

---

## ORIGINATION FORM

---

Proposed Revisions to a Standard Plans Index  
(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: January 27, 2023  
Originator: Joshua Turley  
Phone: (850) 414-4475  
Email: [joshua.turley@dot.state.fl.us](mailto:joshua.turley@dot.state.fl.us)

**Standard Plans:**

Index Number: 455-154  
Sheet Number (s): 1 of 3  
Index Title: 54" PRECAST/POST-TENSIONED CFRP & SS  
CONCRETE CYLINDER PILE

**Summary of the changes:**

Sheet 1: Corrected note 3 language for clarity.

**Commentary / Background:**

Sheet 1: We needed to correct the terminology so that it was clear that the value provided correlated to the application of prestressing force.

**Other Affected Offices / Documents: (Provide name of person contacted)**

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other Standard Plans –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	FDOT Design Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Basis of Estimates Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Standard Specifications –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Approved Product List –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Maintenance –

**Origination Package Includes:** (Submit package to Rick Jenkins)

Yes	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Redline Mark-ups
<input type="checkbox"/>	<input type="checkbox"/>	Revised or Proposed Standard Plan Instruction (SPI)
<input type="checkbox"/>	<input type="checkbox"/>	Other Support Documents

**Implementation:**

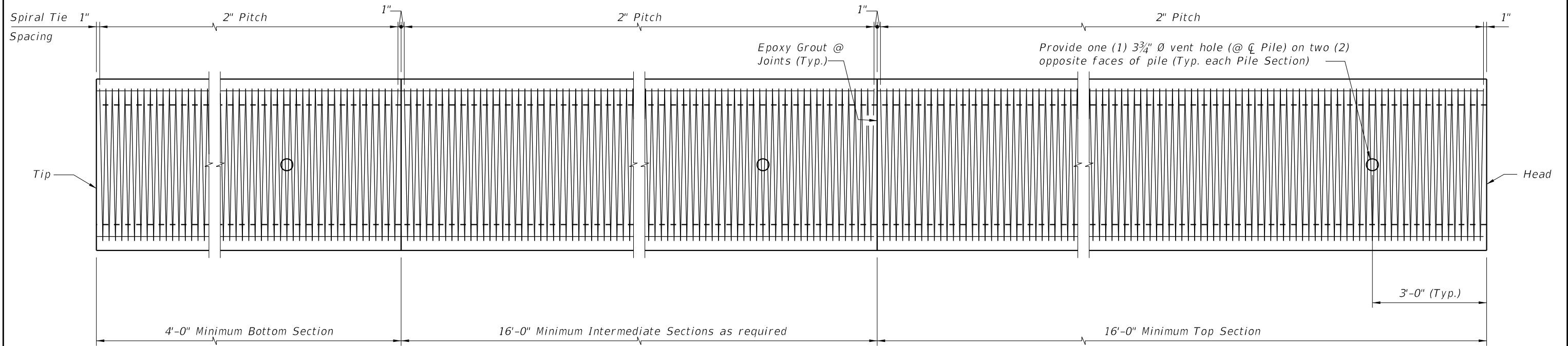
<input type="checkbox"/>	Design Bulletin (Interim)
<input type="checkbox"/>	DCE Memo
<input type="checkbox"/>	Program Mgmt. Bulletin
<input checked="" type="checkbox"/>	FY-Standard Plans (Next Release)

---

Contact the Roadway Design Office for assistance in completing this form

---

Email to: Rick Jenkins [rick.jenkins@dot.state.fl.us](mailto:rick.jenkins@dot.state.fl.us) and Darren Martin [darren.martin@dot.state.fl.us](mailto:darren.martin@dot.state.fl.us)



