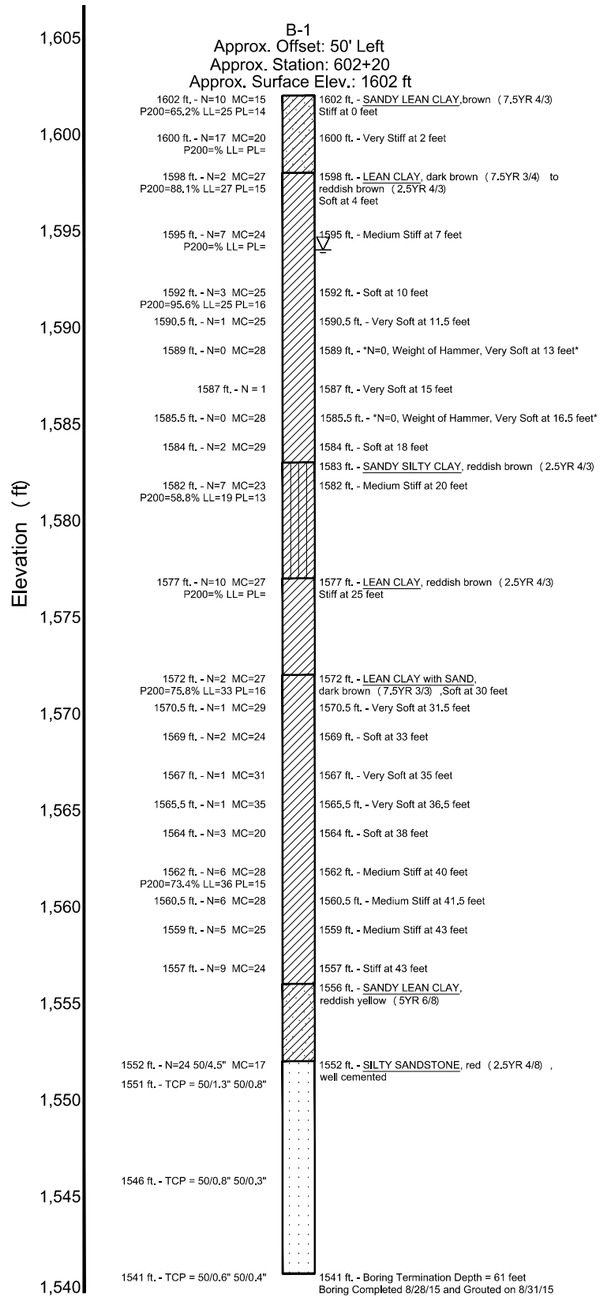
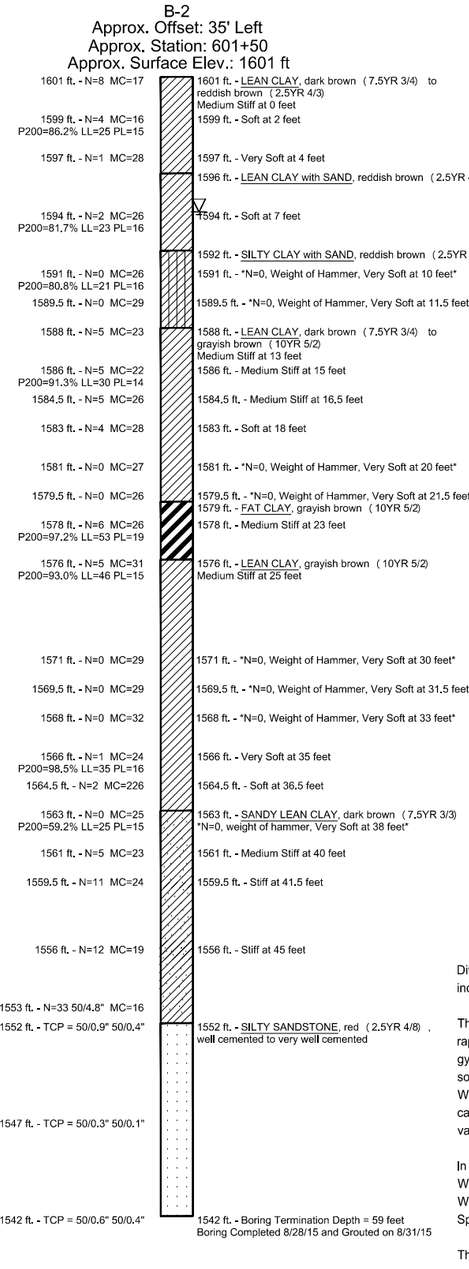
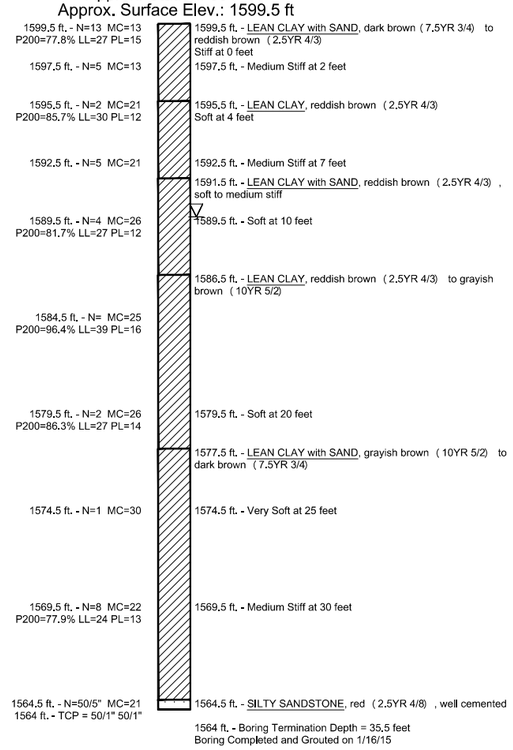
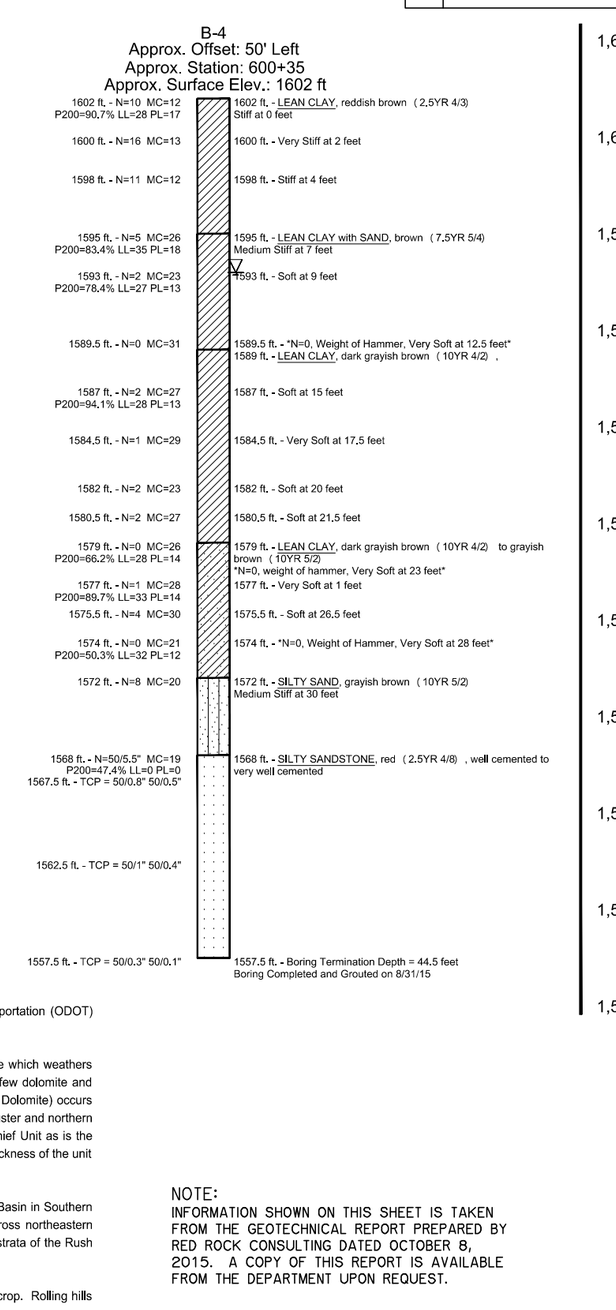
REVISIONS		
REV. NO.	DESCRIPTION	DATE









