

## CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: January 29, 1986

File Ref:

To: Mr. Thomas R. Clark, District Director

Attention: Mr. Bruce Eastenson, District Materials Engineer

From: Mr. G. H. Zuehlke, State Materials Engineer for Highways

Subject: MATERIALS/SOILS  
SITE INVESTIGATION REPORT  
Project ID 8620-08-71, STH 40 over Muddy Creek  
I-94 to Colfax Road, Structure B-17-101  
Dunn County

Two borings have been made for the proposed twin pipes at Station 187 + 00 to carry STH 40 over Muddy Creek. The site is about 4 miles south of Colfax. The proposed work will replace the existing bridge, B-17-0486, of 2 twenty-foot spans.

The two borings were made through the existing roadway. The upper 10 feet were merely augering through fill. The upper foot was asphalt and base of the pavement structure with fine to medium sand then logged down to elevation 953. From elevation 953± to 948±, the borings were made essentially to AASHTO method T-206, Standard Penetration Test. This zone logged loose sands with some silts and organic inclusions. Below elevation 948±, auger borings were made to determine both soil type and depth to shale and/or sandstone bedrock. Sand with moderate auger resistance was noted to elevation 941± and shale or shaley sandstone down to elevation 933±. The upper surface of this rock may be rather irregular both in degree of weathering and elevation.

Ground water at the time of drilling, January 1986, was at elevation 952.9. This was the creek elevation and the depth of water in the creek was about 6 inches at that time. The ground water level is controlled by the stream's fluctuation in these rather permeable soils.

The culvert grade will be elevation 952±, and there will be some 4 feet of overfill over the structure.

Normal construction procedures should be adequate for this work. It would be desirable to place any sumps or wells outside the neat limits of the structure work to prevent any loss of support in the sands. The contractor may elect to use a low-strength geotextile at his own expense under the specified 6 inches of granular material. No objection can be voiced if he so desires.

CNL:lcr

cc: District 6 (Original + 3)  
Bridge  
GHZ  
DLS  
MOF  
Soils File



