

**REPORT ON NEED FOR TOWN  
INFRASTRUCTURE IMPROVEMENTS  
PREPARED FOR  
CONNECTICUT SITING COUNCIL**

**WIND COLEBROOK NORTH  
COLEBROOK, CONNECTICUT**

Prepared for:



**BNE Energy**  
29 South Main Street  
Town Center, Suite 200  
West Hartford, CT 06107



**CIVIL 1**  
43 Sherman Hill Road  
Woodbury, CT 06798

**SEPTEMBER 2011**

## **Project Description**

BNE Energy Inc. (BNE) will be developing Wind Colebrook North on approximately 125 acres on Rock Hall Road in Colebrook, CT. The project will consist of three (3) GE 1.6 MW wind turbines. The turbines will be outfitted with 82.5 meter diameter blades and mounted on 80 meter towers. As part of the construction process, these components will need to be transported onto the project site. This report will address the adequacy of the town's infrastructure to accommodate this transport.

## **Town Infrastructure**

Rock Hall Road is an improved, paved road and is the sole town road over which the turbine components must pass in order to reach the site. The site is approximately 1/4 of a mile north of the intersection with CT Route 44. Some temporary widening at this intersection will be required in order to accommodate the turning movements of the transport vehicles. This widening will occur on the northeast quadrant of the intersection on land leased by BNE Energy.

The horizontal and vertical geometry of Rock Hall Road itself is relatively gentle in nature and will not require any modifications in order to accept the transport vehicles. The physical condition of Rock Hall Road is in poor conditions with severe cracking and pavement failure already existing between CT Rt. 44 and the project entrance.

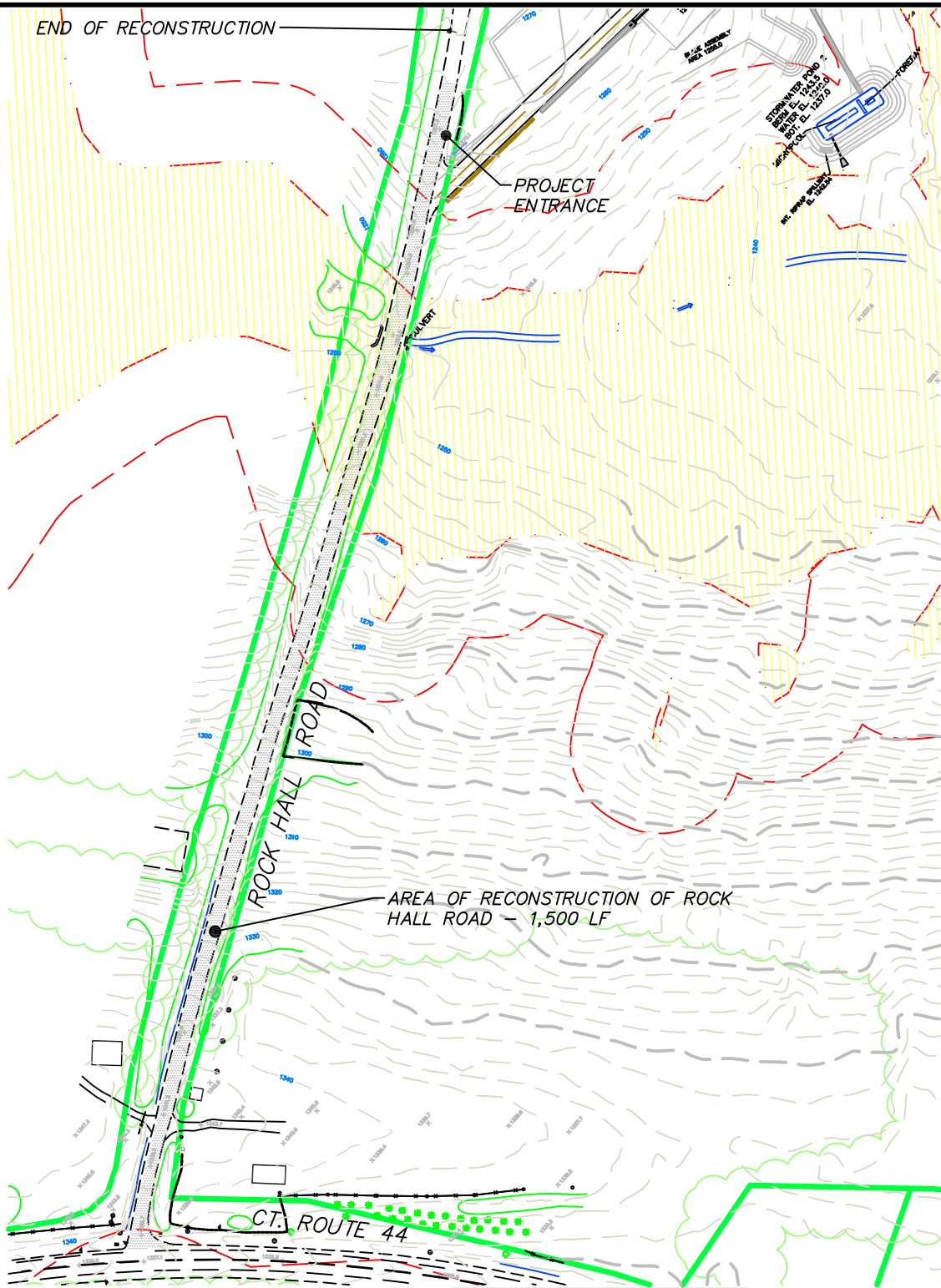
This failure of the asphalt is likely due to the lack of a stable base under the existing asphalt. During the Siting Council hearings, the First Selectman offered testimony that originally Rock Hall Road was a dirt road that was later paved without the addition of any gravel base. Our observations are consistent with his testimony. This section of Rock Hall Road will need to be rebuilt in order to accommodate the anticipated construction traffic. The existing width, horizontal and vertical geometry of the road may be maintained.

