

Hot In Place Recycling Essex County, New York





Essex County

- Founded in 1799
- Second largest county in New York (1916 miles²)
- Population: 38,851
- The county is completely within the Adirondack Park
- 7 traffic signals countywide

Mount Marcy Highest Point in New York



Lake Placid Site of '32 & '80 Winter Olympics



Historic Fort Ticonderoga



Lake Champlain



New York State Bird

Eastern Blue Bird



Essex County DPW

- 358 miles of County Highway.
- Average countywide traffic count of 734.
- \$3.6 mil. Annual budget for highway and bridge maintenance and construction.
- 47 highway division personnel .

Essex County's Four Seasons



Snow Season



Mud Season



Bug Season



Huntin' Season

HIR Selection Process

- ◉ Existing Road Conditions.
- ◉ Cost Benefit.
- ◉ Finish Profile Elevation.
- ◉ Environmentally Friendly “Green”
- ◉ Several Different Wear Coarse Options.

Design Criteria

- Core Samples.
- Lab Results.
- PEN Number.
- Set Finish Product Asphalt Goal.

Tahawus Road



Tahawus Road

Challenges

- Weather

- Extreme Temperature Changes
- Short Season

- Remote location

- Hauling Costs
- Travel Time

Tahawus Road



Tahawus Road



Tahawus Road

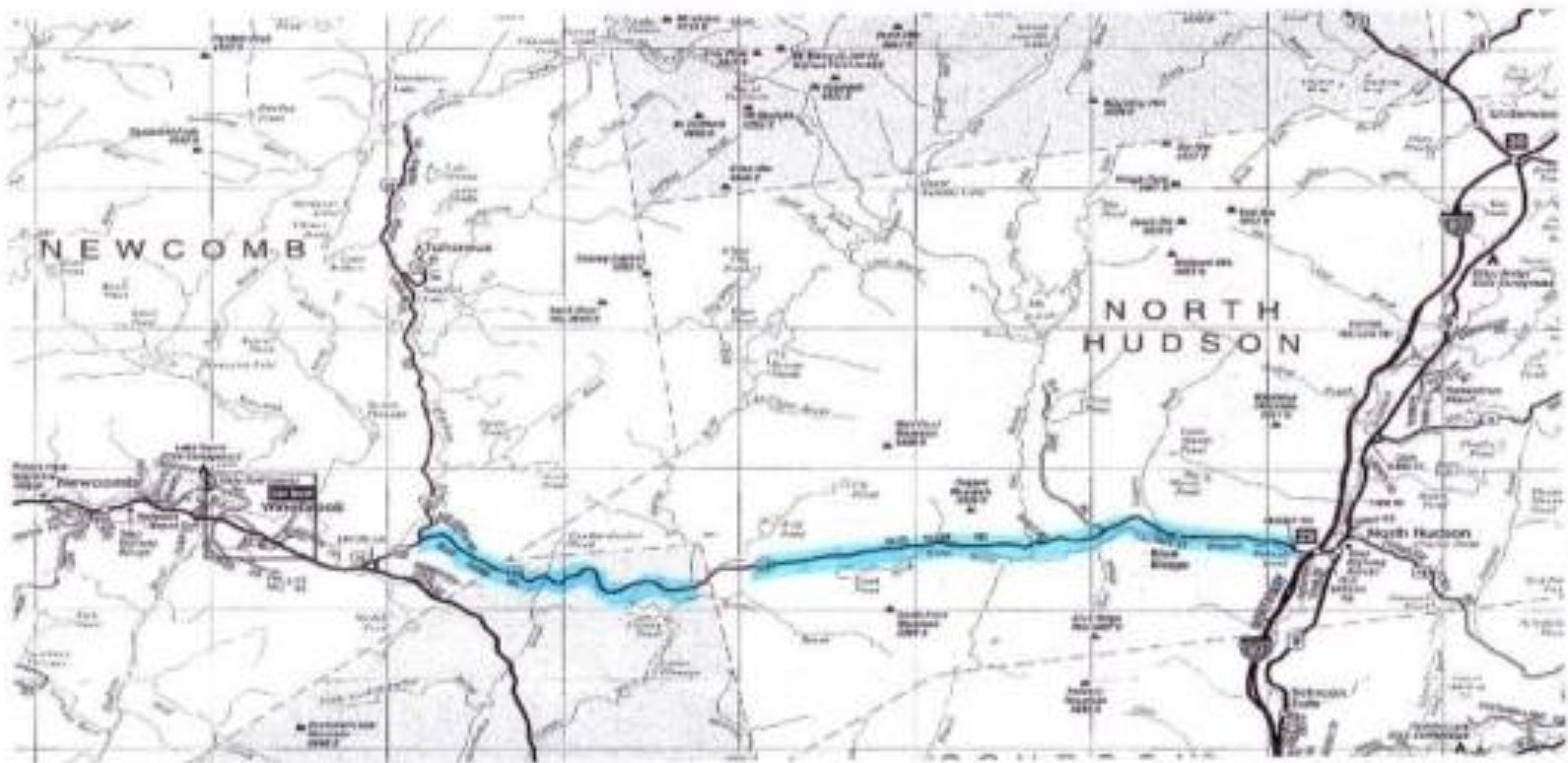
Project Cost:

