

Evaluation of Static Resistance Through FB-DEEP

FDOT Contract No.: BDV-31-977-05

Project Managers:

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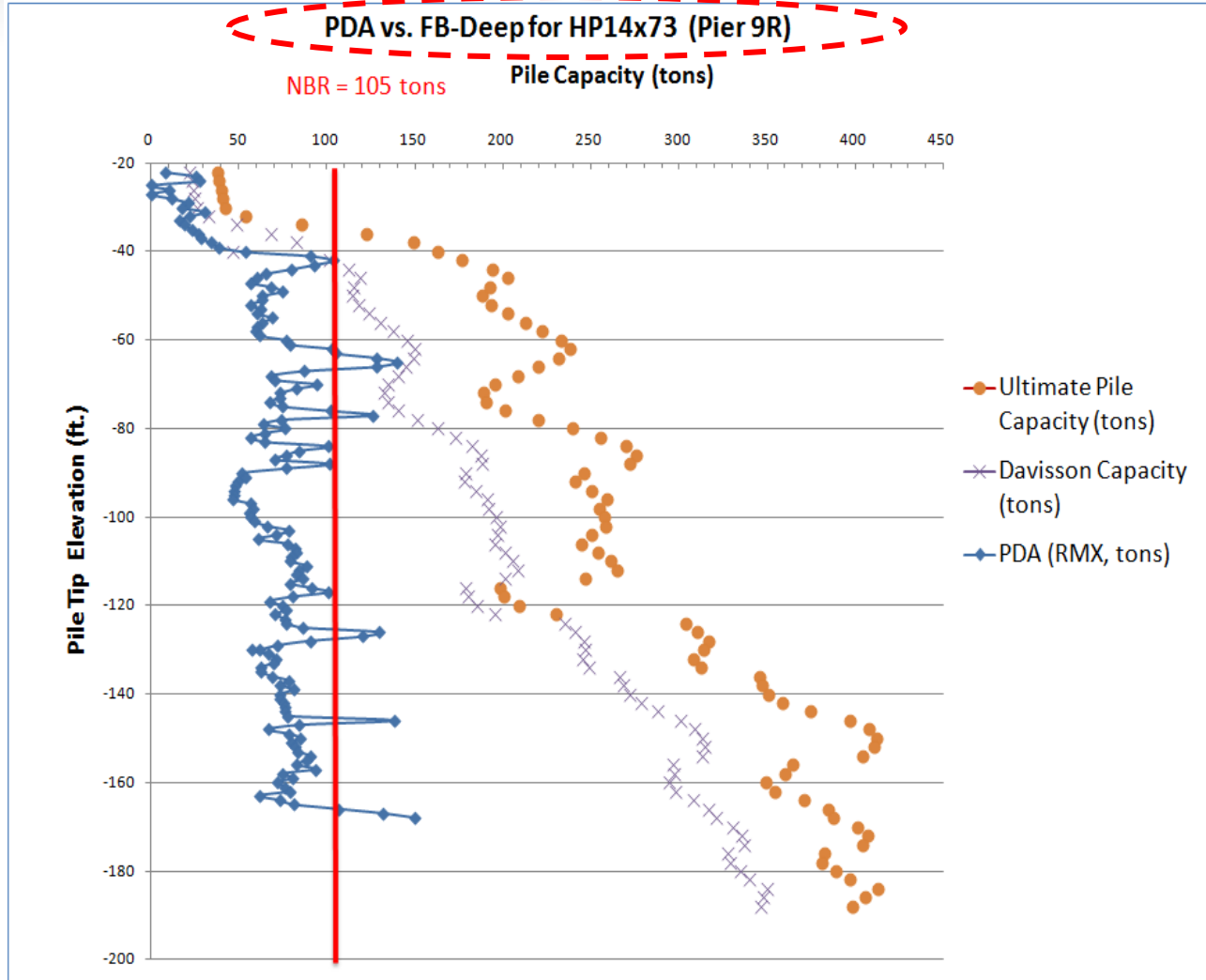