ELEVATION

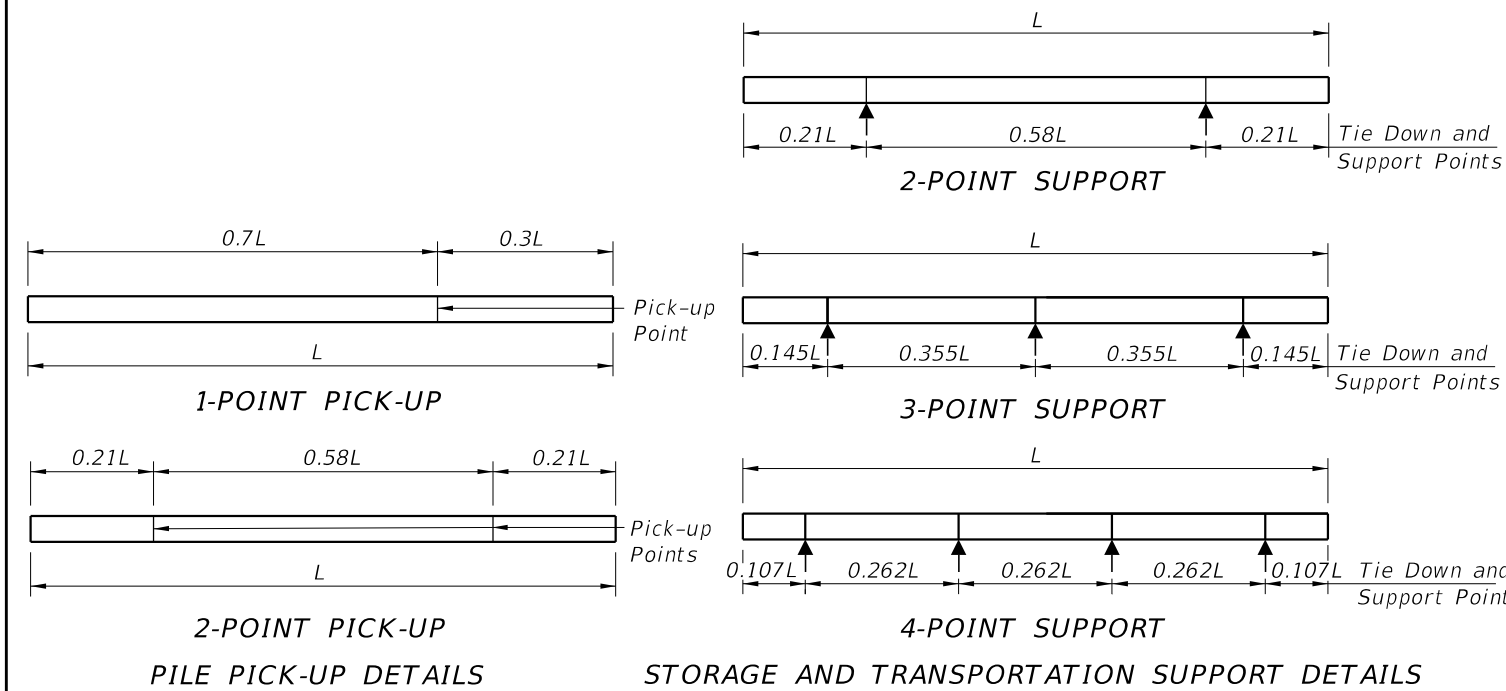
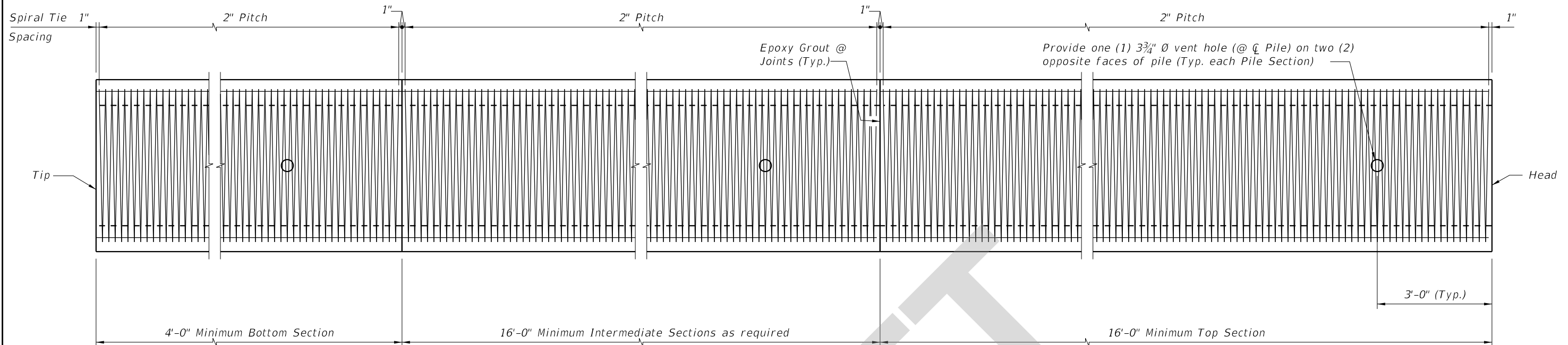


TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS		
Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
119	2, 3, or 4 point	1 Point
170	2, 3, or 4 point	2 Point

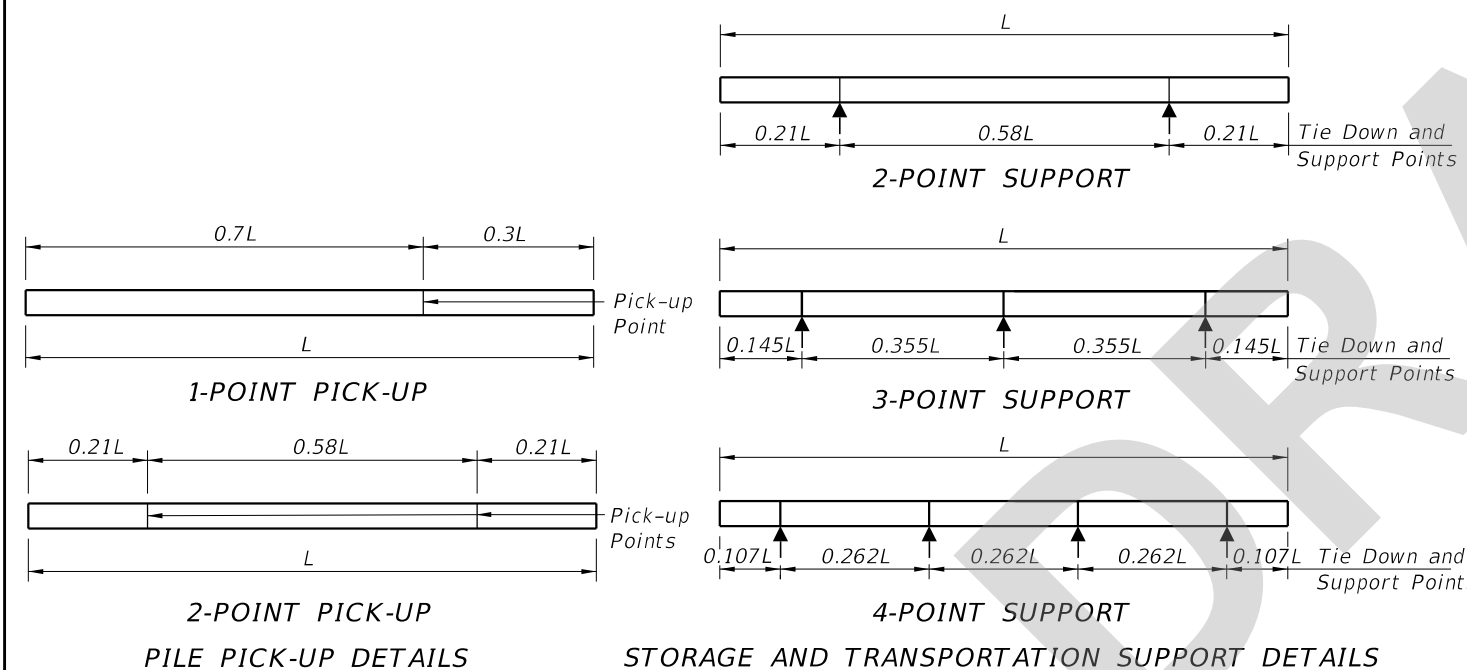
NOTES

- Work this Index with the Pile Data Table in the Structures Plans.
- Concrete:
  - Piles: Class V
  - Splice: Class IV
  - See "GENERAL NOTES" in Structures Plans for locations where the use of Highly Reactive Pozzolans is required for options using stainless steel strand and reinforcing.
- Concrete Strength at time of prestress transfer: **application of the prestressing force:**
  - Piles: 6,000 psi minimum.
- Reinforcing:
  - Bars:
    - Stainless Steel: Meet the requirements of Specification Section 931 for Type 304, Grade 75.
    - Carbon FRP: Meet the requirements of Specification Section 932.
  - Prestressing Strands:
    - Stainless Steel: Seven-wire HSSS, UNS S32205 (Type 2205) or UNS S31803 strand, meeting the requirements of Specification Section 933.
    - Carbon FRP: Meet the requirements of Specification Section 933.
  - Spiral Ties:
    - One half turn is required for carbon steel spiral splice.
    - One full turn is required at the pile head and tip.
- Pile Splices:
  - Epoxy: Type AB Epoxy Compound or Mortar must meet the requirements of Specification Section 926.
    - Use a Type AB Epoxy Bonding Compound or Epoxy Mortar, as recommended by the Manufacturer, to form the joint between pile sections.
    - Use a Type AB Epoxy Bonding Compound as a bonding agent on internal pile surfaces.
  - Driving: Resume pile driving after splice concrete reaches a minimum strength of 5,500 psi.
- Mark piles at the pick-up points to indicate the proper points for attaching handling lines.

