

APPENDIX B

Street Crossing Reports



DeLUCA-HOFFMAN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 778 MAIN STREET
 SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207 775 1121
 FAX 207 879 0896

TRAIL-STREET CROSSING REPORT
 EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #1

Date: 9-16-09

Road Name: Route 1/I-195 eastbound off-ramp (southern ramp)

Town/City Name: _____

Trail Co. Name: Eastern Trail Management District

Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.

DHAI Job No: 2869.00

1. The roadway posted speed limit is Ramp – 35 MPH; Rte 1 northbound – 30 MPH
Rte 1 southbound – not posted

2. The Sight Distance requirement is 35 MPH – 305 feet; 30 MPH – 250 feet

3. Is Horizontal Sight Distance met?

NORTH	<input checked="" type="radio"/> YES	NO	NA
EAST	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> NA
SOUTH	<input checked="" type="radio"/> YES	NO	NA
WEST	<input checked="" type="radio"/> YES	NO	NA

4. What is actual field measured Sight Distance?

NORTH	<u>260'</u>
EAST	<u>305'+</u>
SOUTH	<u>305'+</u>
WEST	<u>650' (from ramp)</u>

5. Is Vertical Sight Distance met? YES NO NA

6. Are Horiz./Vert. alignment modifications recommended? YES NO NA

7. Is tree clearing/trimming required? YES NO NA

Minor trim of low hanging Ash branches

8. Are trail approach grade improvements recommended? YES NO NA

9. Is trail sight distance met? From intersection down trail: YES NO NA

From trail toward intersection: YES NO NA

10. Is the crossing near a roadway intersection? YES NO NA

Distance to intersection? at intersection

Is the intersection signalized? YES NO NA

MISC. COMMENTS

Proposed trail alignment is parallel to U.S. Route 1 and crosses interstate access ramps. Incorporation of pedestrian signal phase recommended for trail crossing at ramp. Signage on ramp required to provide notice of crossing pedestrian movements.

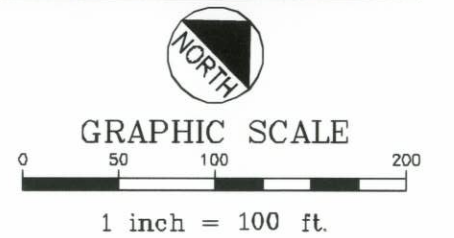
CROSSING SKETCH



SKETCH CHECKLIST

- TRAIL AND ROADWAY
- PAVEMENT MARKINGS
- DRAINAGE FEATURES
- AERIAL UTILITIES
- UNDERGROUND UTILITIES
- RESIDENTIAL / COMMERCIAL DRIVEWAYS
- PROPERTY FEATURES (WELLS, LEACHFIELDS)
- OTHERS _____

- ALL VERTICAL GRANITE CURB, WEST SIDE OF ROAD
- RAISED CONCRETE ISLAND W/ MAST ARM, EAST BOUND OFF-RAMP
- OVERHEAD UTILITIES PARALLEL TO ROUTE 1, WEST SIDE



DH



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**Trail Crossing Photos
Eastern Trail Management District
Old Orchard Beach and Saco
PIN 13340.00**

Date of Photos 9-16-09 **Town/City** Saco
Road Name Route 1/I-195 Interchange – Eastbound off-ramp (southern ramp)



North View



West View



East View



South View



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TRAIL-STREET CROSSING REPORT
EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #2

Date: 9-16-09

Road Name: Route 1/I-195 westbound on/off-ramp (northern ramps)
Town/City Name: Saco
Trail Co. Name: Eastern Trail Management District
Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.
DHAI Job No: 2869.00