Note: TCP denotes Texas Cone Penetration Test

SITE GEOLOGY

Division Five of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates the project site, is underlain by the Rush Springs unit (Prs).

The Rush Springs unit consists dominantly of soft, reddish-brown, massive, cross-bedded to regular-bedded silty sandstone which weathers rapidly, producing a sandy soil which is often blown about by the wind and in some localities is piled into sand dunes. A few dolomite and gypsum beds occur in the upper portions. These beds are generally less than 2 feet thick. One marker bed (Weatherford Dolomite) occurs some 24 to 52 feet below the top of the unit. It varies from 1 foot to 8 feet in thickness and grade from dolomite in eastern Custer and northern Washita Counties to gypsum elsewhere. The Weatherford Dolomite was previously correlated as the base of the Cloud Chief Unit as is the case in the Division 7 publication. The Rush Springs Unit is one of the best water aquifers in western Oklahoma. The total thickness of the unit varies from 186 to 430 feet with the unit generally thinning northwestward from the Custer-Washita Counties area.

In Division 5 the Rush Springs Unit outcrops in the east-west band two to six miles wide on the south flank of the Anadarko Basin in Southern Washita and northeaster Kiowa Counties. On the north flank of the basin, it outcrops over broad band which extend across northeastern Washita, western Blaine, Custer Dewey, and eastern Roger Mills Counties. In Beckham, Greet, and Harmon Counties, the strata of the Rush Springs Unit and the underlying Marlow Unit are similar and are mapped together as the Whitehorse Unit.

The Rush Springs Unit forms broad gently rolling topography dissected locally by rugged canyons throughout most of its outcrop. Rolling hills are prominent near its base with massive bluffs to rounded hills overlooking the underlying Marlow Unit.

According to the Geologic Map of the "Hydrologic Atlas 5 of Oklahoma," Reconnaissance of the Water Resources of the Clinton quadrangle, west-central Oklahoma," by Jerry E. Carr and DeRoy L. Bergman, 1976, indicates that the project site is located over Rush Springs Formation (Pr). The deposit and geologic formation are described therein as follows:

Orange brown, cross-bedded, fine-grained sandstone with dolomite and gypsum beds. Thickness, about 300 feet, thinning northward to about 186 feet.

NOTE:
INFORMATION SHOWN ON THIS SHEET IS TAKEN FROM THE GEOTECHNICAL REPORT PREPARED BY RED ROCK CONSULTING DATED OCTOBER 8, 2015. A COPY OF THIS REPORT IS AVAILABLE FROM THE DEPARTMENT UPON REQUEST.

S.H. 44 OVER DRY ELK CREEK — WASHITA COUNTY

FOUNDATION REPORT

Design	RRC	
Detail	DRB	
Check	RRC	

WHITE ENGINEERING ASSOCIATES

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 28774(04) — SHEET NO. 17

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