Structural Engineering Guidance No. 10-02

Date: April 14, 2010

Distribution: All Engineering Resources

SUBJECT: ANTICIPATED TIP OF CASING ELEVATION PLAN REPORTING FOR

 ROCK SOCKETS

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Effective Date: Immediately for all jobs not turned in to Review Section

EPG Submittal Status: To be submitted

The Anticipated Top of Sound Rock Elevation (ATOSR) and the Anticipated Tip of Casing Elevation (ATOC) for drilled shafts with rock sockets using permanent casing shall be reported on the foundation sheets.

The ATOSR shall also be reported on the General Elevation sheet for the structure.

The Geotechnical Section will provide the ATOC in the Geotechnical Report. The ATOSR shall then be determined as 1 foot higher than the ATOC. If the Geotechnical Report contains information related to a variance from an assumed 1 foot setting of permanent casing into sound rock, the ATOSR shall be adjusted accordingly. Reporting the elevations of the top and the bottom of the permanent casing, and the ATOSR are in accordance with Sec 701 of the Standard Specifications.

It is not necessary to report the “Top of Rock Socket” on the plans because it is defined in Sec 701 as the ATOSR and is accordingly reflected in the pay limits to be shown on the bridge plans.

Identification of the bottom of rock socket elevation will remain unchanged for reporting on the foundation sheets.

The drilled shaft standard drawing (showing details) will be revised to show the ATOSR and the ATOC. The as-built drilled shaft standard drawing (for field data reporting) will be revised to show the Top of Sound Rock Elevation and the Tip of Casing Elevation, and to remove the Bottom of Drilled Shaft Elevation.