- | | | | | | | | | | | | | | | | | | |
|---|--|-------|--------------------------------------|------|------------|-------|--------------------------------------|------|-------------------------------------|-------|--------------------------------------|----|----|------|--------------------------------------|----|----|
| 1. The roadway posted speed limit is | <u>Rte 1 northbound – 30 MPH</u>
<u>Rte 1 southbound – not posted</u> | | | | | | | | | | | | | | | | |
| 2. The Sight Distance requirement is | <u>30 MPH – 250 feet</u>
<u>35 MPH – 305 feet</u> | | | | | | | | | | | | | | | | |
| 3. Is Horizontal Sight Distance met? | <table border="0"> <tr> <td>NORTH</td> <td><input checked="" type="radio"/> YES</td> <td>NO</td> <td>NA</td> </tr> <tr> <td>EAST</td> <td><input checked="" type="radio"/> YES</td> <td>NO</td> <td><input checked="" type="radio"/> NA</td> </tr> <tr> <td>SOUTH</td> <td><input checked="" type="radio"/> YES</td> <td>NO</td> <td>NA</td> </tr> <tr> <td>WEST</td> <td><input checked="" type="radio"/> YES</td> <td>NO</td> <td>NA</td> </tr> </table> | NORTH | <input checked="" type="radio"/> YES | NO | NA | EAST | <input checked="" type="radio"/> YES | NO | <input checked="" type="radio"/> NA | SOUTH | <input checked="" type="radio"/> YES | NO | NA | WEST | <input checked="" type="radio"/> YES | NO | NA |
| NORTH | <input checked="" type="radio"/> YES | NO | NA | | | | | | | | | | | | | | |
| EAST | <input checked="" type="radio"/> YES | NO | <input checked="" type="radio"/> NA | | | | | | | | | | | | | | |
| SOUTH | <input checked="" type="radio"/> YES | NO | NA | | | | | | | | | | | | | | |
| WEST | <input checked="" type="radio"/> YES | NO | NA | | | | | | | | | | | | | | |
| 4. What is actual field measured Sight Distance? | <table border="0"> <tr> <td>NORTH</td> <td><u>>305 feet</u></td> </tr> <tr> <td>EAST</td> <td><u>N/A</u></td> </tr> <tr> <td>SOUTH</td> <td><u>>305 feet</u></td> </tr> <tr> <td>WEST</td> <td><u>>305 feet</u></td> </tr> </table> | NORTH | <u>>305 feet</u> | EAST | <u>N/A</u> | SOUTH | <u>>305 feet</u> | WEST | <u>>305 feet</u> | | | | | | | | |
| NORTH | <u>>305 feet</u> | | | | | | | | | | | | | | | | |
| EAST | <u>N/A</u> | | | | | | | | | | | | | | | | |
| SOUTH | <u>>305 feet</u> | | | | | | | | | | | | | | | | |
| WEST | <u>>305 feet</u> | | | | | | | | | | | | | | | | |
| 5. Is Vertical Sight Distance met? | <input checked="" type="radio"/> YES NO NA | | | | | | | | | | | | | | | | |
| 6. Are Horiz./Vert. alignment modifications recommended? | <input checked="" type="radio"/> YES NO NA | | | | | | | | | | | | | | | | |
| 7. Is tree clearing/trimming required? | YES <input checked="" type="radio"/> NO NA | | | | | | | | | | | | | | | | |
| Minor trim of low hanging Ash branches | | | | | | | | | | | | | | | | | |
| 8. Are trail approach grade improvements recommended? | YES <input checked="" type="radio"/> NO NA | | | | | | | | | | | | | | | | |
| 9. Is trail sight distance met? From intersection down trail: | <input checked="" type="radio"/> YES NO NA | | | | | | | | | | | | | | | | |
| From trail toward intersection: | <input checked="" type="radio"/> YES NO NA | | | | | | | | | | | | | | | | |
| 10. Is the crossing near a roadway intersection? | <input checked="" type="radio"/> YES NO NA | | | | | | | | | | | | | | | | |
| Distance to intersection? | <u>220 feet</u> | | | | | | | | | | | | | | | | |
| Is the intersection signalized? | YES <input checked="" type="radio"/> NO NA | | | | | | | | | | | | | | | | |

MISC. COMMENTS

Trail parallels Route 1; ramps to/from westbound I-195.

There is a bermed area bordering the north edge of the I-195 on-ramp from Route 1. This grade requires modification to provide universal access to the ramped landing leading to the crosswalk. Curb ramps and pedestrian crossing signage are needed at each crossing.



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778 MAIN STREET
SUITE 8
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Trail Crossing Photos
Eastern Trail Management District
Old Orchard Beach and Saco
PIN 13340.00

Date of Photos 9-16-09 **Town/City** Saco **Road Name** Route 1/I-195 Westbound Ramps



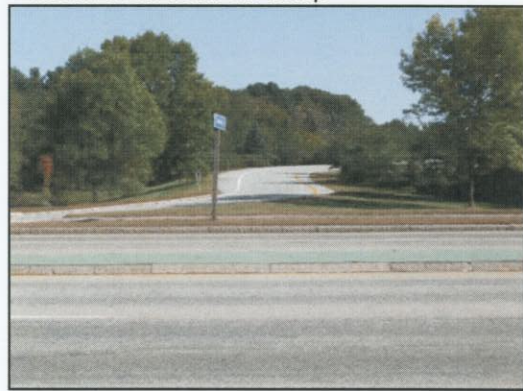
North view from on-ramp



North view from off-ramp



West view of on-ramp



East view opposite on-ramp to I-195



West view of off-ramp



East view opposite off-ramp from I-195



South view from off-ramp



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TRAIL-STREET CROSSING REPORT
EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #3

Date: 9-15-09

Road Name: Moody Street

Town/City Name: Saco

Trail Co. Name: Eastern Trail Management District

Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.

