

4550103DB STRUCTURES FOUNDATIONS
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (10-19-15)

1. In 455-5.18, the following sentence is unclear.

affect the functionality of the structure. The package shall also include ~~clearly legible copies of~~ all pile driving logs, ~~clearly legible~~, EDC records, all supplemental dynamic testing raw data and analyses for the foundation unit, and the signed and sealed evaluation performed to address out-of-tolerance piles in accordance with 455-5.15.5. The certification shall not be contingent on any

Same issue in 455-51.

construction of any structural element over the foundation unit. Each Foundation Certification Package shall include ~~clearly legible copies of~~ all auger cast pile logs, ~~clearly legible~~, the Department spreadsheet properly completed for every auger cast pile and the grout strength test results of the lots sampled. Correct all integrity problems and non compliance issues prior to

Before the edits the clearly legible was before the documents in question. I believe it should return there. Same issue in 455-51.

Response: Legibility issues affect typically pile driving logs only, mostly because until now they have been filled in pencil and scanning pencil may produce bad printouts. That is why we included the “clearly legible” adjective qualifying only the logs. However, this should not be an issue after July 2016, since we will be using electronic forms that will contain electronic data. Therefore, the following change was made: deleting the “clearly legible” phrase from articles 455-5.18, 455-22.2 and 455-51.

Change made.

2. In 455-7.7.2 a comma needs to be inserted.

clear and dress the spliced area to match the pile dimensions. ||
→ → When splices need to be driven, perform dynamic instrumentation during the driving of the spliced pile to monitor and control the stresses and to verify the splicing integrity. Replace any damaged pile splices in accordance with 455-11.2.7. Provide the Engineer 48 hours advance notification prior to driving spliced piles.

Response: Agree. Change made as suggested.

Karen Byram
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Comments: (10-19-15)

455-2.4(2): The specification needs to define 'reputable testing laboratory'. I suggest replacing 'reputable' with a definition of laboratory certification requirements.

Response: This is existing language which has been in the specs for decades and has not created any issue so far. This issue was also recently identified by the 455 Task Team and we will look into it for a possible future revision.

No change made.

Hisham Sunna
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Comments: (10-28-15)

Makes no sense to change "furnish/provide etc. to the Engineer" to "submit to the Engineer" as this information is subject to review and approval. The other way is not applicable. The Engineer will "furnish" was correct. Do not change to "submit".

Response: Disagree. Submit means "to give (a document, proposal, piece of writing, etc.) to someone so that it can be considered or approved". After several internal meetings it was decided to use the term "submit" in lieu of "furnish, provide, supply, etc." when talking about submission of documents. This revision was to be done, when applicable, to all the sections; not just 455.

No change made.

Anonymous

Comments: (10-29-15)

If it is possible to produce these reports in PDF format, then it would be very easy to sign & seal them using a digital signature; thus eliminating costly printing & scanning.

Response: Agree. No Change made.

Chad Rucks
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Comments: (11-20-15)

Since the Geotechnical Foundation Design Engineer of Record is defined as the GFDEOR in Section 455-2.4, I suggest using the shortened term in both Sections 455-26.1 and 455-51.

Response: Agree. Change made as suggested.

Kathy Gray
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Additional comment (addressed to Juan Castellanos via e-mail on 11-20-15)

Do we really want to delete the blue highlighted text below? It doesn't happen very often, but if a Contractor elects to use dowel splices on a job with Pre-planned splices, what is going to require them to allow us to test? Doesn't the text in red above deal just with unexpected pile extensions, not the situation where splices are planned.

→ → → 9. After curing is completed, remove alignment braces and forms and clean and dress the spliced area to match the pile dimensions.¶

→ → ~~When dowel splices need to be driven assist the Engineer in performing dynamic instrumentation during the driving of each dowel spliced pile to monitor and control the stresses and verify the splicing integrity. Replace any damaged pile splices in accordance with 455-11.2.7. Provide the Engineer 48 hours advance notification prior to driving spliced piles.¶~~

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SUBARTICLE 455-7.8 is deleted and the following substituted:¶

→ ~~455-7.8 Pre-Planned Splices:~~ Splices shall be made by the doweled splice method contained in the Standard Indexes or may be made using proprietary splices which are listed on the Department's Approved Product List (APL). Splice test piles in the same manner as the production piles. Include in the pile installation plan, the chosen method of splicing and the approximate locations of the splice. Generally, place the splice at approximately the midpoint between the estimated pile tip and the ground surface, considering scour if applicable. Stagger the splice location between adjacent piles by a minimum of 10 feet. Obtain the Engineer's approval prior to constructing any pile sections. Construct piles which are to be spliced using the doweled splice with preformed dowel holes in the bottom section and embedded dowels in the upper section.¶

→ → ~~When electing to use dowel splices, assist the Engineer in performing a dynamic load test on each dowel spliced pile to verify the splicing integrity at the end of driving. Replace any damaged pile splices in accordance with 455-11.2.7. Provide the Engineer 48 hours advance notification prior to driving piles with epoxy bonded dowel splices.¶~~

→ → Mechanical pile splices shall be capable of developing the following capacities in the pile section unless shown otherwise in the Plans and capable of being installed without

Response: Thank you, good point. Change made on 455-7.8 adding back a revised paragraph as follows: "When dowel splices need to be driven, assist the Engineer in performing dynamic instrumentation during the driving of each dowel spliced pile to monitor and control the stresses and verify the splicing integrity. Replace any damaged pile splices in accordance with 455-11.2.7. Provide the Engineer 48 hours advance notification prior to driving spliced piles." Change made.
