

# MERRYMEETING TRAIL

## Head of Tide Park Trail (Tedford Road to Cathance Road)

### TOPSHAM

Length: 1.79 Miles  
Anticipated Cost: \$719,000



### Section Description

Section A1 connects residential neighborhoods and the village center in Topsham with Head of Tide Park in Topsham. Its proximity to the Brunswick-Topsham Bypass (Route 196) positions it to provide a future connection to the popular Androskoggin River Walk in Brunswick using existing bicycle ramps and lanes on the Bypass bridge.

The southern end of this rail-with-trail section taps into a network of existing and proposed trails at Tedford Road in Topsham, providing connectivity to the Merrymeeting Trail from destinations in Topsham including the Mount Ararat Middle and High Schools, the Topsham Fairgrounds and Topsham village. Tedford Road, Beechwod Drive and Cathance Road all provide a direct, at-grade connection to the trail for bicyclists originating from adjacent residential neighborhoods.

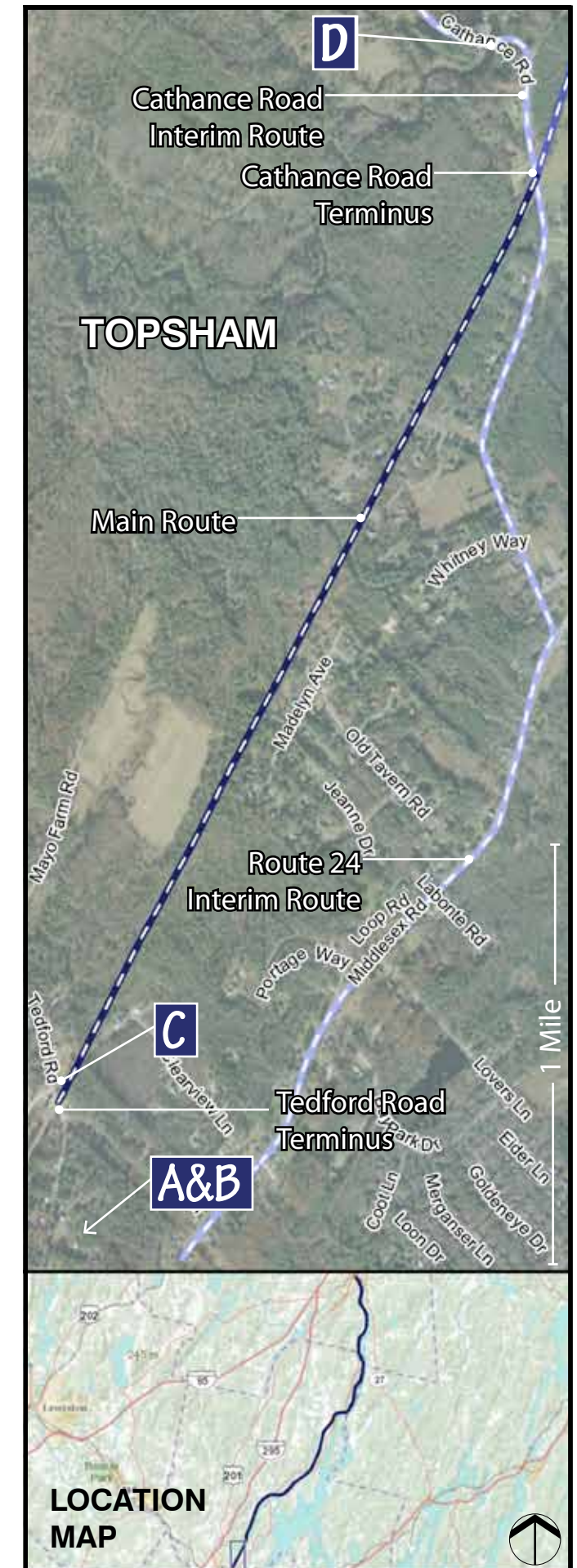
At its northern end, this trail section provides access to Head of Tide Park via a short on-road connection from its terminus at the at-grade crossing of Cathance Road. Head of Tide Park has recently been improved to include a hand-carry boat launch, picnic areas, and trails.

### Interim Route

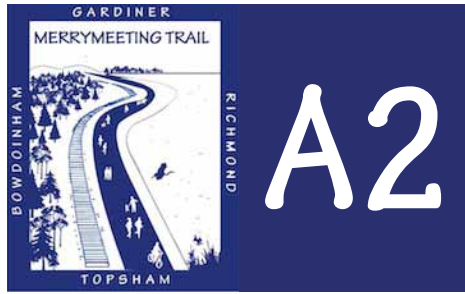
The interim route on Cathance Road leads to Head of Tide Park and will provide a connection north to Bowdoinham Village until the next trail segment, A2, is in place. Route 24 will supplement Cathance Road as part of the interim route connecting Topsham Village and Bowdoinham Village, until such time as sections A1 and A2 are constructed.

### Preliminary Cost Estimate

|    |                        |           |  |                  |
|----|------------------------|-----------|--|------------------|
| 1  | Clearing and Grubbing  | 1.25 Acre | \$6,000.00                               | \$7,500          |
| 2  | Earth Excavation       | 11000 CY  | \$12.00                                  | \$132,000        |
| 3  | Rock Excavation        | 50 CY     | \$125.00                                 | \$6,250          |
| 4  | Aggregate Base         | 1500 CY   | \$34.00                                  | \$51,000         |
| 5  | Aggregate Subbase      | 5800 CY   | \$28.00                                  | \$162,400        |
| 6  | Hot Mix Asphalt        | 1500 Ton  | \$125.00                                 | \$187,500        |
| 7  | 15" Culvert Pipe       | 200 LF    | \$56.00                                  | \$11,200         |
| 8  | 24" Culvert Pipe       | 200 LF    | \$65.00                                  | \$13,000         |
| 9  | 36" Culvert Pipe       | 100 LF    | \$125.00                                 | \$12,500         |
| 10 | Catch Basin            | 4 Unit    | \$2,250.00                               | \$9,000          |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650          |
| 12 | Granite Curb           | 75 LF     | \$36.00                                  | \$2,700          |
| 13 | Loam 6" Depth          | 2200 CY   | \$8.00                                   | \$17,600         |
| 14 | Seeding Method No. 1   | 145 Unit  | \$70.00                                  | \$10,150         |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500          |
| 16 | Pavement Markings      | 1 LS      | \$4,500.00                               | \$3,500          |
| 17 | Traffic Control        | 1 LS      | \$4,500.00                               | \$6,500          |
| 18 | Erosion Control        | 1 LS      | \$10,500.00                              | \$12,000         |
| 19 | Mobilization           | 1 LS      | \$25,000.00                              | \$15,000         |
| 20 | Signage                | 1 LS      | \$6,000.00                               | \$3,000          |
| 21 | Fencing                | 9300 LF   | \$22.50                                  | \$209,250        |
| 22 | Retaining Wall         | 150 SF    | \$90.00                                  | \$13,500         |
| 23 | Pedestrian Bridge      | 0 LF      | \$3,250.00                               | \$-              |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$532,550</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$186,393        |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$718,943</b> |



Section A1 connects the residential neighborhoods off Middlesex and Cathance Road in Topsham with Topsham Village, the Androskoggin Riverwalk, and Head of Tide Park



# MERRYMEETING TRAIL

## Topsham to Bowdoinham Trail (Cathance Road to River Road)

**TOPSHAM & BOWDOINHAM**  
**Length: 3.86 Miles**  
**Anticipated Cost: \$6,970,000**



### Section Description

This section of the trail connects Head of Tide Park on the Cathance River in Topsham with Philip Maily Waterfront Park on the Merrymeeting Bay in Bowdoinham village, passing through forests, wetlands, and river systems. There is the potential for an at-grade connection to the trail from the end of residential Katie Lane near the Cathance Road terminus in Topsham. There are no road crossings on this section between Cathance Road and River Road, resulting in an uninterrupted length of trail traversing scenic landscapes and unique wildlife habitat.

The Cathance River crossing will provide a dramatic view of the river for users suspended high above the water on a new, 140 foot long pedestrian bridge running parallel to the existing railroad bridge. Three wetland crossings will allow trail users to have an intimate experience of these complex ecosystems.

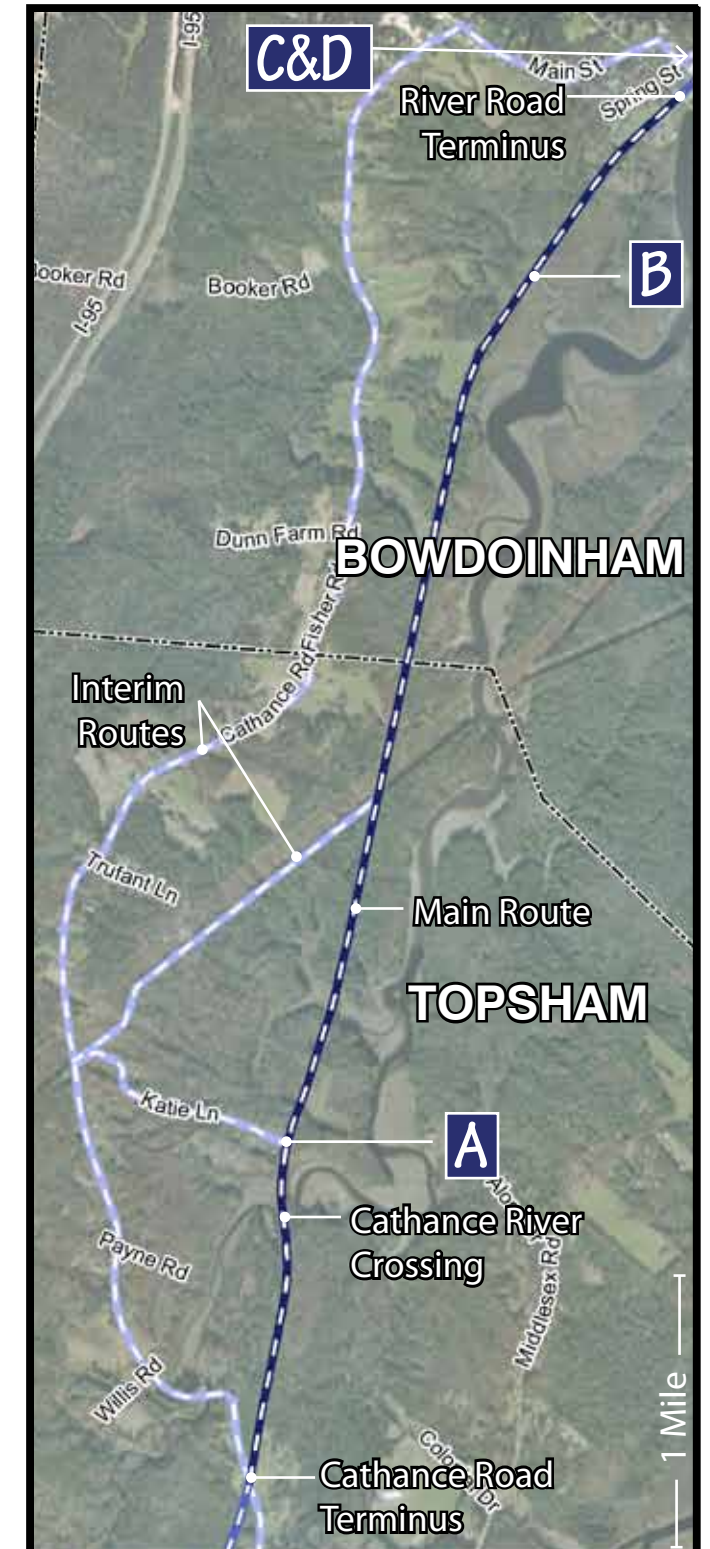
The trail will approach Bowdoinham's village center on a section of double track just south of River Road. As it enters the village within the waterfront park, trail users will be just steps away from Bowdoinham's restaurants, shops, residences, the Merrymeeting Arts Center, and the amenities of Philip Maily Park, where the town's public landing is located.