DHAI Job No: 2869.00

1. The roadway posted speed limit is 25 MPH

2. The Sight Distance requirement is 200 feet

3. Is Horizontal Sight Distance met?	NORTH	<input checked="" type="radio"/> YES	NO	NA
	EAST	<input checked="" type="radio"/> YES	NO	NA
	SOUTH	<input checked="" type="radio"/> YES	NO	NA
	WEST	<input checked="" type="radio"/> YES	NO	NA

4. What is actual field measured Sight Distance?	NORTH	<u>500+'</u>
	EAST	<u>245'</u>
	SOUTH	<u>400+'</u>
	WEST	<u>345'</u>

5. Is Vertical Sight Distance met? YES NO NA

6. Are Horiz./Vert. alignment modifications recommended? YES NO NA

7. Is tree clearing/trimming required?
Heavy undergrowth YES NO NA

8. Are trail approach grade improvements recommended? YES NO NA

9. Is trail sight distance met? From intersection down trail: YES NO NA
From trail toward intersection: YES NO NA

10. Is the crossing near a roadway intersection? YES NO NA

Distance to intersection? (need measurement from plans)

Is the intersection signalized? YES NO NA

MISC. COMMENTS

Provide visual (painted) connection to painted sidewalk from Sweetser School. Moody Street is a relatively narrow street with moderate traffic flow to/from the Sweetser School located at the end of Moody Street west of this crossing.

CROSSING SKETCH

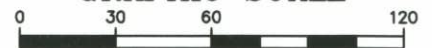


SKETCH CHECKLIST

- TRAIL AND ROADWAY
- PAVEMENT MARKINGS
- DRAINAGE FEATURES
- AERIAL UTILITIES
- UNDERGROUND UTILITIES
- RESIDENTIAL / COMMERCIAL DRIVEWAYS
- PROPERTY FEATURES (WELLS, LEACHFIELDS)
- OTHERS _____



GRAPHIC SCALE



1 inch = 60 ft.

DH



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Trail Crossing Photos
Eastern Trail Management District
Old Orchard Beach and Saco
PIN 13340.00

Date of Photos 9-15-09

Town/City Saco

Road Name Moody Street



North View



West View



East View



South View



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CONSULTING ENGINEERS

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TRAIL-STREET CROSSING REPORT
EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #4

Date: 9-17-09

Road Name: Cascade Road
Town/City Name: Old Orchard Beach
Trail Co. Name: Eastern Trail Management District
Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.
DHAI Job No: 2869.00

1. The roadway posted speed limit is 45 MPH
2. The Sight Distance requirement is 425 feet
3. Is Horizontal Sight Distance met?
- | | | | |
|-------|--------------------------------------|-------------------------------------|----|
| NORTH | <input checked="" type="radio"/> YES | <input type="radio"/> NO | NA |
| EAST | <input checked="" type="radio"/> YES | <input checked="" type="radio"/> NO | NA |
| SOUTH | <input checked="" type="radio"/> YES | <input type="radio"/> NO | NA |
| WEST | <input checked="" type="radio"/> YES | <input type="radio"/> NO | NA |
4. What is actual field measured Sight Distance?
- | | | |
|-------|--------------------------|------------------------|
| NORTH | <u>(need to measure)</u> | |
| EAST | <u>275'</u> | <u>(475' above 2')</u> |
| SOUTH | <u>425'</u> | |
| WEST | <u>600'</u> | |
5. Is Vertical Sight Distance met? YES NO NA
6. Are Horiz./Vert. alignment modifications recommended? YES NO NA
7. Is tree clearing/trimming required? YES NO NA
8. Are trail approach grade improvements recommended? YES NO NA
9. Is trail sight distance met? From intersection down trail: YES NO NA
From trail toward intersection: YES NO NA
10. Is the crossing near a roadway intersection? YES NO NA
Distance to intersection? _____
Is the intersection signalized? YES NO NA

MISC. COMMENTS

Approach from east: Beyond 275', the vertical curve of the road limits visibility of objects at street-grade at the crossing; objects taller than 2-3 feet can be seen from a much greater distance from the east. Signage highly recommended.