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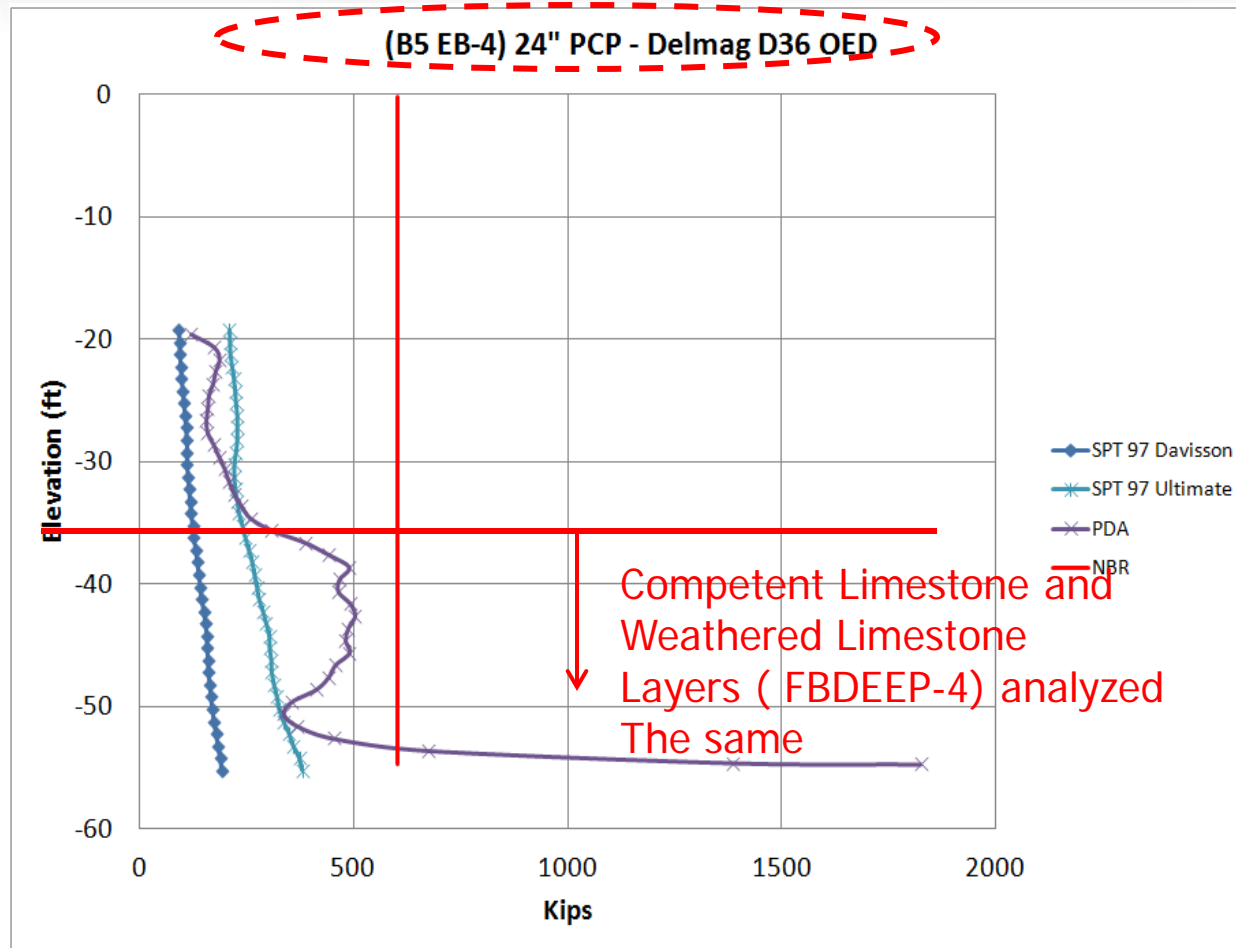
Reevaluate and Improve FB-DEEP for Other Pile Types and Soil/Rock