### Interim Routes

An interim route that follows Cathance and Fisher Roads, then turns east on Route 125/Main Street to connect into Bowdoinham's village center, will complete the connection from Topsham to Bowdoinham until this section of trail is constructed.

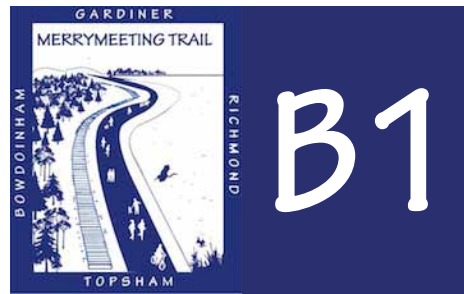
### Preliminary Cost Estimate

|    |                        |           |  |                    |
|----|------------------------|-----------|--|--------------------|
| 1  | Clearing and Grubbing  | 2.6 Acre  | \$6,000.00                               | \$15,600           |
| 2  | Earth Excavation       | 23000 CY  | \$12.00                                  | \$276,000          |
| 3  | Rock Excavation        | 650 CY    | \$125.00                                 | \$81,250           |
| 4  | Aggregate Base         | 3200 CY   | \$34.00                                  | \$108,800          |
| 5  | Aggregate Subbase      | 13500 CY  | \$28.00                                  | \$378,000          |
| 6  | Hot Mix Asphalt        | 3250 Ton  | \$125.00                                 | \$406,250          |
| 7  | 15" Culvert Pipe       | 600 LF    | \$56.00                                  | \$33,600           |
| 8  | 24" Culvert Pipe       | 350 LF    | \$65.00                                  | \$22,750           |
| 9  | 36" Culvert Pipe       | 200 LF    | \$125.00                                 | \$25,000           |
| 10 | Catch Basin            | 6 Unit    | \$2,250.00                               | \$13,500           |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650            |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200            |
| 13 | Loam 6" Depth          | 4700 Unit | \$8.00                                   | \$37,600           |
| 14 | Seeding Method No. 1   | 320 Unit  | \$70.00                                  | \$22,400           |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500            |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600            |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500            |
| 18 | Erosion Control        | 1 LS      | \$12,000.00                              | \$12,000           |
| 19 | Mobilization           | 1 LS      | \$80,000.00                              | \$80,000           |
| 20 | Signage                | 1 LS      | \$7,000.00                               | \$7,000            |
| 21 | Fencing                | 23000 LF  | \$22.50                                  | \$517,500          |
| 22 | Retaining Wall         | 35000 SF  | \$90.00                                  | \$3,150,000        |
| 23 | Pedestrian Bridge      | 250 LS    | \$3,250.00                               | \$812,500          |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$5,162,550</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$1,806,893        |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$6,969,443</b> |



Section A2 crosses wetlands and rivers to connect Head of Tide Park and the residential neighborhoods near the Cathance River in Topsham with Bowdoinham's village center and waterfront park





# MERRYMEETING TRAIL

## Bowdoinham Village Trail

**BOWDOINHAM**

**Length: .47 Miles**

**Anticipated Cost: \$1,539,000**



### Section Description

This section of the trail begins on the west side of Philip Maily Waterfront Park in Bowdoinham, where River Road (Route 24) intersects the trail. The park is the site of Bowdoinham's public boat launch, as well as a picnic area, bandshell, and a parking lot that could be used for trailhead parking. The trail follows the rail line through the park, just a block away from Bowdoinham's village center on Main Street. It then runs parallel to River Road until just after it crosses the West Branch. At this point the trail diverges from River Road.

This section of trail connects Bowdoinham's library, playground, and stores with neighborhoods on the far side of the West Branch. As it enters the village within the waterfront park, trail users will be just steps away from Bowdoinham's restaurants, shops, residences, the Merrymeeting Arts Center, and the amenities of Philip Maily Park. Combined with the next two segments, it will provide a 7.3 mile long trail connection between the centers of Bowdoinham and Richmond.

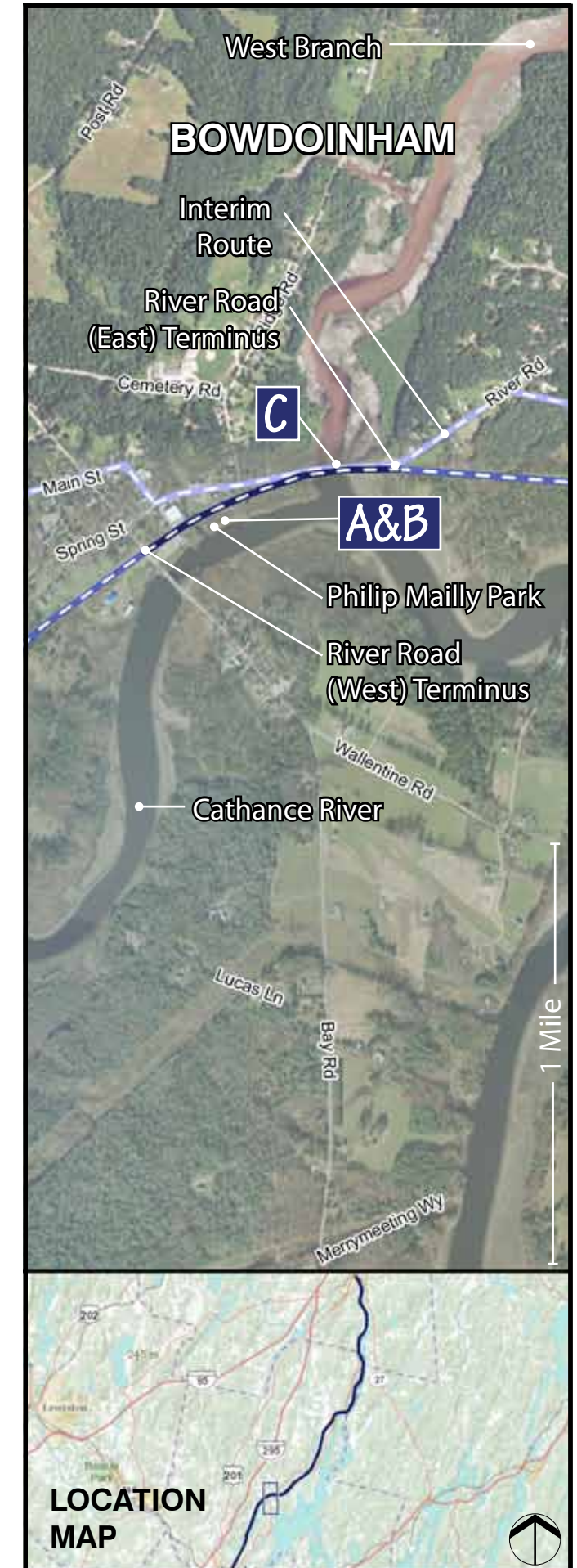
Because of constraints associated with the raised railroad bed between Route 24 and the Cathance River, two pedestrian bridges will carry trail users over the West Branch to continue on to the east side of River Road.

### Interim Routes

Until such time as the trail can be constructed, River Road in Bowdoinham's village center will provide a bypass around this section of the trail, completing the connection between Topsham and Bowdoinham.

### Preliminary Cost Estimate

|    |                        |          |  |                    |
|----|------------------------|----------|--|--------------------|
| 1  | Clearing and Grubbing  | 0.5 Acre | \$6,000.00                               | \$3,000            |
| 2  | Earth Excavation       | 3000 CY  | \$12.00                                  | \$36,000           |
| 3  | Rock Excavation        | 250 CY   | \$125.00                                 | \$31,250           |
| 4  | Aggregate Base         | 400 CY   | \$34.00                                  | \$13,600           |
| 5  | Aggregate Subbase      | 1650 CY  | \$28.00                                  | \$46,200           |
| 6  | Hot Mix Asphalt        | 425 Ton  | \$125.00                                 | \$53,125           |
| 7  | 15" Culvert Pipe       | 250 LF   | \$56.00                                  | \$14,000           |
| 8  | 24" Culvert Pipe       | 200 LF   | \$65.00                                  | \$13,000           |
| 9  | 36" Culvert Pipe       | 100 LF   | \$125.00                                 | \$12,500           |
| 10 | Catch Basin            | 5 Unit   | \$2,250.00                               | \$11,250           |
| 11 | Curb Ramp Det. Warning | 6 Each   | \$275.00                                 | \$1,650            |
| 12 | Granite Curb           | 200 LF   | \$36.00                                  | \$7,200            |
| 13 | Loam 6" Depth          | 600 Unit | \$8.00                                   | \$4,800            |
| 14 | Seeding Method No. 1   | 40 Unit  | \$70.00                                  | \$2,800            |
| 15 | Landscape Plantings    | 1 LS     | \$4,500.00                               | \$4,500            |
| 16 | Pavement Markings      | 1 LS     | \$2,600.00                               | \$2,600            |
| 17 | Traffic Control        | 1 LS     | \$6,500.00                               | \$6,500            |
| 18 | Erosion Control        | 1 LS     | \$12,000.00                              | \$12,000           |
| 19 | Mobilization           | 1 LS     | \$75,000.00                              | \$75,000           |
| 20 | Signage                | 1 LS     | \$6,000.00                               | \$6,000            |
| 21 | Fencing                | 2500 LF  | \$22.50                                  | \$56,250           |
| 22 | Retaining Wall         | 5000 SF  | \$90.00                                  | \$450,000          |
| 23 | Pedestrian Bridge      | 125 LS   | \$3,250.00                               | \$406,250          |
|    |                        |          | <b>Subtotal:</b>                         | <b>\$1,139,425</b> |
|    |                        |          | Engineering, Permitting and Contingency: | \$398,799          |
|    |                        |          | <b>Segment Total:</b>                    | <b>\$1,538,224</b> |



Photograph by Vanasse Hangen Brustlin, Inc.

