The information contained herein was obtained by the Department for design and estimating purposes only. It is being furnished with the express understanding that said information does not constitute a part of the Proposal or Contract and represents only the best knowledge of the Department as to the location, character and depth of the materials encountered. The information is only included and made available so that bidders may have access to subsurface information obtained by the Department and is not intended to be a substitute for personal investigation, interpretation and judgment of the bidder. The bidder should be cognizant of the possibility that conditions affecting the cost and/or quantities of work to be performed may differ from those indicated herein.
TO: Mr. Trinity Smith, Engineer of Roadway Design

SUBJECT: Job No. 080505
Greenbrier Creek Str. & Apprs. (S)
Route 225 Section 1
Faulkner County

Transmitted herewith is the requested Soil Survey test results for the above referenced job. The project consists of replacing the bridge crossing Greenbrier Creek on Highway 225. Samples were obtained in the existing travel lanes, and ditch line. Due to utility conflicts a bulk sample was not obtained. An estimated R-Value of 10 is recommended for the subgrade materials.

Based on laboratory results of samples obtained, the subgrade soils consist primarily of moderately plastic sandy clay. Cross sections are not currently available, but it is assumed the construction grade line will closely match that of the existing roadway. The subgrade soils are expected to provide a stable working platform with normal drying and compactive efforts, if the weather is favorable during construction.

Additional earthwork requirements will be made upon request when plans are further developed.

Listed below is the additional information requested for use in developing the plans:

1. The Qualified Products List (QPL) indicates that Aggregate Base Course (Class CL-7) is available from commercial producers located near Greenbrier.

2. Asphalt Concrete Hot Mix

<table>
<thead>
<tr>
<th>Type</th>
<th>Asphalt Cement %</th>
<th>Mineral Aggregate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Course</td>
<td>5.2</td>
<td>94.8</td>
</tr>
<tr>
<td>Binder Course</td>
<td>4.4</td>
<td>95.6</td>
</tr>
<tr>
<td>Base Course</td>
<td>3.9</td>
<td>96.1</td>
</tr>
</tbody>
</table>

Michael C. Benson
Materials Engineer

MCB:pt:bjj
Attachment
cc: State Constr. Eng. – Master File Copy
    District 8 Engineer
    System Information and Research Div.
    G. C. File
DATE - 12/07/16  
JOB NUMBER - 080505  
FEDERAL AID NO. - TO BE ASSIGNED  
PURPOSE - SOIL SURVEY SAMPLE  
SPEC. REMARKS - NO SPECIFICATION CHECK  
SUPPLIER NAME - STATE  
NAME OF PROJECT - GREENBRIER CREEK STR. & APPRS. (S)  
PROJECT ENGINEER - NOT APPLICABLE  
PIT/QUARRY - ARKANSAS  
LOCATION - FAULKNER, COUNTY  
SAMPLED BY - THORNTON / BATES  
SAMPLE FROM - TEST HOLE  
DATE SAMPLED - 11/29/16  
DATE RECEIVED - 12/01/16  
DATE TESTED - 12/06/16  
SEQUENCE NO. - 1  
MATERIAL CODE - SSPS  
SPEC. YEAR - 2014  
SUPPLIER ID. - 1  
COUNTY/STATE - 23  
DISTRICT NO. - 08  

MATERIAL DESC. - SOIL SURVEY PAVEMENT SOUNDINGS

LAB NUMBER - 20163952 - 20163953 - 20163954  
SAMPLE ID - S483 - S484 - S485  
TEST STATUS - INFORMATION ONLY - INFORMATION ONLY - INFORMATION ONLY  
STATION - 108+90 - 108+90 - 109+50  
LOCATION - 05RT - 15RT - 05LT  
DEPTH IN FEET - 0-5 - 0-5 - 0-5  
MAT'L COLOR - BROWN - BROWN - BROWN  
MAT'L TYPE -  
LATITUDE DEG-MIN-SEC - 35 14 15.30 - 35 14 14.90 - 35 14 15.60  

% PASSING  
2 IN. -  
1 1/2 IN. -  
3/4 IN. -  
3/8 IN. - 100 - 100 - 98  
NO. 4 - 95 - 99 - 92  
NO. 10 - 88 - 95 - 82  
NO. 40 - 77 - 86 - 73  
NO. 80 - 60 - 69 - 51  
NO. 200 - 50 - 56 - 37  

LIQUID LIMIT - 24 - 21 - ND  
PLASTICITY INDEX - 10 - 08 - NP  
AASHTO SOIL - A-4(2) - A-4(1) - A-4(0)  
UNIFIED SOIL -  
% MOISTURE CONTENT - 7.0 - 11.0 - 8.9  

ACHMSC (IN) - 2.25W - -- - 3.0W  
AGG.BASE CRS CL-7 (IN) - 8.0 - -- - 8.0  

REMARKS - W=MULTIPLE LAYERS  

AASHTO TESTS : T24 T88 T89 T90 T265
DATE - 12/07/16  SEQUENCE NO. - 2
JOB NUMBER - 080505  MATERIAL CODE - SSPS
FEDERAL AID NO. - TO BE ASSIGNED  SPEC. YEAR - 2014
PURPOSE - SOIL SURVEY SAMPLE  SUPPLIER ID. - 1
SPEC. REMARKS - NO SPECIFICATION CHECK  COUNTY/STATE - 23
SUPPLIER NAME - STATE  DISTRICT NO. - 08
NAME OF PROJECT - GREENBRIER CREEK STR. & APPRS. (S)
PROJECT ENGINEER - NOT APPLICABLE
PIT/QUARRY - ARKANSAS  DATE SAMPLED - 11/29/16
LOCATION - FAULKNER, COUNTY  DATE RECEIVED - 12/01/16
SAMPLED BY - THORNTON / BATES  DATE TESTED - 12/06/16
SAMPLE FROM - TEST HOLE
MATERIAL DESC. - SOIL SURVEY PAVEMENT SOUNDINGS

LAB NUMBER - 20163955
SAMPLE ID - 9486
TEST STATUS - INFORMATION ONLY
STATION - 109+50
LOCATION - 171T
DEPTH IN FEET - 0-5
MAT'L COLOR - BROWN
MAT'L TYPE -
LATITUDE DEG-MIN-SEC - 35 14 15.80
LONGITUDE DEG-MIN-SEC - 92 24 12.90

% PASSING
2 IN. -
1 1/2 IN. -
3/4 IN. - 100
3/8 IN. - 99
NO. 4 - 93
NO. 10 - 87
NO. 40 - 79
NO. 80 - 50
NO. 200 - 33

LIQUID LIMIT - ND
PLASTICITY INDEX - NP
AASHTO SOIL - A-2-4(0)
UNIFIED SOIL -

% MOISTURE CONTENT - 11.8

REMARKS - W=MULTIPLE LAYERS

AASHTO TESTS : T24 T88 T89 T90 T265