10/6/2022 11:09:26 AM



ELEVATION



NOTES

1. Work this Index with the Pile Data Table in the Structures Plans.
2. Concrete:
  - A. Piles: Class V
  - B. Splice: Class IV
  - C. See "GENERAL NOTES" in Structures Plans for locations where the use of Highly Reactive Pozzolans is required for options using stainless steel strand and reinforcing.
3. Concrete Strength at time of application of the prestressing force:
  - A. Piles: 6,000 psi minimum.
4. Reinforcing:
  - A. Bars:
    - a. Stainless Steel: Meet the requirements of Specification Section 931 for Type 304, Grade 75.
    - b. Carbon FRP: Meet the requirements of Specification Section 932.
  - B. Prestressing Strands:
    - a. Stainless Steel: Seven-wire HSSS, UNS S32205 (Type 2205) or UNS S31803 strand, meeting the requirements of Specification Section 933.
    - b. Carbon FRP: Meet the requirements of Specification Section 933.
  - C. Spiral Ties:
    - a. One half turn is required for carbon steel spiral splice.
    - b. One full turn is required at the pile head and tip.
5. Pile Splices:
  - A. Epoxy: Type AB Epoxy Compound or Mortar must meet the requirements of Specification Section 926.
    - a. Use a Type AB Epoxy Bonding Compound or Epoxy Mortar, as recommended by the Manufacturer, to form the joint between pile sections.
    - b. Use a Type AB Epoxy Bonding Compound as a bonding agent on internal pile surfaces.
  - B. Driving: Resume pile driving after splice concrete reaches a minimum strength of 5,500 psi.
6. Mark piles at the pick-up points to indicate the proper points for attaching handling lines.

Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
119	2, 3, or 4 point	1 Point
170	2, 3, or 4 point	2 Point

11/21/03 AM  
6/26/2023