The short B1 section of the trail begins and ends on the Cathance River in Bowdoinham

**LOCATION  
MAP**



# MERRYMEETING TRAIL

## Bowdoinham to Richmond Trail (South)

### BOWDOINHAM

Length: 3.16 Miles  
Anticipated Cost: \$4,820,000



### Section Description

Beginning on the east side of the West Branch crossing, the trail passes through rolling wooded terrain as it moves away from the Cathance River and toward the Kennebec. After crossing Brown's Point Road at grade, the trail traverses several scenic wetlands. Two pedestrian bridges will carry trail users over the Abagadasset River and one of its tributaries just prior to the northern terminus of this section at River Road (Route 24). Crossing aids such as bike actuated flashers may be desired on River Road due to high observed vehicle speeds and a skewed crossing angle.

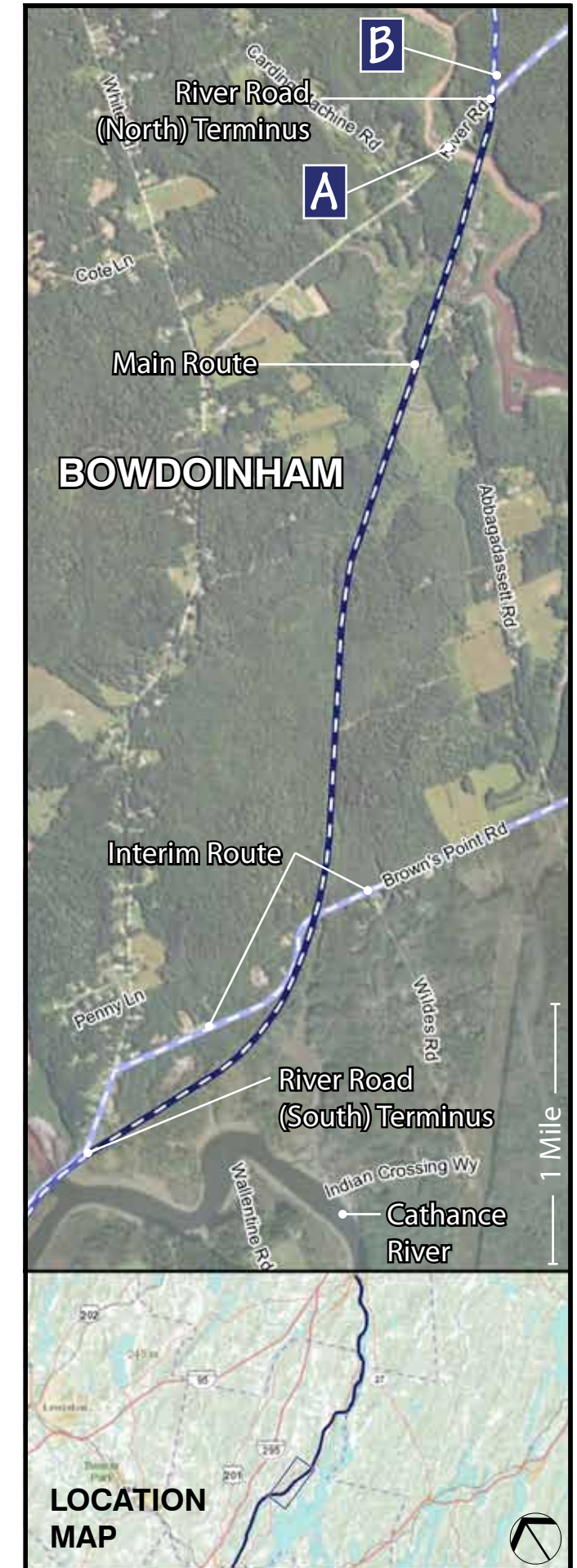
This section constitutes approximately one half of the connection between Bowdoinham's village center and waterfront and Richmond's town center and waterfront. It will provide visual access to scenic woodlands and undisturbed wildlife habitat. Combined with the previous segment and the following segment, it will complete the 7.3 mile long trail connection between the centers of the two communities.

### Interim Route

An interim route will provide connectivity between Richmond and Bowdoinham until the trail can be constructed. The route follows River Road, then turns onto the lightly traveled Brown's Point Road. From Brown's Point Road it turns north to follow Pork Point Road through cultivated fields with glimpses of the Kennebec, and then rejoins River Road.

### Preliminary Cost Estimate

|    |                        |           |  |                    |
|----|------------------------|-----------|--|--------------------|
| 1  | Clearing and Grubbing  | 2.2 Acre  | \$6,000.00                               | \$13,200           |
| 2  | Earth Excavation       | 19000 CY  | \$12.00                                  | \$228,000          |
| 3  | Rock Excavation        | 750 CY    | \$125.00                                 | \$93,750           |
| 4  | Aggregate Base         | 2600 CY   | \$34.00                                  | \$88,400           |
| 5  | Aggregate Subbase      | 10250 CY  | \$28.00                                  | \$287,000          |
| 6  | Hot Mix Asphalt        | 2600 Ton  | \$125.00                                 | \$325,000          |
| 7  | 15" Culvert Pipe       | 250 LF    | \$56.00                                  | \$14,000           |
| 8  | 24" Culvert Pipe       | 200 LF    | \$65.00                                  | \$13,000           |
| 9  | 36" Culvert Pipe       | 100 LF    | \$125.00                                 | \$12,500           |
| 10 | Catch Basin            | 5 Unit    | \$2,250.00                               | \$11,250           |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650            |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200            |
| 13 | Loam 6" Depth          | 3850 Unit | \$8.00                                   | \$30,800           |
| 14 | Seeding Method No. 1   | 260 Unit  | \$70.00                                  | \$18,200           |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500            |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600            |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500            |
| 18 | Erosion Control        | 1 LS      | \$12,000.00                              | \$12,000           |
| 19 | Mobilization           | 1 LS      | \$75,000.00                              | \$75,000           |
| 20 | Signage                | 1 LS      | \$6,000.00                               | \$6,000            |
| 21 | Fencing                | 16600 LF  | \$22.50                                  | \$373,500          |
| 22 | Retaining Wall         | 25000 SF  | \$90.00                                  | \$2,250,000        |
| 23 | Pedestrian Bridge      | 125 LS    | \$3,250.00                               | \$406,250          |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$3,569,950</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$1,249,483        |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$4,819,433</b> |



Section B2 crosses several scenic wetlands and rivers as it makes its way toward Richmond





# MERRYMEETING TRAIL

## Bowdoinham to Richmond Trail (North)

### BOWDOINHAM & RICHMOND

Length: 3.59 Miles  
Anticipated Cost: \$1,343,000



### Section Description

This section comprises approximately one half of the connection between Bowdoinham's village center and Richmond's downtown. Passing through rolling wooded terrain, it crosses several small wetlands as it makes its way toward the Kennebec, allowing trail users to have an intimate experience of these complex ecosystems and providing visual access to scenic woodlands and undisturbed wildlife habitat.

