional Director  
cc: MEPA File

Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

We appreciate the opportunity to comment on this project. If you have any questions about this letter, please contact David Paulson, Senior Endangered Species Review Biologist, at (508) 389-6366 or [david.paulson@state.ma.us](mailto:david.paulson@state.ma.us).

**David Paulson**

Senior Endangered Species Review Biologist  
Massachusetts Division of Fisheries & Wildlife  
1 Rabbit Hill Road, Westborough, MA 01581  
p: [\(508\) 389-6366](tel:5083896366) | e: [david.paulson@state.ma.us](mailto:david.paulson@state.ma.us)  
[mass.gov/masswildlife](http://mass.gov/masswildlife) | [facebook.com/masswildlife](https://facebook.com/masswildlife)





The COMMONWEALTH OF MASSACHUSETTS  
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES  
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS  
251 Causeway Street, Suite 800, Boston, MA 02114-2136  
Tel. (617) 626-1141 Fax (617) 626-1240  
[www.mass.gov/orgs/board-of-underwater-archaeological-resources](http://www.mass.gov/orgs/board-of-underwater-archaeological-resources)

June 4, 2019

Kathleen A. Theoharides, Secretary  
Executive Office of Energy and Environmental Affairs  
Attention: Purvi Patel, MEPA Unit  
100 Cambridge St., Suite 900  
Boston, MA 02114

RE: Route 143 Road Improvements and Related Work, Worthington (EEA#16029)

Dear Secretary Theoharides,

The staff of the Massachusetts Board of Underwater Archaeological Resources has reviewed the above referenced project's ENF (EEA #16029) submitted by the Massachusetts Department of Transportation. We offer the following comments.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential submerged cultural resources in the proposed project area. No record of any underwater archaeological resources was found. Based on the results of this review and prior disturbance, the Board expects that this project is unlikely to impact submerged cultural resources.

However, the area may be considered archaeologically sensitive. Therefore, should heretofore-unknown submerged cultural resources be encountered during the course of the project, the Board expects that the project's sponsor will take steps to limit adverse effects and notify the Board, as well as other appropriate agencies, immediately in accordance with the Board's Policy Guidance for the Discovery of Unanticipated Archaeological Resources.

The Board appreciates the opportunity to provide these comments. If you have any questions regarding this letter, please do not hesitate to contact me at the address above, by telephone at (617) 626-1141 or by email at [Victor.Mastone@mass.gov](mailto:Victor.Mastone@mass.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Victor Mastone".

Victor T. Mastone  
Director

/vtm