2006	2.0 miles	\$175,114.58
<u>2007</u>	<u>3.7 miles</u>	<u>\$249,797.88</u>
Total	5.7 miles	\$424,912.46

Total cost per mile \$74,546.05

Ave. Cost/mile 1-1/2" overlay \$81,947.37

Blue Ridge Road



Blue Ridge Road

Challenges

● ARRA Funding

- Fast Track Design
- Federal and State Requirements

● Project Length

- 16.7 Miles Long
- Coordination with Paving and Guide Rail Work
- Late Season Start

Blue Ridge Road

Challenges

- Weather

- Extreme Temperature Changes
- Short Season

- Remote location

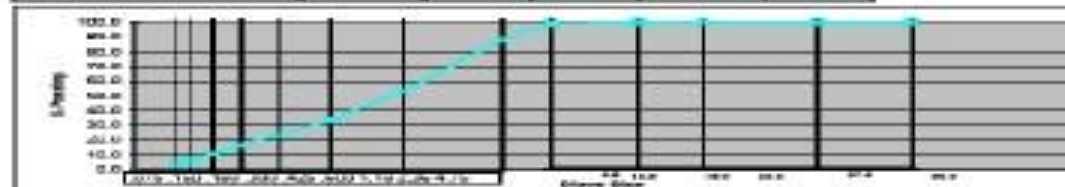
- Hauling Costs
- Travel Time

Blue Ridge Road Design

Sample #	Description	Sample Type
00-2-1000A	HIGHWAY REPAIR	LUMP MIX
Date	MLD: 10/04/00 MLD: 5/30/00 L.L.	
08/25/00	WHL / 1000 0/2500	
Weight of bowl and spoon, grams		
Weight of sample (wet), bowl, and spoon, grams		
Weight of sample heated @250F, bowl, and spoon, grams		
Weight of filter before extraction, grams		
Weight of extracted aggregate @250F, bowl, and spoon, grams		
Weight of filter after extraction, grams		
Asph. Content, %	Actual	Assumed
Total weight of extracted aggregate, grams		
% Asphalt, corrected		4.6 %

Gradation Results

Sieve Size	Weight Retained	% Retained	% Passing	Specification	
				Low	High
60 mm - (2")			100.0		
37.5 mm - (1 1/2")			100.0		
25 mm - (1")			100.0		
19.0 mm - (3/4")			100.0		
12.5 mm - (1/2")			99.0		
9.5 mm - (3/8")			88.2		
4.75 mm - (#40)			54.4		
2.50 mm - (#60)			55.4		
1.18 mm - (#16)			33.1		
0.600 mm - (#30)			16.2		
0.300 mm - (#60)			10.2		
0.150 mm - (#100)			8.3		
0.075 mm - (#200)			3.2		
Pan			0.0		
Filtered ash					
Total					



Comments:

ARSON RECOVERY
PEN = 26

TAKEN 5/25/00

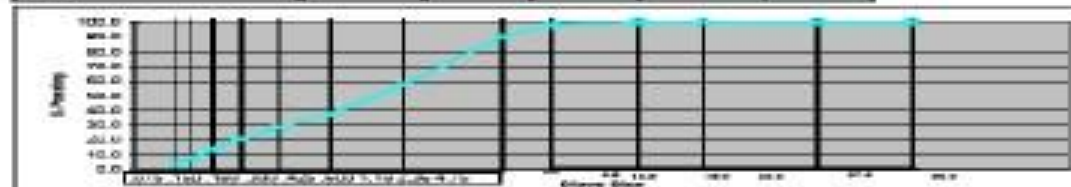
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Blue Ridge Road Design