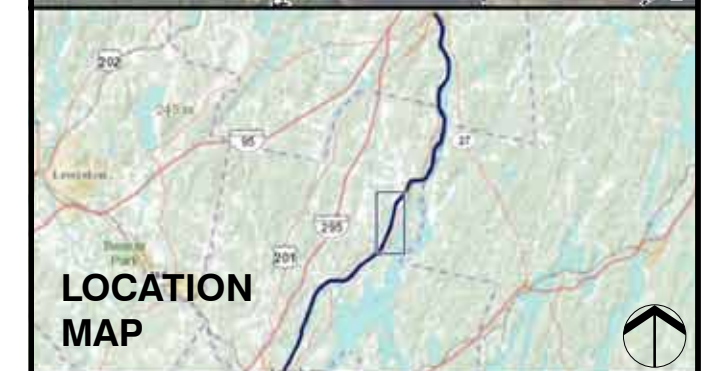
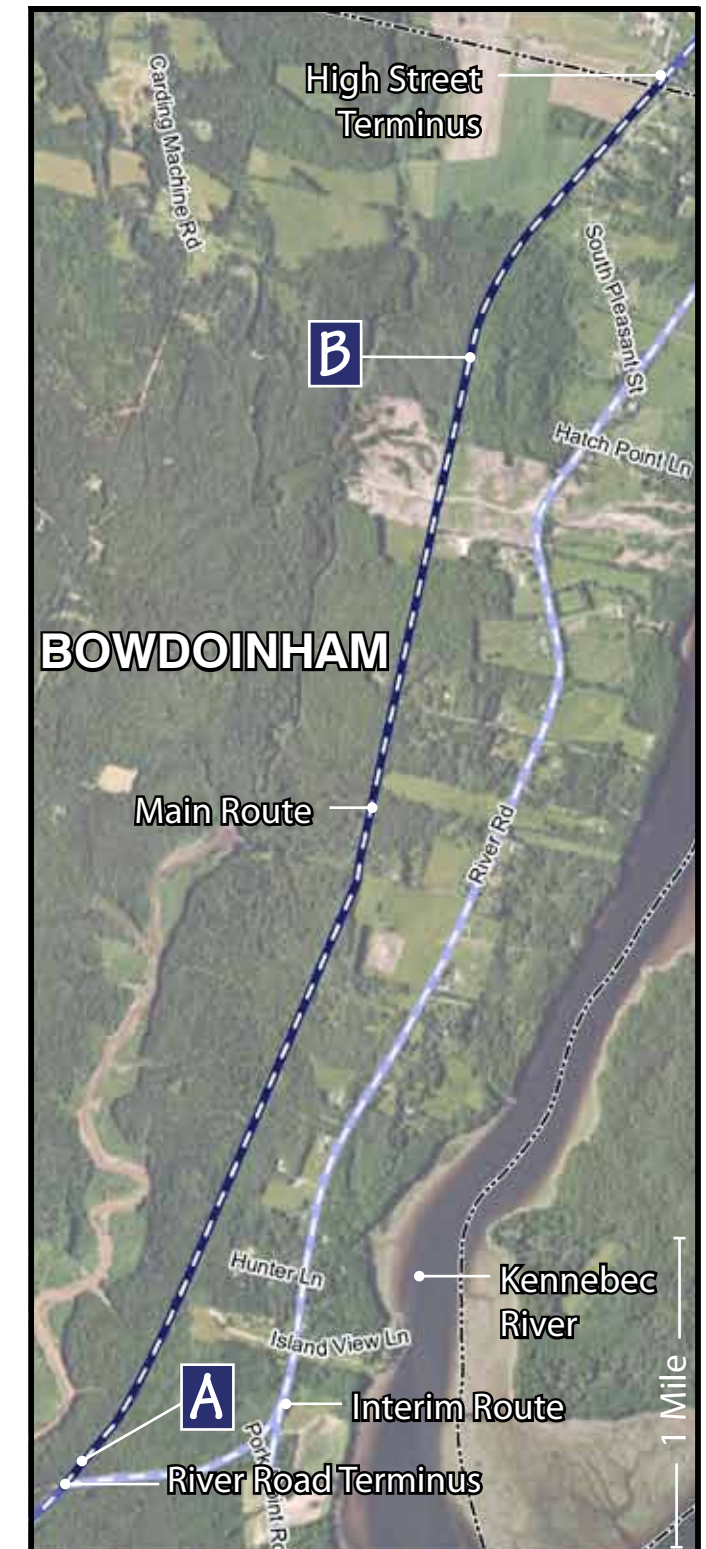
This section ends at High Street, on the Richmond side of the Bowdoinham/Richmond town line. Combined with the previous two segments, it will complete a 7.3 mile long trail connection between the centers of the two communities.

### Interim Route

An interim route following River Road and connecting onto Pork Point Road and Brown's Point Road to the south will provide connectivity between Richmond and Bowdoinham until this section of trail is constructed.

### Preliminary Cost Estimate

|    |                        |           |  |                    |
|----|------------------------|-----------|--|--------------------|
| 1  | Clearing and Grubbing  | 2.2 Acre  | \$6,000.00                               | \$13,200           |
| 2  | Earth Excavation       | 21500 CY  | \$12.00                                  | \$258,000          |
| 3  | Rock Excavation        | 50 CY     | \$125.00                                 | \$6,250            |
| 4  | Aggregate Base         | 2900 CY   | \$34.00                                  | \$98,600           |
| 5  | Aggregate Subbase      | 12000 CY  | \$28.00                                  | \$336,000          |
| 6  | Hot Mix Asphalt        | 2950 Ton  | \$125.00                                 | \$368,750          |
| 7  | 15" Culvert Pipe       | 350 LF    | \$56.00                                  | \$19,600           |
| 8  | 24" Culvert Pipe       | 250 LF    | \$65.00                                  | \$16,250           |
| 9  | 36" Culvert Pipe       | 200 LF    | \$125.00                                 | \$25,000           |
| 10 | Catch Basin            | 5 Unit    | \$2,250.00                               | \$11,250           |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650            |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200            |
| 13 | Loam 6" Depth          | 4300 Unit | \$8.00                                   | \$34,400           |
| 14 | Seeding Method No. 1   | 285 Unit  | \$70.00                                  | \$19,950           |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500            |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600            |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500            |
| 18 | Erosion Control        | 1 LS      | \$12,000.00                              | \$12,000           |
| 19 | Mobilization           | 1 LS      | \$20,000.00                              | \$20,000           |
| 20 | Signage                | 1 LS      | \$6,000.00                               | \$6,000            |
| 21 | Fencing                | 19000 LF  | \$22.50                                  | \$427,500          |
| 22 | Retaining Wall         | 125 SF    | \$90.00                                  | \$11,250           |
| 23 | Pedestrian Bridge      | 0 LS      | \$3,250.00                               | \$-                |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$994,400</b>   |
|    |                        |           | Engineering, Permitting and Contingency: | \$348,040          |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$1,342,440</b> |



Photograph by Vanasse Hangen Brustlin, Inc.

Photograph by Vanasse Hangen Brustlin, Inc.

Section B3 lacks the more scenic river and wetland crossings of some of the preceding sections, but comprises an important piece of the connection between two communities



# MERRYMEETING TRAIL

## Richmond Village Trail (South)

RICHMOND

Length: .62 Miles

Anticipated Cost: \$508,000



### Section Description

This section of the trail provides an in-town connection between residences in the thickly settled south side of Richmond and the commercial downtown district centered on Richmond's Main Street. The trail will provide an important alternative transportation function within the town, as well as providing regional connectivity from the downtown to the adjoining towns and beyond.

From High Street, the trail passes close to the Marcia Buker School as it enters the south side of Richmond village. After passing the school, the trail continues into Richmond's downtown, where it crosses Main Street at grade. There is potential for trailheads both at the school and in the downtown area. This segment includes several in-town road crossings, with Main Street being the busiest one. It will be important to add the appropriate crossing signs, pavement markings and possibly flashers, where warranted. Wayfinding signs for trail users and trail identification signs for road users should be included all along the trail in this and other more populated areas.

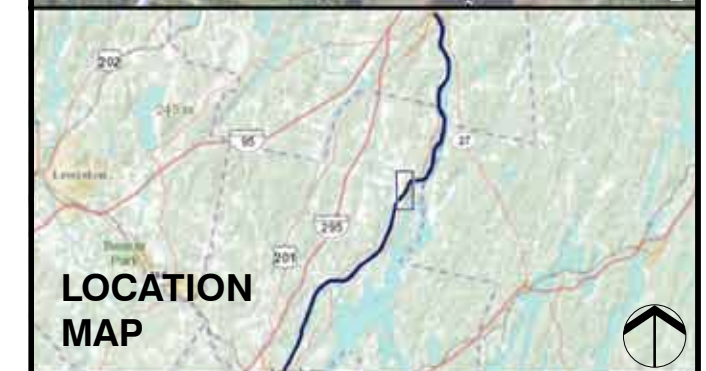
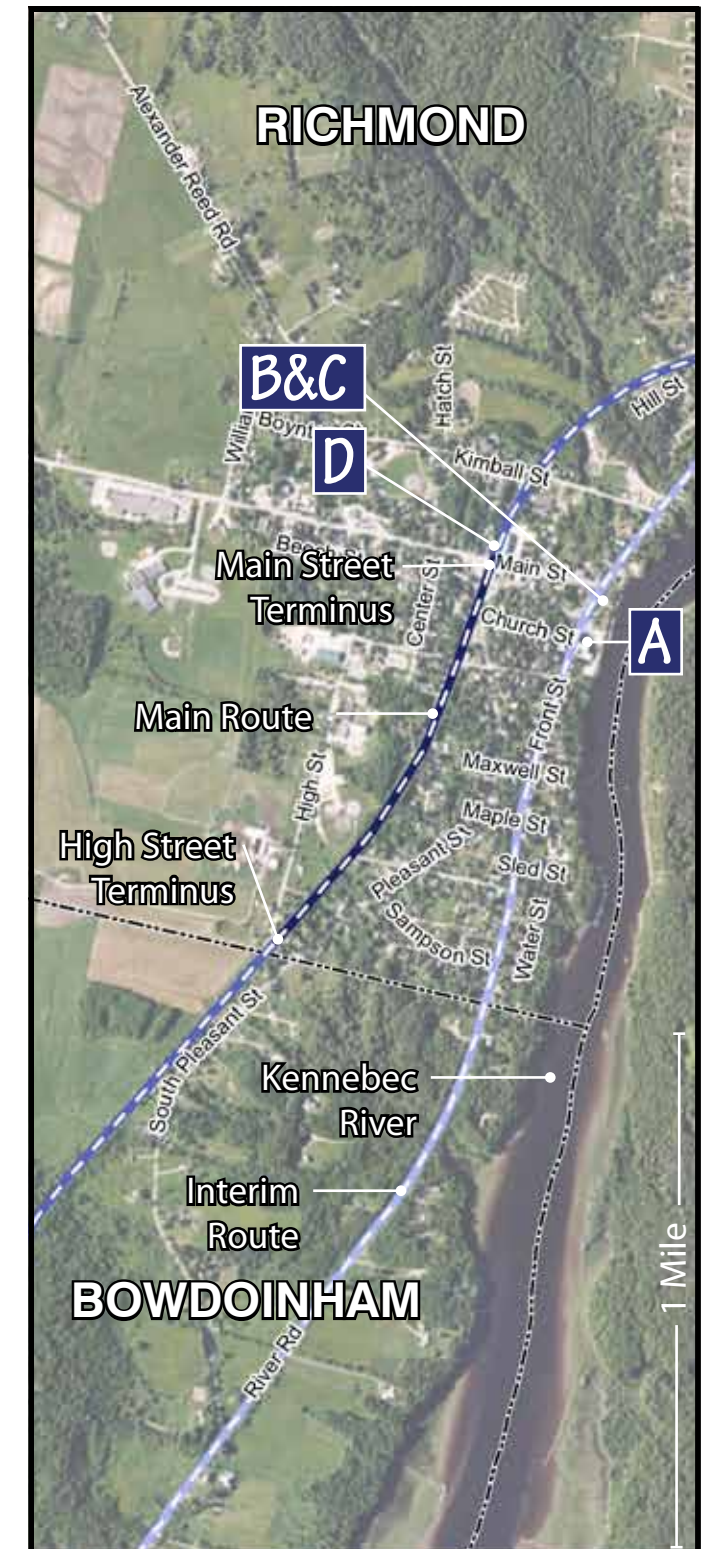
The rail corridor becomes very constrained between commercial buildings as it reaches Main Street. Paving the trail within the town center will help to increase its visibility as a formal facility for bicyclists and pedestrians, as well as accessibility for handicapped residents of the community.