Inside curve limits visibility of south trail segment as approached from the west. Removal of tree and vegetative undergrowth to open views of the intersection with the trail is recommended.

Trail crossing near, but not directly on, valley of the road.

CROSSING SKETCH

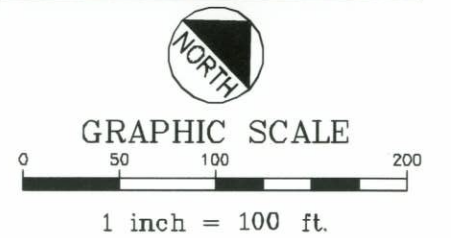


SKETCH CHECKLIST

- TRAIL AND ROADWAY
- PAVEMENT MARKINGS
- DRAINAGE FEATURES
- AERIAL UTILITIES
- UNDERGROUND UTILITIES
- RESIDENTIAL / COMMERCIAL DRIVEWAYS
- PROPERTY FEATURES (WELLS, LEACHFIELDS)
- OTHERS _____

OLD CASCADe ROAD

- EROSION FROM EXISTING PATH
- PAVEMENT CRACKED + SETTLED
- LOW AREAS NEAR + WEST OF RAILROAD ABUTMENTS



DH



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Trail Crossing Photos
Eastern Trail Management District
Old Orchard Beach and Saco
PIN 13340.00

Date of Photos 9-17-09

Town/City Old Orchard Beach

Road Name Cascade Road



North View



West View



East View



South View



Road Name: Old Cascade Road
Town/City Name: Old Orchard Beach
Trail Co. Name: Eastern Trail Management District
Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.
DHAI Job No: 2869.00

1. The roadway posted speed limit is Not posted; assumed 25 MPH
2. The Sight Distance requirement is Assumed 200 feet
3. Is Horizontal Sight Distance met?
- | | | | |
|-------|--------------------------------------|----|----|
| NORTH | <input checked="" type="radio"/> YES | NO | NA |
| EAST | <input checked="" type="radio"/> YES | NO | NA |
| SOUTH | <input checked="" type="radio"/> YES | NO | NA |
| WEST | <input checked="" type="radio"/> YES | NO | NA |
4. What is actual field measured Sight Distance?
- | | |
|-------|------------------------|
| NORTH | <u>60'</u> |
| EAST | <u>350'</u> |
| SOUTH | <u>25'</u> |
| WEST | <u>200' (dead end)</u> |
5. Is Vertical Sight Distance met? YES NO NA
6. Are Horiz./Vert. alignment modifications recommended? YES NO NA
7. Is tree clearing/trimming required? YES NO NA
8. Are trail approach grade improvements recommended? YES NO NA
9. Is trail sight distance met? From intersection down trail: YES NO NA
- Proposed alignment of grade improvements should meet requirements.**
- From trail toward intersection: YES NO NA
- Limited view to west from south**
10. Is the crossing near a roadway intersection? YES NO NA
- Distance to intersection? 700'+; dead end to west
- Is the intersection signalized? YES NO NA

MISC. COMMENTS

- Very lightly traveled dead end road, serves one single-family residence.
- Vertical alignment modifications necessary for street-grade crossing to accommodate universal accessibility guidelines.
- Existing bridge abutments limit visibility from west; removal may be an alternative to accommodate accessibility and increase visibility. Signage is recommended.
- Evidence of standing water and poor to moderate pavement conditions may require attention during final design.
- Crossing could be overhead pedestrian bridge; however, structural analysis of existing concrete abutments is required.

Date of Photos 4-30-09 and 9-15-09

Town/City Old Orchard Beach

Road Name Old Cascade Road



North view of eastern side of abutment



West View – Paths on west side of abutments obstructed



East View



South view of eastern side of abutment; may not fall on ETMD property



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TRAIL-STREET CROSSING REPORT
 EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #6

Date: 9-17-09

Road Name: Milliken Mills Road
Town/City Name: Old Orchard Beach
Trail Co. Name: Eastern Trail Management District
Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.
DHAI Job No: 2869.00

