

Title: Policy for Borings, Borehole Backfilling and Local Enforcement Agency Engagement

BACKGROUND

Recently the subject of the California Department of Transportation (Caltrans) needing a Water Well Drillers (C-57) license, obtaining drilling permits and paying inspection fees was raised by different local enforcement agencies (counties, cities, water districts, etc.). Some local enforcement agencies state that we are not in compliance with applicable laws. Consequently our drilling activities are being affected (projects being shut down by local enforcement agencies, etc.). In order to maintain project delivery and our environmental stewardship responsibilities, this Directive has been developed.

DIRECTIVE

This Geotechnical Services Directive supersedes the "Borehole Backfill Documentation" Memorandum dated March 10, 2010, and the "California Water Code and Well Drilling Permits" Issue Memorandum, dated August 10, 2012. Effective immediately Caltrans geoprofessionals are required to comply with State Water Code and any local enforcement agency (LEA) requirements by doing the following:

- Contact the LEA to determine if the proposed activities fall under the LEA definition of C-57 work.
- Discuss with the LEA project-specific details, such as number of borings/soundings, depths, if groundwater is expected to be encountered, the proposed grout mix and backfilling procedure.
- Obtain LEA requirements and special conditions to perform borings/soundings and backfilling requirements, document the LEA responses and archive the documentation.
- Perform and document field work consistent with Caltrans, State Water Code and LEA requirements.

PURPOSE

This Geotechnical Services Directive will:

- Reduce the risk of impacts to California's groundwater resources.
- Establish drilling practices that are compliant with State and local laws related to groundwater protection.
- Provide assurance to the LEAs that Caltrans will follow local requirements.
- Provide detailed instructions and requirements for proper documentation and the archiving of communication with LEAs to all affected Caltrans personnel.

DEFINITION

For the purposes of this policy, C-57 work is defined as:

- Any boring or sounding that encounters groundwater.
- Any boring or sounding that terminates at a specific distance above groundwater. The LEA determines this distance.

RESPONSIBILITIES

A. Geoprofessional Roles and Responsibilities

1. For C-57 Work:

- a) Contact the LEA to determine if the proposed activities fall under the LEA definition of C-57 work.
- b) Submit a Drilling Request (attached) to Drilling Services and/or a Cone Penetrometer Testing (CPT) Request (attached) to the Geotechnical Instrumentation Branch (GIB).
- c) Provide LEA requirements to the A&E consultant.
- d) Obtain and provide the A&E estimate to the District Project Manager.
- e) Notify Drilling Services if CPT soundings will be performed so they can schedule and perform grouting operations (this is an interim step until GIB obtains the required backfilling equipment).
- f) Ensure piezometers are properly constructed and capped in compliance to State Water Code and LEA requirements.
- g) Complete the Borehole Backfill Data Sheet (attached) and archive according to the Geotechnical Archive section of the Geotechnical Manual.

2. For Non C-57 Work:

- a) Contact the LEA to determine if the proposed activities fall under the LEA definition of C-57 work.
- b) If the LEA asserts permits/fees are required, contact the Office Chief of Geotechnical Support and suspend work pending resolution.
- c) Following resolution, submit a Drilling Request (attached) to Drilling Services and/or a Cone Penetrometer Testing (CPT) Request (attached) to the Geotechnical Instrumentation Branch (GIB).
- d) Complete the Borehole Backfill Data Sheet (attached) and archive according to the Geotechnical Archive section of the Geotechnical Manual.

B. Supervisor and Managers of Geoprofessional

1. Perform verification activities and document compliance with this Directive (e.g. periodic compliance reports, QC/QA reports, etc.)

C. A&E Consultant Roles & Responsibilities for C-57 work

1. Obtain LEA permits and pay fees.
2. Schedule backfill inspections with LEA and coordinate with the geoprofessional.

3. Observe Caltrans drilling and CPT operations, including borehole/sounding backfilling and standpipe piezometer construction/destruction to ensure compliance with enforcement agency requirements.
4. Complete and submit the Well Completion Report (WCR) to the LEA, the Department of Water Resources, and Drilling Services. The WCR is required to be submitted within 60 days after monitoring well (including standpipe piezometers) are constructed, altered or destructed.

D. Drilling Services Roles & Responsibilities

1. For C-57 work as identified on the Drilling Request, obtain an A&E Task Order to have a C-57 licensed representative on-site during drilling and CPT operations.
2. For grouting operations: mix, pump and tremie according to LEA requirements as listed on the Drilling Request.
3. For backfilling with bentonite chips: tremie bentonite chips for holes deeper than 30 feet.
4. Displaced water shall be contained in a drum.
5. Receive the WCR and enter into the standpipe piezometer database.

E. Geotechnical Instrumentation Branch Roles & Responsibilities

1. For grouting operations: mix, pump and tremie grout according to LEA requirements as listed on the CPT Request.
2. For backfilling with bentonite chips: tremie bentonite chips for holes deeper than 30 feet.
3. Displaced water shall be contained in a drum.

APPROVED



PHILIP J. STOLARSKI
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Date

Attachments:

- Drilling Request
- Cone Penetrometer Test Request
- Borehole Backfill Data Sheet