### Interim Routes

Route 24/River Road (which becomes Front Street in Richmond's downtown) will provide connectivity around downtown Richmond until this section of trail is completed.

### Preliminary Cost Estimate

|    |                        |          |  |                  |
|----|------------------------|----------|--|------------------|
| 1  | Clearing and Grubbing  | 0.5 Acre | \$6,000.00                               | \$3,000          |
| 2  | Earth Excavation       | 3750 CY  | \$12.00                                  | \$45,000         |
| 3  | Rock Excavation        | 50 CY    | \$125.00                                 | \$6,250          |
| 4  | Aggregate Base         | 550 CY   | \$34.00                                  | \$18,700         |
| 5  | Aggregate Subbase      | 2100 CY  | \$28.00                                  | \$58,800         |
| 6  | Hot Mix Asphalt        | 550 Ton  | \$125.00                                 | \$68,750         |
| 7  | 15" Culvert Pipe       | 250 LF   | \$56.00                                  | \$14,000         |
| 8  | 24" Culvert Pipe       | 100 LF   | \$65.00                                  | \$6,500          |
| 9  | 36" Culvert Pipe       | 0 LF     | \$125.00                                 | \$-              |
| 10 | Catch Basin            | 2 Unit   | \$2,250.00                               | \$4,500          |
| 11 | Curb Ramp Det. Warning | 6 Each   | \$275.00                                 | \$1,650          |
| 12 | Granite Curb           | 200 LF   | \$36.00                                  | \$7,200          |
| 13 | Loam 6" Depth          | 750 Unit | \$8.00                                   | \$6,000          |
| 14 | Seeding Method No. 1   | 55 Unit  | \$70.00                                  | \$3,850          |
| 15 | Landscape Plantings    | 1 LS     | \$4,500.00                               | \$4,500          |
| 16 | Pavement Markings      | 1 LS     | \$2,600.00                               | \$2,600          |
| 17 | Traffic Control        | 1 LS     | \$6,500.00                               | \$5,500          |
| 18 | Erosion Control        | 1 LS     | \$12,000.00                              | \$7,000          |
| 19 | Mobilization           | 1 LS     | \$10,000.00                              | \$7,500          |
| 20 | Signage                | 1 LS     | \$5,000.00                               | \$5,000          |
| 21 | Fencing                | 4000 LF  | \$22.50                                  | \$90,000         |
| 22 | Retaining Wall         | 125 SF   | \$90.00                                  | \$11,250         |
| 23 | Pedestrian Bridge      | 40 LS    | \$3,250.00                               | \$130,000        |
|    |                        |          | <b>Subtotal:</b>                         | <b>\$375,800</b> |
|    |                        |          | Engineering, Permitting and Contingency: | \$131,530        |
|    |                        |          | <b>Segment Total:</b>                    | <b>\$507,330</b> |



The short B4 section of the trail connects residences on the south side of Richmond to its commercial downtown and waterfront



# MERRYMEETING TRAIL

## Richmond Village Trail (North 1)

RICHMOND

Length: .42 Miles

Anticipated Cost: \$951,000



### Section Description

This section of the trail provides an in-town connection between the commercial downtown district centered on Richmond's Main Street and residences in the thickly settled north side of Richmond. The trail will provide an important alternative transportation function within the town, as well as providing regional connectivity from the downtown to the adjoining towns and beyond.

From Main Street, the trail passes close to the town's recently improved outdoor athletic facility on Alexander Reed Road, where there is potential for a trailhead location. This segment includes several in-town road crossings. Safety features and wayfinding signs for trail users and trail identification signs for road users should be included all along the trail in this and other more populated areas.

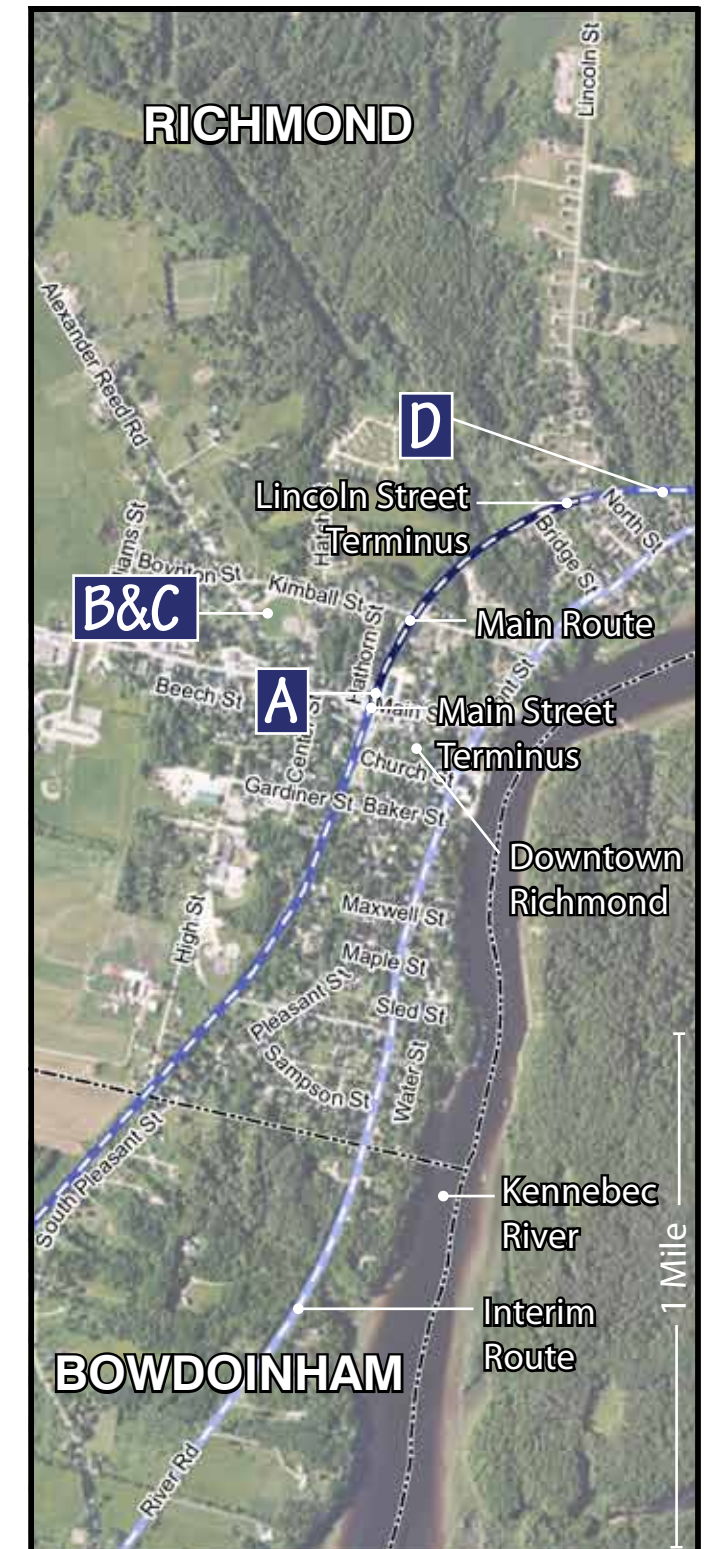
Paving the trail within the town center will help to increase its visibility as a formal facility for bicyclists and pedestrians, as well as accessibility for handicapped residents of the community.

### Interim Routes

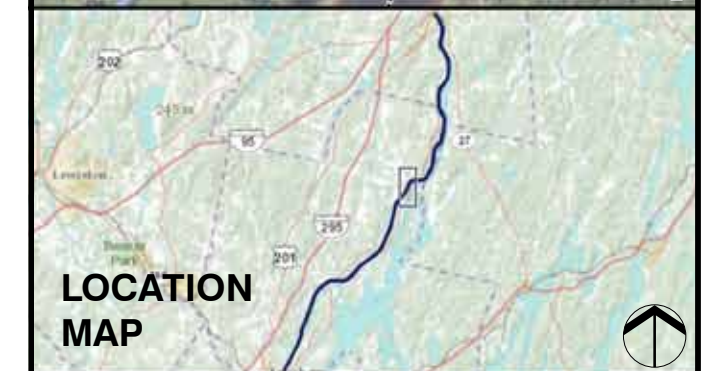
Route 24/Front Street (which becomes River Road to the north and south of Richmond's downtown) will provide connectivity around downtown Richmond until this section of trail is completed.

### Preliminary Cost Estimate

|    |                        |           |  |                  |
|----|------------------------|-----------|--|------------------|
| 1  | Clearing and Grubbing  | 0.35 Acre | \$6,000.00                               | \$2,100          |
| 2  | Earth Excavation       | 2600 CY   | \$12.00                                  | \$31,200         |
| 3  | Rock Excavation        | 50 CY     | \$125.00                                 | \$6,250          |
| 4  | Aggregate Base         | 350 CY    | \$34.00                                  | \$11,900         |
| 5  | Aggregate Subbase      | 1400 CY   | \$28.00                                  | \$39,200         |
| 6  | Hot Mix Asphalt        | 350 Ton   | \$125.00                                 | \$43,750         |
| 7  | 15" Culvert Pipe       | 250 LF    | \$56.00                                  | \$14,000         |
| 8  | 24" Culvert Pipe       | 100 LF    | \$65.00                                  | \$6,500          |
| 9  | 36" Culvert Pipe       | 0 LF      | \$125.00                                 | \$-              |
| 10 | Catch Basin            | 3 Unit    | \$2,250.00                               | \$6,750          |
| 11 | Curb Ramp Det. Warning | 2 Each    | \$275.00                                 | \$550            |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200          |
| 13 | Loam 6" Depth          | 550 CY    | \$8.00                                   | \$4,400          |
| 14 | Seeding Method No. 1   | 35 Unit   | \$70.00                                  | \$2,450          |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500          |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600          |
| 17 | Traffic Control        | 1 LS      | \$2,500.00                               | \$2,500          |
| 18 | Erosion Control        | 1 LS      | \$15,000.00                              | \$15,000         |
| 19 | Mobilization           | 1 LS      | \$30,000.00                              | \$30,000         |
| 20 | Signage                | 1 LS      | \$1,500.00                               | \$1,500          |
| 21 | Fencing                | 2250 LF   | \$22.50                                  | \$50,625         |
| 22 | Retaining Wall         | 4600 SF   | \$90.00                                  | \$414,000        |
| 23 | Pedestrian Bridge      | 30 LF     | \$3,250.00                               | \$97,500         |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$703,825</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$246,339        |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$950,164</b> |



The short C1 section of the trail meets Richmond's Main Street and passes through or near many residential streets and community facilities as it crosses town





# MERRYMEETING TRAIL

## Richmond Village Trail (North 2)

RICHMOND

Length: .26 Miles

Anticipated Cost: \$293,000



### Section Description

This short section of the trail will provide a crucial connection between the population centers of Richmond and Gardiner, as well as a connection to Richmond's commercial downtown for residences located to the north of the junction of Front Street and River Road. The trail will serve an important alternative transportation function within the town, as well as providing regional connectivity from the downtown to the adjoining towns and beyond.