- | | | | |
|---|--|-------------------------------------|----|
| 1. The roadway posted speed limit is | <u>25 MPH</u> | | |
| 2. The Sight Distance requirement is | <u>200 feet</u> | | |
| 3. Is Horizontal Sight Distance met? | NORTH <input checked="" type="radio"/> YES | NO | NA |
| | EAST <input checked="" type="radio"/> YES | NO | NA |
| | SOUTH <input checked="" type="radio"/> YES | NO | NA |
| | WEST <input checked="" type="radio"/> YES | <input checked="" type="radio"/> NO | NA |
| 4. What is actual field measured Sight Distance? | NORTH | <u>500'+</u> | |
| | EAST | <u>385'</u> | |
| | SOUTH | <u>400'+</u> | |
| | WEST | <u>185'</u> | |
| 5. Is Vertical Sight Distance met? | <input checked="" type="radio"/> YES | NO | NA |
| 6. Are Horiz./Vert. alignment modifications recommended? | YES | <input checked="" type="radio"/> NO | NA |
| 7. Is tree clearing/trimming required? | | | |
| West side of south trail segment | <input checked="" type="radio"/> YES | NO | NA |
| 8. Are trail approach grade improvements recommended? | YES | <input checked="" type="radio"/> NO | NA |
| 9. Is trail sight distance met? From intersection down trail: | <input checked="" type="radio"/> YES | NO | NA |
| From trail toward intersection: | <input checked="" type="radio"/> YES | NO | NA |
| 10. Is the crossing near a roadway intersection? | <input checked="" type="radio"/> YES | NO | NA |
| Distance to intersection? | <u>575' ±</u> | | NA |
| Is the intersection signalized? | YES | <input checked="" type="radio"/> NO | NA |

MISC. COMMENTS

Inside curve limits visibility of south trail segment as one approaches from the west.

Visibility from south trail segment toward west is limited by the inside curve of the road and existing pines near trail.



SKETCH CHECKLIST

- TRAIL AND ROADWAY
- PAVEMENT MARKINGS - DYL @ RD CENTER
- DRAINAGE FEATURES
- AERIAL UTILITIES - NORTH SIDE
- UNDERGROUND UTILITIES
- RESIDENTIAL / COMMERCIAL DRIVEWAYS
- PROPERTY FEATURES (WELLS, LEACHFIELDS)
- OTHERS PAVEMENT GOOD CONDITION

AT PARALLEL, ON STREET PKG:
 • ROOT DAMAGE & SLOPE EROSION



GRAPHIC SCALE



1 inch = 100 ft.



Date of Photos 9-17-09

Town/City

Old Orchard Beach

Road Name Milliken Mills Road



North View



West View



East View



South View



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TRAIL-STREET CROSSING REPORT
EASTERN TRAIL MANAGEMENT DISTRICT – PIN 13340.00

Report #7

Date: 11-2-09

Road Name: Clark Street – Trail Terminus

Town/City Name: Saco

Trail Co. Name: Eastern Trail Management District

Inspector(s): Shelley Brunelle, DeLuca-Hoffman Associates, Inc.

DHAI Job No: 2869.00

1. The roadway posted speed limit is Not posted – 25 MPH (assumed)

2. The Sight Distance requirement is 200 feet

3. Is Horizontal Sight Distance met?

NORTH	<input checked="" type="radio"/> YES	NO	NA
EAST	<input checked="" type="radio"/> YES	NO	NA
SOUTH	<input checked="" type="radio"/> YES	NO	<input checked="" type="radio"/> NA
WEST	<input checked="" type="radio"/> YES	NO	NA

4. What is actual field measured Sight Distance?

NORTH	<u>300'+</u>
EAST	<u>250'</u>
SOUTH	<u>N/A</u>
WEST	<u>200'</u>

5. Is Vertical Sight Distance met? YES NO NA

6. Are Horiz./Vert. alignment modifications recommended? YES NO NA

7. Is tree clearing/trimming required? YES NO NA

8. Are trail approach grade improvements recommended?

Trail crosses swale, grade descends to street elevation YES NO NA

9. Is trail sight distance met? From intersection down trail: YES NO NA

From trail toward intersection: YES NO NA

10. Is the crossing near a roadway intersection? YES NO NA

Distance to intersection? 200' to west; 350' to east

Is the intersection signalized? YES NO NA

MISC. COMMENTS

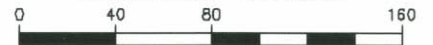


SKETCH CHECKLIST

- TRAIL AND ROADWAY
- PAVEMENT MARKINGS
- DRAINAGE FEATURES
- AERIAL UTILITIES
- UNDERGROUND UTILITIES
- RESIDENTIAL / COMMERCIAL DRIVEWAYS
- PROPERTY FEATURES (WELLS, LEACHFIELDS)
- OTHERS _____



GRAPHIC SCALE



1 inch = 80 ft.



Date of Photos 11-2-09 Town/City Saco

Road Name Clark Street – Trail Terminus



North View



West View



East View



South View