



STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 16 STATE HOUSE STATION  
 AUGUSTA, MAINE 04333-0016

Paul R. LePage  
 GOVERNOR

David Bernhardt  
 COMMISSIONER

Applicant: Dirigo Center Developments, LLC  
 7 Swain Drive  
 Hampton Falls, NH 03844  
 Project Location: Main Street / Larrabee Road / Westbrook Arterial, Westbrook, ME  
 Westbrook Tax Map #32 Lot(s) #46-47  
 Project: Commercial Shopping Center  
 Identification #: Reg. 01-00185-A-N  
 Permit Category: 200 Plus PCE  
 Traffic Engineer: Vanasse & Associates, Inc.  
 Attn: Jeffrey S. Dirk, PE  
 35 New England Business Center Drive, Suite 140  
 Andover, MA 01810-1071

Pursuant to the provision of 23 M.R.S.A. § 704-A and Chapter 305 of the MaineDOT's Regulations, the Maine Department of Transportation has considered the application of Dirigo Center Developments, LLC with supportive data, agency review and other related materials on file.

**PROJECT DESCRIPTION**

The project consists of 500,000 SF of mixed-use retail development. Access to the site is via four full movement entrances, one signalized entrance on Main Street, one signalized entrance on Larrabee Road, one stop-controlled entrance on Larrabee Road and one signalized entrance on the Westbrook Arterial. The project is estimated to generate 1,853 trip ends during a typical Saturday peak hour and 1,217 trips during a typical weekday PM peak hour.

**Findings**

Based on a review of the files and related information, MaineDOT approves the Traffic Movement Permit Application of Dirigo Center Developments, LLC subject to the following conditions:

**MITIGATION**

The mitigation is intended to describe that conceptually shown on the following plans provided by Vanasse & Associates, Inc. and Jones & Beach Engineers, Inc.:

1. "Conceptual Improvement Plan Riverside Street Corridor" Last Rev 9-15-16
2. "Conceptual Improvement Plan Riverside Street At Larrabee Road and I-95 Exit 48 Ramps" Last Rev 9-22-16
3. "Rand Road At I-95 Exit 47 Ramps Conceptual Improvement Plan" Last Rev 9-13-16
4. "Figure 14 Conceptual Improvement Plan" Sheets 1 thru 5, Last Rev 9-22-16
5. "Stroudwater Street At Forest Street Conceptual Improvement Plan" Last Rev 9-13-16



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If the descriptions contained herein conflict with the plans, these descriptions shall take precedence over the plans. Not all of the mitigation discussed herein maybe shown on those or any plan. The following mitigation shall be constructed or implemented to MaineDOT's satisfaction prior to the opening of the facility, unless otherwise approved by MaineDOT.

All proposed traffic signals and traffic signal upgrades shall be designed and specified to be in compliance with the PACTS, City of Westbrook, City of Portland and MaineDOT traffic signal specifications. All traffic signals will be fully-functional, integrated and have full communications with the PACTS existing Streetwise ATMS.

### **On-Site Mitigation**

#### **Site Entrance / Main Street (Signalized)**

The site entrance shall consist of one ingress lane and two egress lanes. The entrance shall have all appropriate lane, center line, and directional pavement markings. All markings shall be supplied, installed/painted and maintained yearly.

Modify raised median to accommodate dedicated left-turn pocket on Main Street to the site entrance with appropriate storage lengths and tapers.

Reconstruct sidewalks to meet ADA requirements.

Install new fully actuated traffic signal and design and implement an optimal traffic signal timing, phasing and coordination plan. Install a hardwire (fiber optic) interconnect to the signal at Main and Larrabee Rd. and the signal at Main St. and Riverside St.

#### **Site Entrance / Larrabee @ Terminal Street (Signalized)**

The site entrance shall consist of one ingress lane and two egress lanes. The entrance shall have all appropriate lane, center line, and directional pavement markings and shall be supplied, installed/painted and maintained yearly.