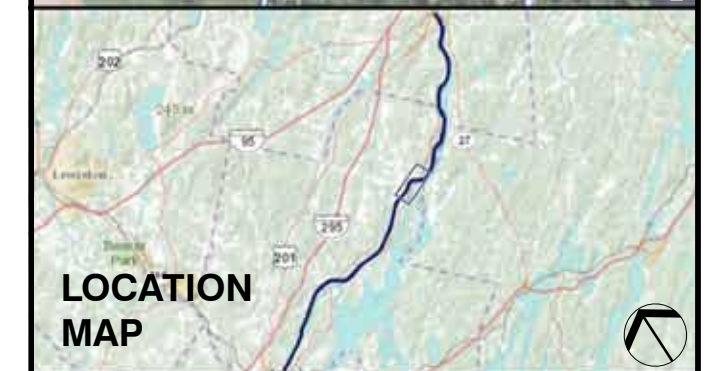
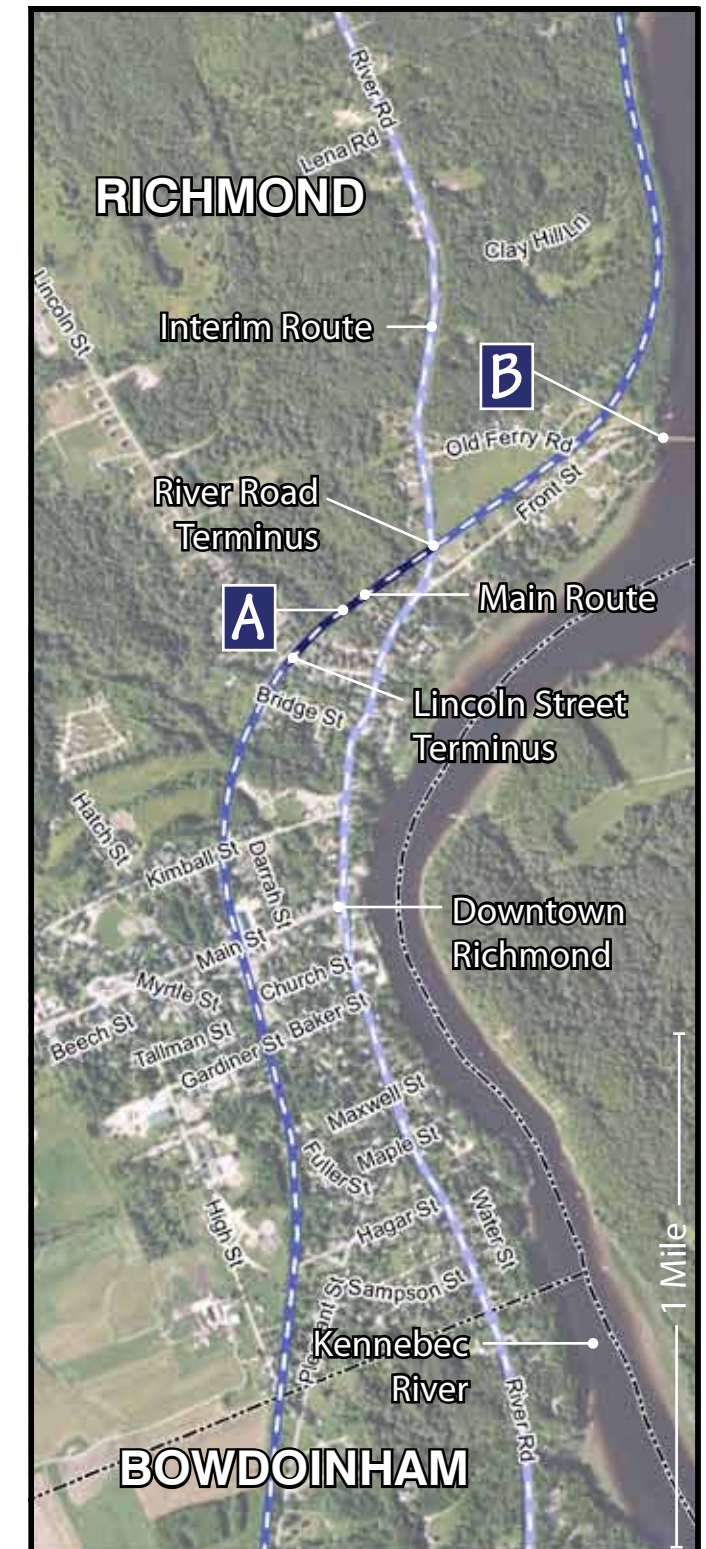
Building the trail through this area will necessitate creating a level area for the trail adjacent to the track, as the ground slopes abruptly away from the track in this short stretch.

### Interim Routes

An interim route following Front Street into Richmond's downtown and River Road north into South Gardiner will provide connectivity between the two communities until this section of trail can be completed.

### Preliminary Cost Estimate

|    |                        |           |  |                  |
|----|------------------------|-----------|--|------------------|
| 1  | Clearing and Grubbing  | 0.25 Acre | \$6,000.00                               | \$1,500          |
| 2  | Earth Excavation       | 1600 CY   | \$12.00                                  | \$19,200         |
| 3  | Rock Excavation        | 50 CY     | \$125.00                                 | \$6,250          |
| 4  | Aggregate Base         | 225 CY    | \$34.00                                  | \$7,650          |
| 5  | Aggregate Subbase      | 875 CY    | \$28.00                                  | \$24,500         |
| 6  | Hot Mix Asphalt        | 225 Ton   | \$125.00                                 | \$28,125         |
| 7  | 15" Culvert Pipe       | 250 LF    | \$56.00                                  | \$14,000         |
| 8  | 24" Culvert Pipe       | 100 LF    | \$65.00                                  | \$6,500          |
| 9  | 36" Culvert Pipe       | 0 LF      | \$125.00                                 | \$-              |
| 10 | Catch Basin            | 3 Unit    | \$2,250.00                               | \$6,750          |
| 11 | Curb Ramp Det. Warning | 2 Each    | \$275.00                                 | \$550            |
| 12 | Granite Curb           | 0 LF      | \$36.00                                  | \$-              |
| 13 | Loam 6" Depth          | 325 CY    | \$8.00                                   | \$2,600          |
| 14 | Seeding Method No. 1   | 22 Unit   | \$70.00                                  | \$1,540          |
| 15 | Landscape Plantings    | 1 LS      | \$2,500.00                               | \$2,500          |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600          |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500          |
| 18 | Erosion Control        | 1 LS      | \$7,000.00                               | \$7,000          |
| 19 | Mobilization           | 1 LS      | \$15,000.00                              | \$15,000         |
| 20 | Signage                | 1 LS      | \$1,500.00                               | \$1,500          |
| 21 | Fencing                | 1400 LF   | \$22.50                                  | \$31,500         |
| 22 | Retaining Wall         | 1000 SF   | \$90.00                                  | \$90,000         |
| 23 | Pedestrian Bridge      | 0 LF      | \$3,250.00                               | \$-              |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$216,665</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$75,833         |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$292,498</b> |



Photograph by Vanasse Hangen Brustlin, Inc.

The short C2 section of the trail continues through the residential north portion of Richmond's town center, toward Gardiner and the Kennebec River





# MERRYMEETING TRAIL

## Richmond to Gardiner Trail

**RICHMOND & GARDINER**

**Length: 6.42 Miles**

**Anticipated Cost: \$20,608,000**



### Section Description

This section connects two population centers in a long stretch that starts on River Road near the northern edge of Richmond's town center and ends at Riverview Drive, at the southern edge of South Gardiner. It follows closely along the western shore of the Kennebec River, heading north over rolling forested terrain and affording excellent views of the river.

This section begins with a pedestrian bridge crossing River Road parallel to the existing rail bridge. The trail crosses Old Ferry Road at grade before continuing north along the river, where it remains until it reaches its northern terminus at Riverview Drive. In addition to views of the river, the trail will provide visual access to scenic woodlands, agricultural fields, and undisturbed wildlife habitat.