Improve FB-DEEP H Pile Design

- Collect Data from FDOT projects Using H Piles (e.g. I-95)
 - SPT borings
 - PDA records (e.g. certification Letters for Bridge Piers)
 - Upload into Online Database, evaluate skin and tip resistance based on soil type, and SPT blow count

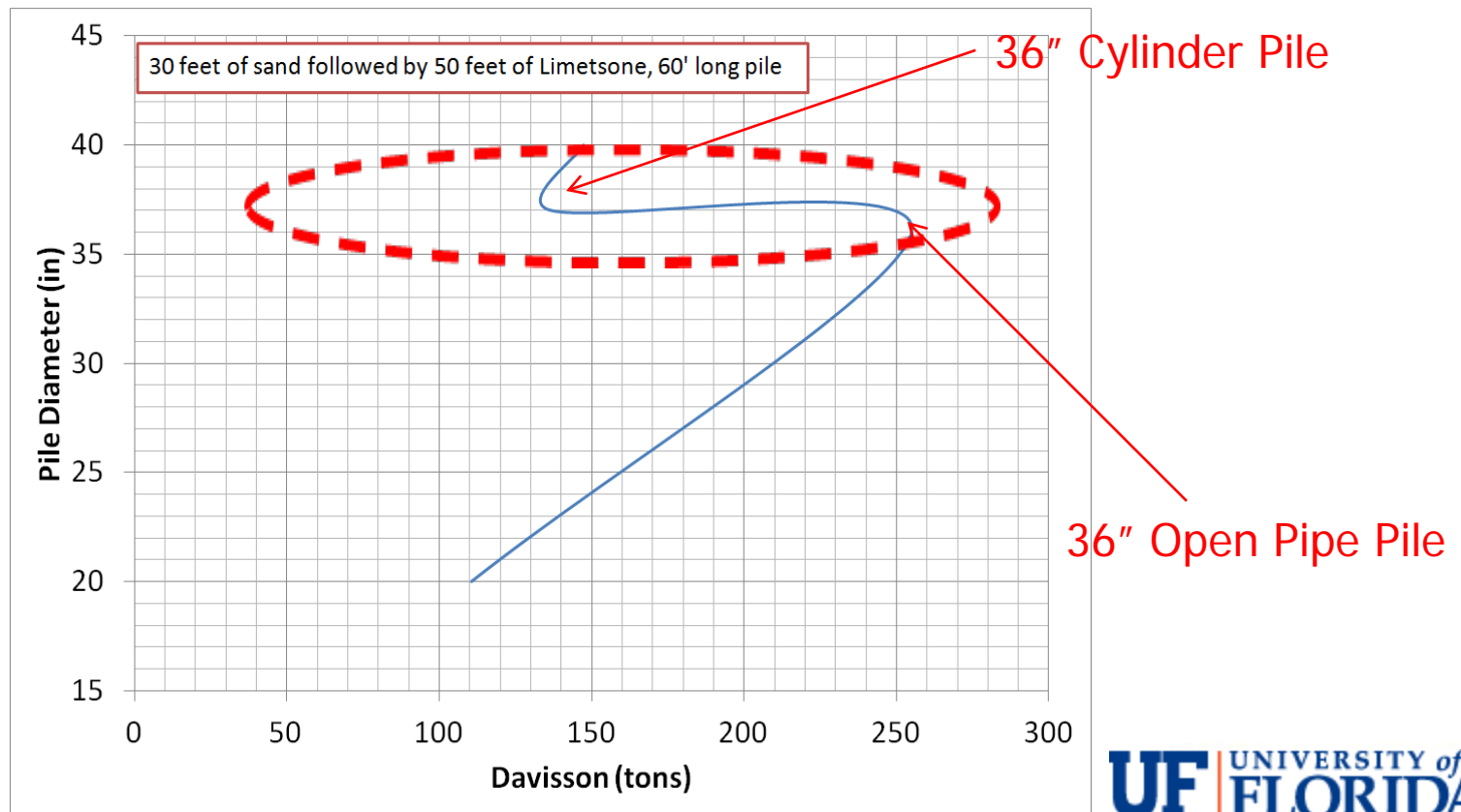
Reevaluate and Improve FB-DEEP for Other Pile Types and Soil/Rock