Construct a dedicated left-turn pocket into site entrance and Terminal Street with appropriate storage lengths and tapers.

Widen Larrabee Road to provide five-foot shoulders to accommodate bicycle travel for both directions of travel.

Provide six-foot sidewalks along both sides of Larrabee Road.

Install new fully actuated traffic signal and design and implement an optimal traffic signal timing, phasing and coordination plan. The traffic signal shall be set to flash until MUTCD traffic signal

warrants are met. Install a hardwire interconnect to the signal at Main and Larrabee Rd. and the signal at Larrabee Rd. and Westbrook Arterial.

Site Entrance / Larrabee @ Saunders Way (Unsignalized)

The site entrance shall consist of one ingress lane and two egress lanes. The entrance shall have a STOP bar and all appropriate lane, center line, and directional pavement markings and shall be supplied, installed/painted and maintained yearly.

Construct a dedicated left-turn pocket into site entrance and Saunders Way with appropriate storage lengths and tapers.

Site Entrance / Westbrook Arterial (Signalized)

The site entrance shall consist of one ingress lane and two egress lanes. The entrance shall have all appropriate lane, center line, and directional pavement markings and shall be supplied, installed/painted and maintained yearly.

Construct a dedicated left-turn pocket into site entrance with appropriate storage lengths and tapers. Construct a dedicated right-turn pocket into the site entrance with appropriate storage lengths and tapers.

Install new traffic signal and design and implement an optimal traffic signal timing, phasing and coordination plan. Install a hardwire interconnect to the signal at Westbrook Arterial and Larrabee Rd. and extending thereafter to the signal at Westbrook Arterial (Rand Rd.) and Exit 47 ramps to the extent that an overhead hardwire interconnect can feasibly be provided. If a hardwire interconnect cannot be provided to Exit 47, a communication link will be provided within the traffic signal controller at Exit 47 to allow remote access to the traffic signal system by PACTS.

General Requirements For All Entrances

A. The entrances shall provide overhead illumination, if not existing, to illuminate the intersections per MaineDOT standards at a minimum. Overhead lighting shall have an average of 0.6 to 1.0 foot candles, with the maximum to minimum lighting ratio of not more than 10:1 and an average to minimum light level of not more than 4:1.

Off-Site Mitigation

Optimize traffic signal timings in the coordinated system on Riverside St / Main St / Brighton Ave.

### Riverside Street

#### Intersection of Riverside St / Larrabee Rd (Exit 48)

Construct a second dedicated left-turn lane on the Riverside southbound approach to Exit 48. Restripe the southbound approach to include two dedicated left-turn lanes, a dedicated thru lane and a share thru-right lane. Lane widths shall be a minimum of 11 feet.

Install appropriate overhead lane-usage signs for the Riverside southbound approach both in advance of the intersection and at the intersection. Install appropriate lane-use signs at the intersection for the other intersection approaches.

Construct a second left-turn lane on Larrabee Road with appropriate storage length and taper.

Remove channelizing island for the right-turn movements from the Riverside Street northbound approach and the I-95 exit ramp. Construct a right turn lane with appropriate length and Taper

Reconstruct the traffic signal system to accommodate the new geometry and installation of conduit to the toll plaza to facilitate ramp pre-emption. Provide overlap phasing when possible.

Design and implement an optimal traffic signal timing, phasing and coordination plan. Install a hardwire (fiber optic) interconnect to the signal at Main and Larrabee Rd, as well as the adjacent intersections on Riverside Street. Provide signal heads with reflective back plates and install thermal detection in accordance with City standards.

Note: Work on Maine Turnpike Authority (MTA) property requires an MTA work permit and MTA review and approval.

#### Intersection of Riverside St / Forest Ave

Design and implement an optimal traffic signal timing, phasing and coordination plan.

#### Intersection of Riverside St / Warren Ave

Design and implement an optimal traffic signal timing, phasing and coordination plan. Ensure there is a hardwire (fiber optic) interconnect between adjacent intersections.

Provide design plans to the City of Portland for minor geometric and traffic signal improvements.