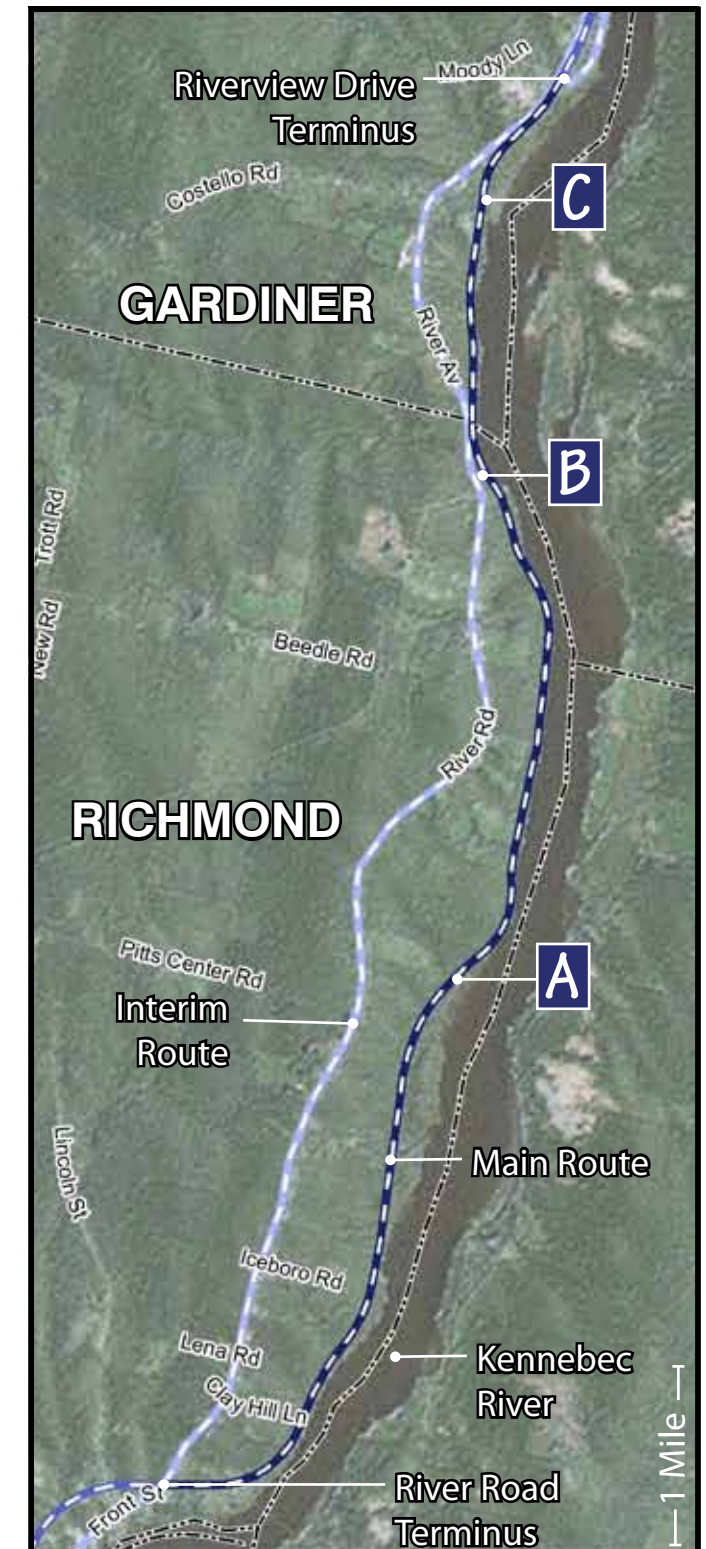
The Riverview Community School is located on River Avenue (Route 24) within close proximity to the Riverview Drive terminus, and could potentially serve as a trailhead location. The trail will provide a safe walking route for children attending the school and create an opportunity for exercise and classroom outings.

### Interim Routes

The interim route follows River Road before reconnecting with the trail at Riverside Road, near the town line.

### Preliminary Cost Estimate

|    |                        |           |  |                     |
|----|------------------------|-----------|--|---------------------|
| 1  | Clearing and Grubbing  | 4 Acre    | \$6,000.00                               | \$24,000            |
| 2  | Earth Excavation       | 38000 CY  | \$12.00                                  | \$456,000           |
| 3  | Rock Excavation        | 1750 CY   | \$125.00                                 | \$218,750           |
| 4  | Aggregate Base         | 5300 CY   | \$34.00                                  | \$180,200           |
| 5  | Aggregate Subbase      | 21500 CY  | \$28.00                                  | \$602,000           |
| 6  | Hot Mix Asphalt        | 5300 Ton  | \$125.00                                 | \$662,500           |
| 7  | 15" Culvert Pipe       | 750 LF    | \$56.00                                  | \$42,000            |
| 8  | 24" Culvert Pipe       | 450 LF    | \$65.00                                  | \$29,250            |
| 9  | 36" Culvert Pipe       | 100 LF    | \$125.00                                 | \$12,500            |
| 10 | Catch Basin            | 6 Unit    | \$2,250.00                               | \$13,500            |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650             |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200             |
| 13 | Loam 6" Depth          | 8000 Unit | \$8.00                                   | \$64,000            |
| 14 | Seeding Method No. 1   | 520 Unit  | \$70.00                                  | \$36,400            |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500             |
| 16 | Pavement Markings      | 1 LS      | \$2,600.00                               | \$2,600             |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500             |
| 18 | Erosion Control        | 1 LS      | \$12,000.00                              | \$12,000            |
| 19 | Mobilization           | 1 LS      | \$200,000.00                             | \$200,000           |
| 20 | Signage                | 1 LS      | \$4,000.00                               | \$4,000             |
| 21 | Fencing                | 39500 LF  | \$22.50                                  | \$888,750           |
| 22 | Retaining Wall         | 145000 SF | \$90.00                                  | \$13,050,000        |
| 23 | Pedestrian Bridge      | 70 LS     | \$3,250.00                               | \$227,500           |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$15,264,850</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$5,342,698         |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$20,607,548</b> |



Photograph by Vanasse Hangen Brustlin, Inc.

Photograph by Vanasse Hangen Brustlin, Inc.

Section C3 begins near Richmond's town center and quickly moves toward the west shore of the Kennebec, before reaching the southern end of South Gardiner





# MERRYMEETING TRAIL

## South Gardiner Village Trail

GARDINER

Length: .80 Miles

Anticipated Cost: \$478,000



### Section Description

This short section of the trail provides a multi-modal alternative for residents of South Gardiner, traversing the most heavily settled area of the village between the Riverview Community School in the south to the mill in the north.

Section C4 hugs the banks of the Kennebec as it crosses the village of South Gardiner, affording excellent views of the river.

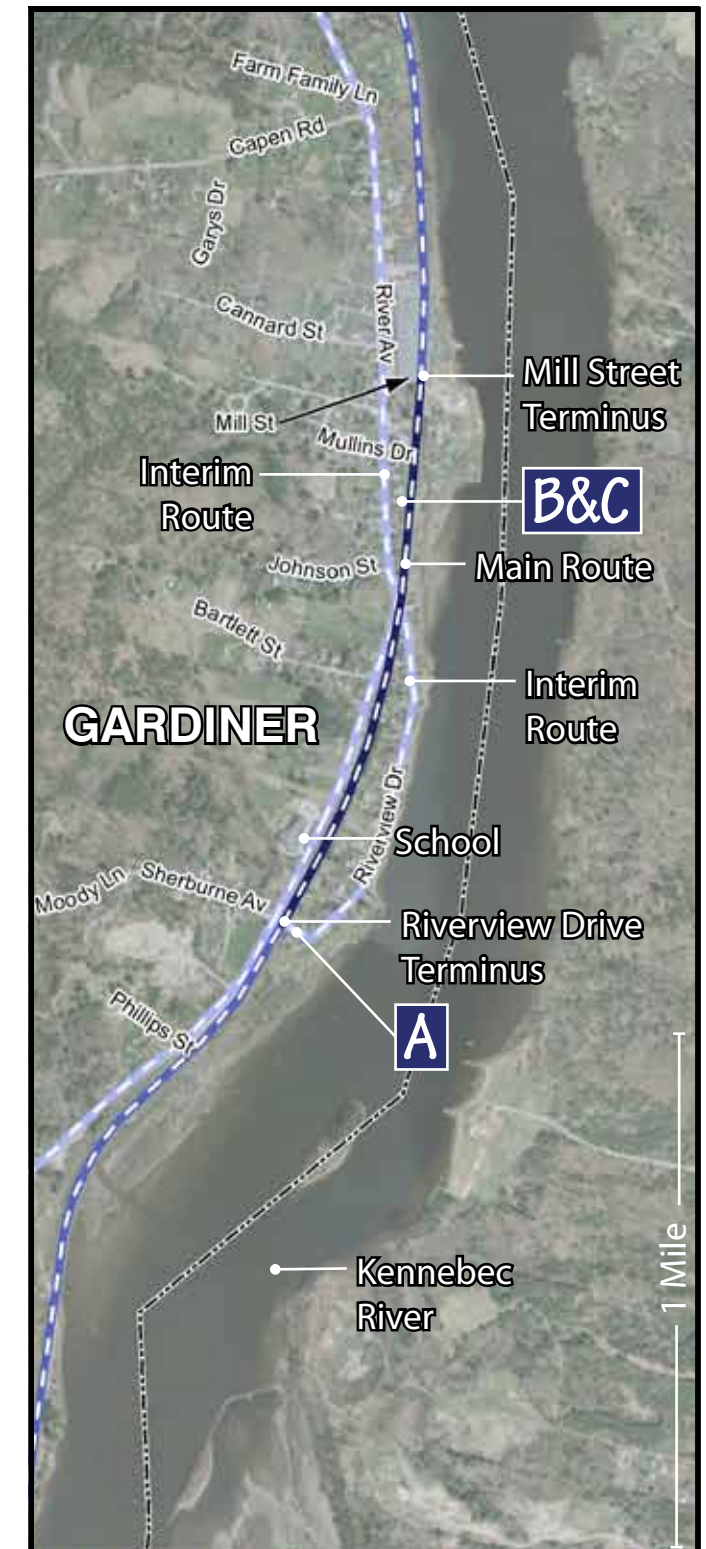
The Riverview Community School is located on River Avenue (Route 24) within close proximity to the trail, and could potentially serve as a trailhead location. The trail will provide a safe walking route for children attending the school as well as an opportunity for exercise and classroom outings.

### Interim Route

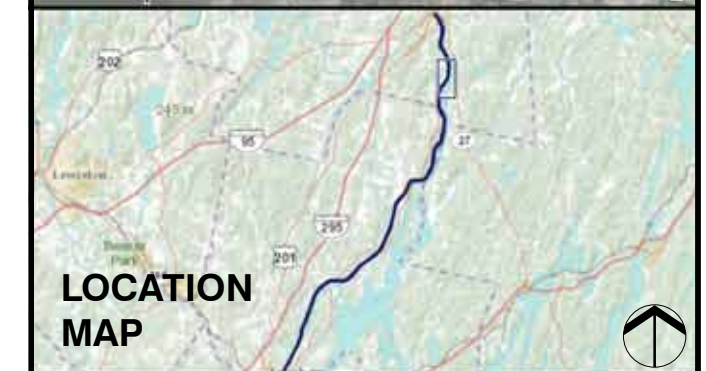
An interim route follows River Avenue/Route 24 until just before reaching the Gardiner's Waterfront Park, with a spur following Riverview Drive along the river that reconnects to River Avenue at both ends. The interim route will provide connectivity around South Gardiner until this section of the trail is constructed.