## **Recommendations**

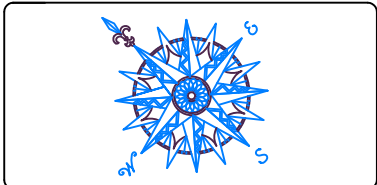
Rock Road should be rebuilt for a distance of 1500 linear feet from the intersection of CT Rt. 44. This will bring the improvements approximately 100 feet past the entrance to the Wind Colebrook North project. The work shall be performed in accordance with the plan and specifications attached in Appendix A and in accordance with CT DOT specifications. After the improvements have been completed, a pre-transport inspection shall be conducted with representatives from BNE and the Town of Colebrook to ascertain the condition of the road just

prior to the commencement of construction activities. A post-construction survey shall be completed immediately following the completion of construction activities with representatives of BNE and the Town present to ascertain if there were any impacts or damage to Town infrastructure resulting from project construction. If the post-construction survey identifies any impacts or damage to Town infrastructure caused by construction activities for the Wind Colebrook South project, then BNE agrees to bring any affected infrastructure to pre-project conditions or better. No other improvements to Town infrastructure are anticipated at this time.

## APPENDIX A



NO.	REVISION	DATE



**ROCK HALL ROAD  
RECONSTRUCTION  
AREA**

**CIVIL 1**

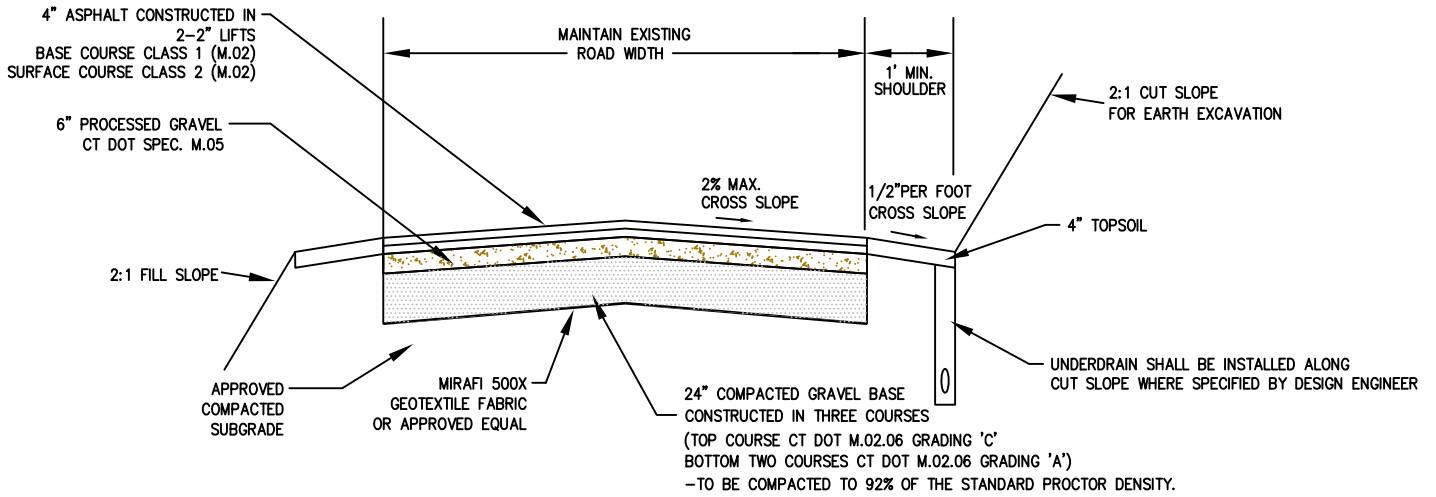
CORNERSTONE PROFESSIONAL PARK, SUITE D-101  
43 SHERMAN HILL ROAD  
WOODBURY CONNECTICUT  
(203) 266-0778

**BNE ENERGY, INC.**  
29 SOUTH MAIN STREET  
TOWN CENTER SUITE 200  
WEST HARTFORD, CT 06107

**WIND COLEBROOK  
NORTH**  
ROCK HALL ROAD  
COLEBROOK CONNECTICUT

DRAWN: BB	APPROVER: CJ
SCALE: 1" = 200'	
DATE: 23 SEP 11	
PROJ. NO.: 3093	
CHD FILE NAME: 3093	
DRAWING NO.:	

**A - 1**



**SUBGRADE FILL SPECIFICATIONS:**

1. Fill to be approved by the Engineer prior to placement. Material to consist of hard and durable particles or fragments and shall be free of frozen material, sod, brush, roots, stumps, organic matter and other objectionable materials.
2. Subbase fill material shall be compacted to 90% of the standard proctor density until the required elevation is obtained.
3. Subbase and fill specifications to be confirmed and modified as necessary after site analysis by geotechnical engineer. Access drive design must be able to accommodate all proposed construction vehicles.

**NOTES:**

1. Rock Hall Road to be excavated down to proposed subgrade 34" below the current existing road grade. Excavated material to be removed from site.
2. All materials to be used in reconstruction of Rock Hall Road are to be CT DOT Spec Form 816.

# ROCK HALL ROAD RECONSTRUCTION CROSS SECTION

N.T.S.

NO.	REVISION	DATE

**ROCK HALL ROAD  
RECONSTRUCTION  
DETAIL**

**BNE ENERGY, INC.**  
29 SOUTH MAIN STREET  
TOWN CENTER SUITE 200  
WEST HARTFORD, CT 06107

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NORTH**  
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COLEBROOK      CONNECTICUT

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DRWING: BB	APPROVED: CJ
SCALE: AS NOTED	
DATE: 23 SEP 11	
PROJ. NO.: 3093	
CADD FILE NAME: 3093	
DRAWING NO.: A-2	