Sample #	Description	Sample Type
00-2-1005A	HIGHWAY REPAIR	Vib. Mix
Date	MD: 10/04; MD: 5/30/05	
08/25/09	WHL / 1000 8/26/09	
Weight of bowl and spoon, grams		
Weight of sample (wet), bowl, and spoon, grams		
Weight of sample heated @250F, bowl, and spoon, grams		
Weight of filter before extraction, grams		
Weight of extracted aggregate @250F, bowl, and spoon, grams		
Weight of filter after extraction, grams		
Asph. Content, %	Actual	Assumed
Total weight of extracted aggregate, grams		
% Asphalt, corrected		5.4 %

Gradation Results

Sieve Size	Weight Retained	% Retained	% Passing	Specification	
				Low	High
60 mm - (2")			100.0		
37.5 mm - (1 1/2")			100.0		
25 mm - (1")			100.0		
19.0 mm - (3/4")			100.0		
12.5 mm - (1/2")			99.1		
9.5 mm - (3/8")			90.6		
4.75 mm - (#40)			87.7		
2.50 mm - (#60)			87.0		
1.18 mm - (#16)			88.3		
0.600 mm - (#30)			84.1		
0.300 mm - (#60)			83.8		
0.150 mm - (#100)			7.3		
0.075 mm - (#200)			4.0		
Pan			0.0		
Filtered ash					
Total					



Comments:

ARSON RECOVERY
PEN = 52

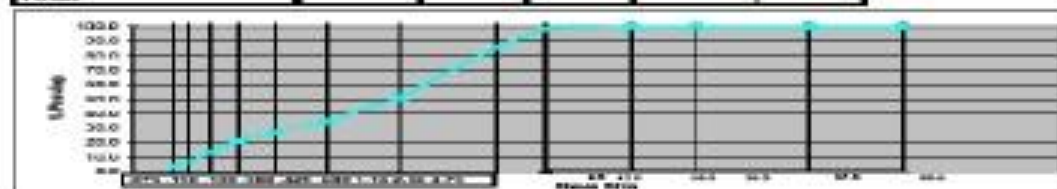
TAKEN 5/25/09

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Blue Ridge Road Design

Sample #	Description	Sample Type
06C-1600A	ROADWAY ASPHALT	WPT MIX
Date	RIIP 0010P RD PERP C/D	
06/11/09	WDL 14+000 0/25/09	
Weight of bowl and spoon, grams		0
Weight of sample wet, bowl and spoon, grams		0
Weight of sample heated @250F, bowl and spoon, grams		0
Weight of filter before extraction, grams		0
Weight of extracted aggregate @250F, bowl and spoon, grams		0
Weight of filter after extraction, grams		0
Asph Correction	Actual	Assumed
Total weight of extracted aggregate, grams		0
% Asphalt, corrected		0.0 %

Gradation Results					
sieve size	Weight Retained	% Retained	% Passing	Specification	
				Low	High
30 mm - (2")			100.0		
37.5 mm - (1-1/2")			100.0		
25 mm - (1")			100.0		
19.0 mm - (3/4")			100.0		
12.5 mm - (1/2")			98.6		
9.5 mm - (3/8")			85.5		
4.75 mm - (#4)			51.2		
2.50 mm - (#60)			34.0		
1.18 mm - (#150)			27.1		
0.600 mm - (#30)			20.8		
0.300 mm - (#60)			10.1		
0.150 mm - (#100)			0.4		
0.075 mm - (#200)			0.0		
Pan			0.0		
Filter Catch					
Total					



Blue Ridge Road

PIN 1758.33 647.009 8/10/09 ARRA SIGN BY
COUNTY, EASTERN END



NYWORKS

PROJECT FUNDED BY THE
American Recovery
and
Reinvestment Act



USDOT
TIGER

Blue Ridge Road



Blue Ridge Road



Blue Ridge Road



Blue Ridge Road



Blue Ridge Road



Blue Ridge Road

Project Cost: 16.7 miles

HIR	\$1,051,816.68
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<u>Asphalt overlay</u>	<u>\$1,389,986.32</u>
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Total	\$2,441,803.00
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Total cost per mile \$146,215.75 (HIR & Paving)

Complete Project Cost: \$3,246,510.07

(includes all items, guide rail, shoulder back-up, striping, etc..)

Questions?