### Preliminary Cost Estimate

|    |                        |           |  |                  |
|----|------------------------|-----------|--|------------------|
| 1  | Clearing and Grubbing  | 3.5 Acre  | \$6,000.00                               | \$21,000         |
| 2  | Earth Excavation       | 32000 CY  | \$12.00                                  | \$384,000        |
| 3  | Rock Excavation        | 350 CY    | \$125.00                                 | \$43,750         |
| 4  | Aggregate Base         | 700 CY    | \$34.00                                  | \$23,800         |
| 5  | Aggregate Subbase      | 2650 CY   | \$28.00                                  | \$74,200         |
| 6  | Hot Mix Asphalt        | 700 Ton   | \$125.00                                 | \$87,500         |
| 7  | 15" Culvert Pipe       | 250 LF    | \$56.00                                  | \$14,000         |
| 8  | 24" Culvert Pipe       | 85 LF     | \$65.00                                  | \$5,525          |
| 9  | 36" Culvert Pipe       | 50 LF     | \$125.00                                 | \$6,250          |
| 10 | Catch Basin            | 4 Unit    | \$2,250.00                               | \$9,000          |
| 11 | Curb Ramp Det. Warning | 4 Each    | \$275.00                                 | \$1,100          |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200          |
| 13 | Loam 6" Depth          | 1000 Unit | \$8.00                                   | \$8,000          |
| 14 | Seeding Method No. 1   | 70 Unit   | \$70.00                                  | \$4,900          |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500          |
| 16 | Pavement Markings      | 1 LS      | \$4,500.00                               | \$4,500          |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$4,500          |
| 18 | Erosion Control        | 1 LS      | \$26,500.00                              | \$10,500         |
| 19 | Mobilization           | 1 LS      | \$140,000.00                             | \$25,000         |
| 20 | Signage                | 1 LS      | \$6,000.00                               | \$6,000          |
| 21 | Fencing                | 5500 LF   | \$22.50                                  | \$123,750        |
| 22 | Retaining Wall         | 350 SF    | \$90.00                                  | \$31,500         |
| 23 | Pedestrian Bridge      | 0 LS      | \$3,250.00                               | \$-              |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$353,725</b> |
|    |                        |           | Engineering, Permitting and Contingency: | \$123,804        |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$477,529</b> |



Section C4 crosses the primarily residential village of South Gardiner





# MERRYMEETING TRAIL

## Gardiner to South Gardiner Trail

GARDINER

Length: 3.36 Miles

Anticipated Cost: \$11,647,000



### Section Description

The long northernmost section of the trail knits together residential and commercial areas, connecting the primarily residential neighborhoods of South Gardiner to the bustling activity of Gardiner's busy downtown. Like sections C3 and C4, this section follows closely along the western shore of the Kennebec River for much of its length. Its northern terminus occurs in Gardiner's recently improved Waterfront Park, with a direct connection to the downtown and other shopping centers. The trail ends just a short distance away from the Kennebec River Rail Trail, which follows the river all the way to Augusta.

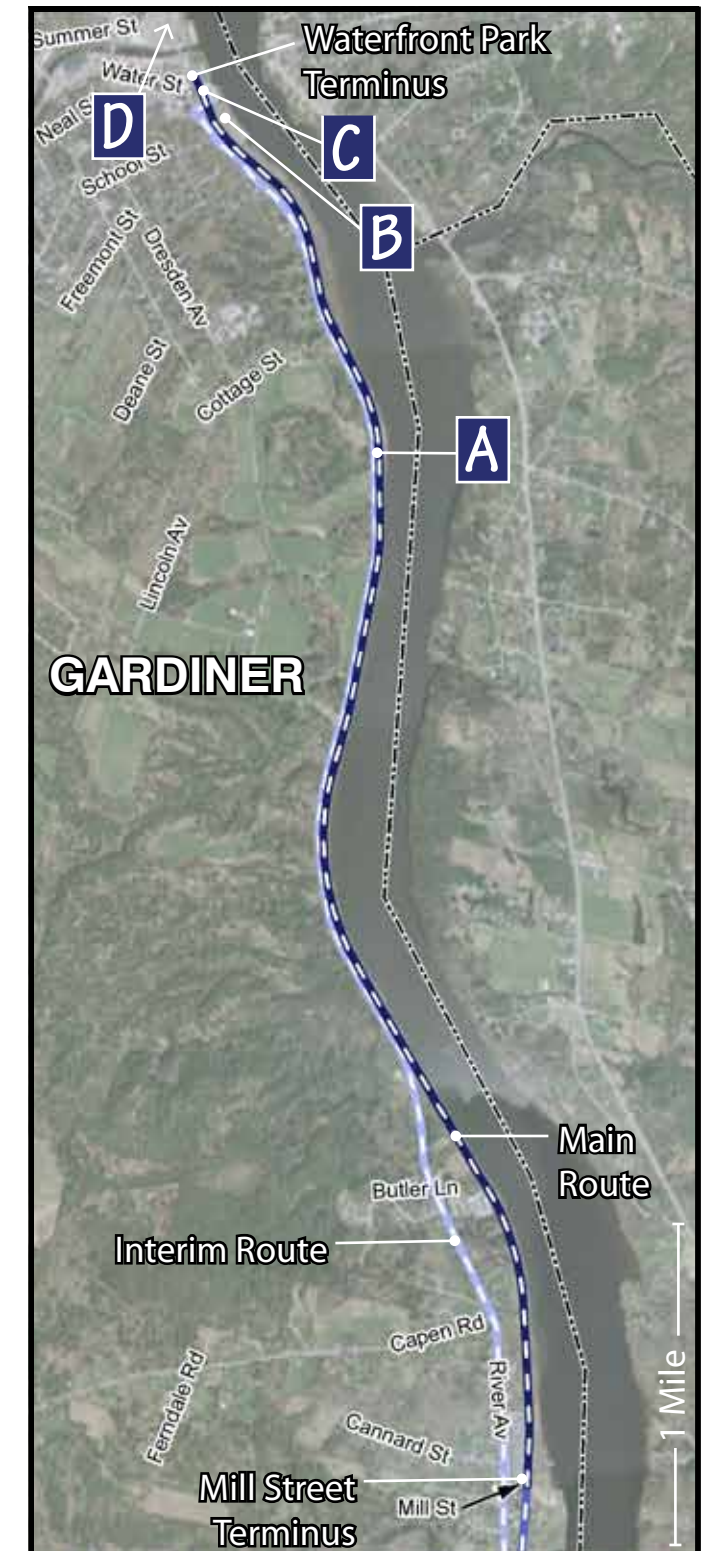
The trail's location affords excellent views of the Kennebec, and provides visual access to scenic woodlands and undisturbed wildlife habitat. It will create a vital off-road alternative for residents of Gardiner, who will be able to walk or bicycle along the river, across their City and beyond.

### Interim Routes

River Avenue (Route 24), will provide a connection into Gardiner and to the Kennebec River Rail Trail until this portion of the trail is constructed.

### Preliminary Cost Estimate

|    |                        |           |  |                     |
|----|------------------------|-----------|--|---------------------|
| 1  | Clearing and Grubbing  | 2.2 Acre  | \$6,000.00                               | \$13,200            |
| 2  | Earth Excavation       | 21000 CY  | \$12.00                                  | \$252,000           |
| 3  | Rock Excavation        | 350 CY    | \$125.00                                 | \$43,750            |
| 4  | Aggregate Base         | 2800 CY   | \$34.00                                  | \$95,200            |
| 5  | Aggregate Subbase      | 11000 CY  | \$28.00                                  | \$308,000           |
| 6  | Hot Mix Asphalt        | 2850 Ton  | \$125.00                                 | \$356,250           |
| 7  | 15" Culvert Pipe       | 800 LF    | \$56.00                                  | \$44,800            |
| 8  | 24" Culvert Pipe       | 500 LF    | \$65.00                                  | \$32,500            |
| 9  | 36" Culvert Pipe       | 200 LF    | \$125.00                                 | \$25,000            |
| 10 | Catch Basin            | 6 Unit    | \$2,250.00                               | \$13,500            |
| 11 | Curb Ramp Det. Warning | 6 Each    | \$275.00                                 | \$1,650             |
| 12 | Granite Curb           | 200 LF    | \$36.00                                  | \$7,200             |
| 13 | Loam 6" Depth          | 4100 Unit | \$8.00                                   | \$32,800            |
| 14 | Seeding Method No. 1   | 275 Unit  | \$70.00                                  | \$19,250            |
| 15 | Landscape Plantings    | 1 LS      | \$4,500.00                               | \$4,500             |
| 16 | Pavement Markings      | 1 LS      | \$4,500.00                               | \$4,500             |
| 17 | Traffic Control        | 1 LS      | \$6,500.00                               | \$6,500             |
| 18 | Erosion Control        | 1 LS      | \$26,500.00                              | \$18,500            |
| 19 | Mobilization           | 1 LS      | \$140,000.00                             | \$80,000            |
| 20 | Signage                | 1 LS      | \$6,000.00                               | \$6,000             |
| 21 | Fencing                | 21500 LF  | \$22.50                                  | \$483,750           |
| 22 | Retaining Wall         | 76000 SF  | \$90.00                                  | \$6,840,000         |
| 23 | Pedestrian Bridge      | 200 LS    | \$3,250.00                               | \$650,000           |
|    |                        |           | <b>Subtotal:</b>                         | <b>\$8,626,700</b>  |
|    |                        |           | Engineering, Permitting and Contingency: | \$3,019,345         |
|    |                        |           | <b>Segment Total:</b>                    | <b>\$11,646,045</b> |



Photograph by Vanasse Hangen Brustlin, Inc.



Section C5 provides the final link connecting Topsham and Brunswick's Androscoggin River Walk with Gardiner's Kennebec River Rail Trail, while connecting residential South Gardiner with Gardiner's downtown

