

STATEWIDE CRITICAL REQUIREMENT LIST – FISCAL YEAR 2009/2010

Quality Assessment Category Number 9 Structure Foundations

PILES

- 1 Does the CEI staff ensure that pile driving requirements as outlined in Spec 455 and as established by the Geotechnical Engineer in reference to bearing penetration, pile and hammer cushion, blow count criteria, practical refusal, and equipment for driving has been complied with? Do the project records, the pile driving log and a field visit verify this? [Spec.455-5]
2. Does the CEI staff inspect prestressed piles for defects as soon as possible upon delivery to the project site? Are defects reported to the Project Administrator as soon as possible but, in any case, prior to use? Have the width, length, termination points, and precise location for any cracks or other defects been properly documented? Have the cause and need for correction of defects been addressed appropriately? Do project documentation and a field visit verify the aforementioned? [Good Practice]
3. When Sure-Lock pile splices are used - is the CEI staff aware of and ensuring that threaded rebars penetrate into the splice plate at least the distance specified in the shop drawings as verified by measuring the distance from plate top to bar end. Does project documentation and a field visit verify this [Good Practice]

ALL DRILLED SHAFTS INCLUDING SHAFTS UNDER MISCELLANEOUS STRUCTURES

- 4 Does the CEI staff ensure the methods and equipment for drilled shaft construction are consistent with the contract plans and the approved drilled shaft installation plan and ensure proper alignment, cleanliness of shaft, over reaming, and slurry mixtures have been maintained and documented as required by contract documents? Do project records including the drilled shaft logs and a field visit verify this? Try to visit during drilled shaft installation if possible. [Spec. 455-15]
- 5 Does the CEI staff ensure that Drilled shaft concrete operations are consistent with slump loss test results, limits, pump requirements, and duration of placement limits as outlined in Specs 346, 400 and 455? Do project records including the drilled shaft logs and a field visit verify this? [Spec. 455-17]

6. Does the CEI staff verify that the temporary casing in drilled shafts supporting miscellaneous structures provided at least one foot above the ground surface to at least five feet below the ground surface (455-15)
7. Does the CEI staff verify that CSL tubes installed in all shafts were in conformance with specifications and that when testing required the proper procedures were complied with (Spec 455-16, 455-17)