#### Intersection of Riverside St / Home Depot

Design and implement an optimal traffic signal timing, phasing and coordination plan. Ensure there is a hardwire (fiber optic) interconnect between adjacent intersections.

Provide design plans to the City of Portland for minor geometric and traffic signal improvements.

Intersection of Riverside St / Brighton Ave / Main St

Design and implement an optimal traffic signal timing, phasing and coordination plan. Ensure there is a hardwire (fiber optic) interconnect between adjacent intersections. Update signal heads with reflective back plates and install thermal detection in accordance with City of Portland standards.

Segment between Riverside Court (Berlin City) and Exit 48

Restripe to provide a two-way left-turn lane.

Construct sidewalk along the west side of Riverside, eliminating existing sidewalk gaps.

Segment between Exit 48 / Brighton Ave

Construct sidewalk along the east side of Riverside, eliminating existing sidewalk gaps.

**Main Street**

Intersection of Main St / Larrabee Rd

Remove existing raised triangular islands from Larrabee approaches to Main Street. Construct a dedicated right-turn pocket on the Larrabee Road southbound approach to Main Street with appropriate storage length and taper.

Provide ADA improvements to the sidewalks and signal equipment. Provide a hardwire (fiber optic) interconnect between adjacent intersections.

Upgrade traffic signal equipment, design and implement an optimal traffic signal timing, phasing and coordination plan.

**Westbrook Arterial**

Intersection of Rand Rd / Westbrook Arterial (Exit 47)

Widen I-95 ramp to provide a second left-turn lane to the Westbrook Arterial. Widen Rand Road to accept the dual-left turn lanes.

Install a raised median along the Rand Road eastbound approach to the intersection.

Upgrade traffic signal equipment, design and implement an optimal traffic signal timing, phasing and coordination plan. Ensure there is a hardwire or wireless interconnect to the adjacent intersection at the site entrance at Westbrook Arterial to the extent that an overhead hardwire interconnect can feasibly be provided. If a hardwire interconnect cannot be provided to Exit 47, a communications link will be provided within the traffic signal controller at Exit 47 to allow remote access to the traffic signal system by PACTS.

Note: Work on Maine Turnpike Authority (MTA) property requires an MTA work permit and MTA review and approval.

**William Clarke Drive**

The applicant should design and implement an optimal traffic signal timing, phasing and coordination plan for the weekday and weekend post construction

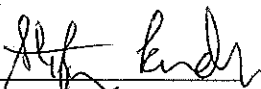
**Stroudwater Street**

Construct a dedicated left-turn lane on Stroudwater Street to Forest Street and reconstruct the sidewalk and crosswalk for crossing Stroudwater Street at Forest Street as necessary to provide an ADA compliant crossing at the intersection.

**Overall Requirements**

- A. Provide all necessary auxiliary signs, striping and pavement markings to implement the improvements described herein according to MaineDOT and/or National standards.
- B. All plantings and signs (existing and/or proposed; permanent and/or temporary) shall be placed and maintained such that they do not block available sight distances and do not violate the State's "Installations and Obstructions" law. No signage, plantings or structures shall be allowed within the "clear zone" if they constitute a deadly fixed object as determined by MaineDOT. All signs shall meet MRSA Title 23, Chapter 21, Section 1914: "On-Premise Signs".
- C. If any of the supporting data or representations for which this permit is based changes in any way or is found to be incorrect / inaccurate, the applicant shall request in writing from MaineDOT a decision of what impacts those changes will have on the permit. The applicant will then be required to submit those changes for review and approval and additional mitigation as a result of those changes may be required at the expense of the applicant.
- D. Because the proposed project affects the State Highway and drainage systems and requires improvement to that system, the applicant must obtain approval of the design plans and coordinate work through MaineDOT's State Traffic Engineer or Assistant State Traffic Engineer, who can be reached at (207) 624-3620 in Augusta.

By:

  
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Stephen Landry, P.E.  
State Traffic Engineer

Date: 10/26/16