Improve FB-DEEP for Prestressed Concrete in Weathered and Competent Limestone

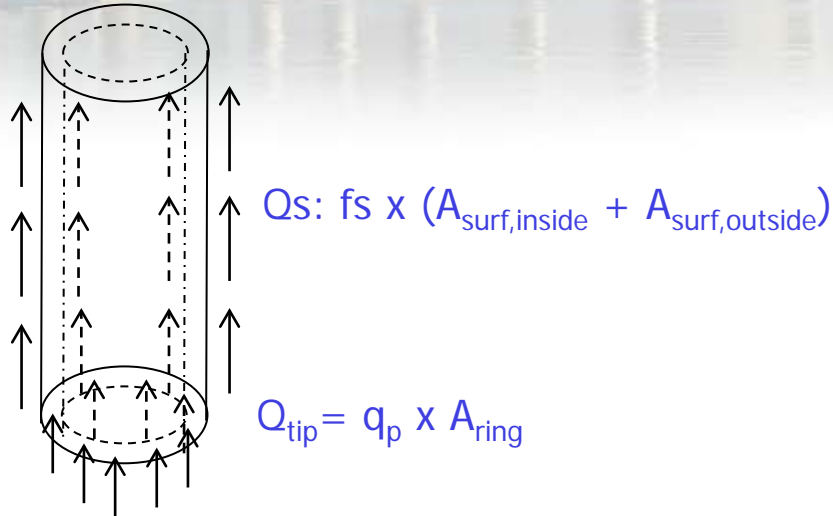
- Collect Data from FDOT projects Using PSCP Piles (e.g. I-595, etc.)
 - SPT borings
 - PDA records (e.g. certification Letters for Bridge Piers)
 - Upload into Online Database, evaluate skin and tip resistance based on soil type, and SPT blow count (consider differentiating competent from weathered limestone)

Reevaluate and Improve FB-DEEP for Other Pile Types and Soil/Rock

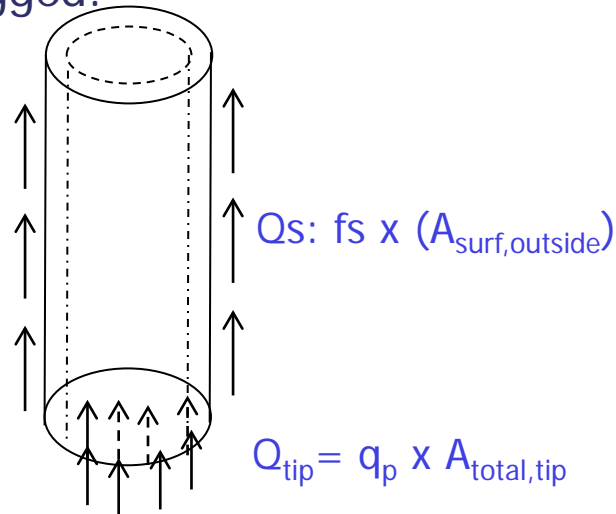


Pipe Pile – Smaller of A or B

A) Unplugged:

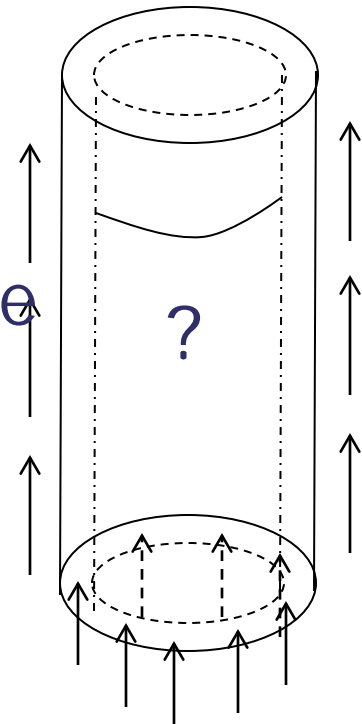


B) Plugged:



