

Technical Memorandum

To: Mr. Amish T. Bhatt, S.E, P.E., AECOM

From: Met Seyhun, P.E., Sr. Geotechnical Engineer

Date: February 21, 2020

Subject: Top of Weathered/Sound Bedrock Clarification – West Abutment Drilled Shafts

Approved SGR for Adams Street Bridge over I-90/94 dated August 11, 2017

SN016-1701

Project: Jane Byrne (Circle) Interchange Reconstruction – Cook County, Illinois

Wang No: 1100-04-01

This memorandum was prepared in response to comment 5 by the Bridge Office on the pre-final submittal by Transystems for Adams Street Bridge (016-1701), stating as per below.

We don't understand why the west abutment has 17' rock sockets while the east has only 6' and the piers have 5'. We think they should revise considering the friction in the so-called weathered bedrock.

Wang drilled Boring 0589-B-01 at the proposed bridge west abutment and encountered refusal 11 feet higher than the other nearby borings.

It is our opinion that the auger refusal reported at an elevation of 501.1 feet elevation in Boring 0589-B-01 is an outlier because bedrock is at as high as about 490.0 feet elevation in this area. We believe this may be due to the presence of a possible boulder/cobble and not weathered bedrock. Since no rock cores were taken at the west abutment where drilled shafts are planned on top of bedrock, this area must be investigated before the planned shaft installation.

The investigation should consist of blind drilling to top of bedrock adjacent to the proposed west abutment foundations and undertake a 20-foot rock core to establish the actual elevation of sound bedrock that is anticipated at about 484 feet elevation. Rock excavation quantities should be considered from 501 feet elevation at the west abutment as per 0589-B-01 but the final quantities should be adjusted according to the actual top of bedrock.

Attached is updated Boring log 0589-B-01. This boring log should be incorporated in the final construction documents.

Attachment: Revised Boring log 0589-B-01



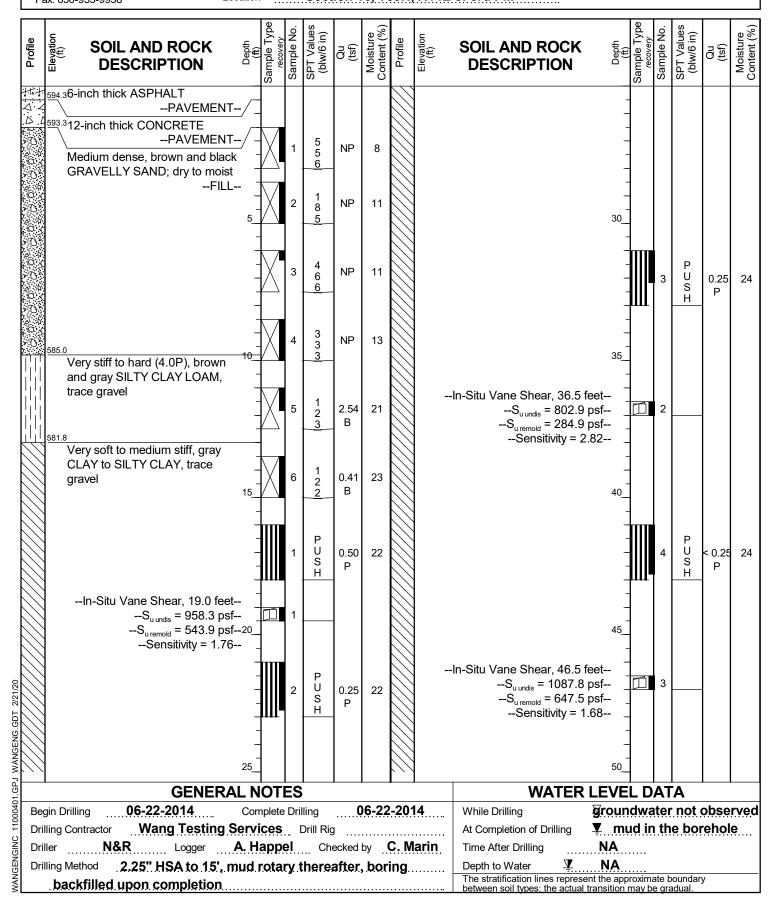
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BORING LOG 0589-B-01

WEI Job No.: 1100-04-01

Client AECOM
Project Jane Byrne Interchange
Location Section 16, T39N, R14E of 3rd PM

Datum: NAVD 88 Elevation: 594.82 ft North: 1899347.34 ft East: 1171345.80 ft Station: 8311+86.85 Offset: 16.7442 LT





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