Cylinder Pile

Outside Area

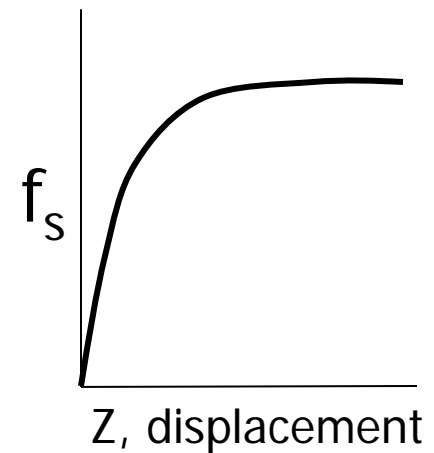
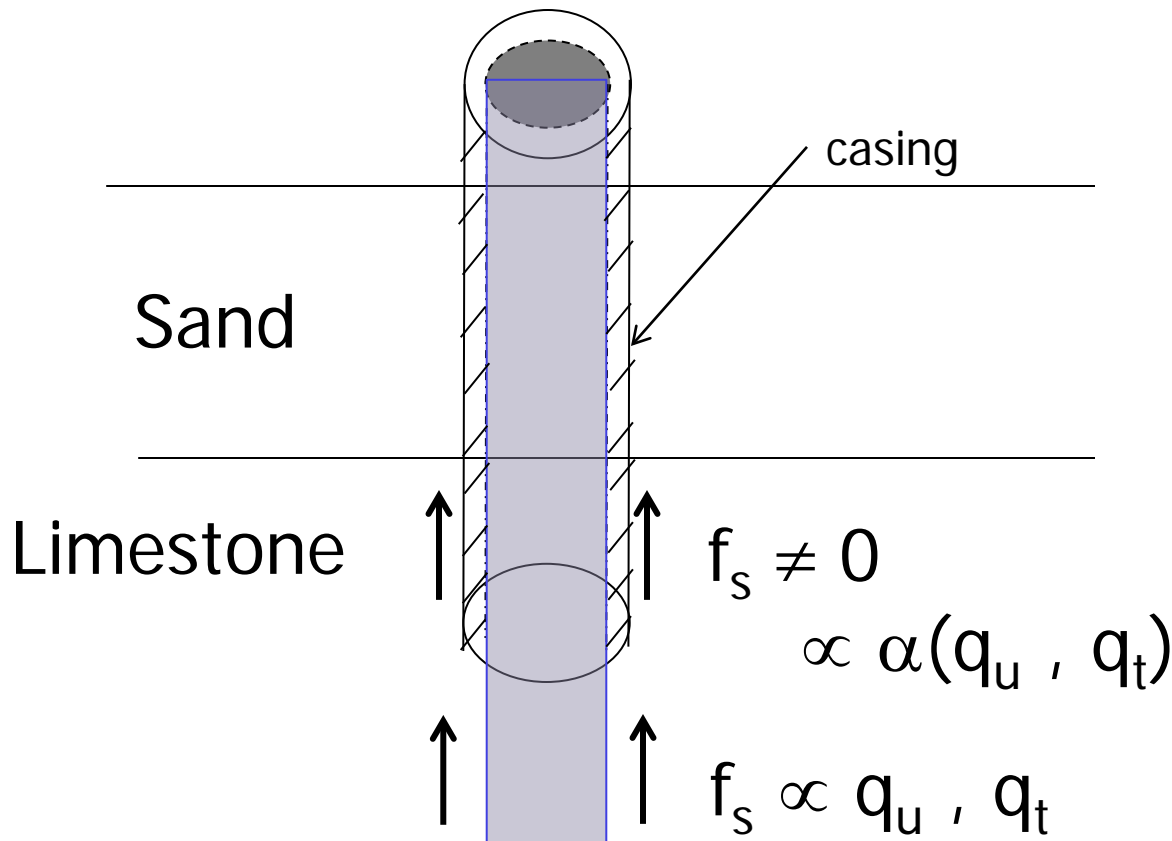


Ring Area

Update FB-DEEP Design for Steel Pipe Piles

- Collect Data from FDOT projects Using steel Pipe Piles (e.g. SR-79, SR-46)
 - SPT borings
 - PDA records (e.g. certification Letters for Bridge Piers)
 - Upload into Online Database, evaluate skin and tip resistance based on soil type, and SPT blow count, (consider API approach and others)

FB-DEEP Analysis of Cased Drilled Shafts Installed in Florida Limestone



Improve FB-DEEP Design for Cased Drilled Shafts into Florida Limestone

- Collect new Data (lab and load tests) from FDOT projects Using cased shafts into limestone(e.g. Leroy Selmon widening)
- Search old databases (FDOT access database), contact other southern DOTs for data
- Develop unit skin friction vs. deformation (T-Z curve) for cased section of drilled shafts in Limestone

Thank You
Questions?