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**ORIGINATION FORM**

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Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: October 21, 2021  
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: 455-001  
Sheet Number (s): 1  
Index Title: Square Prestressed Concrete Piles Typical  
Details and Notes

**Summary of the changes:**

Changed Class V (Special) concrete to Class V.

**Commentary / Background:**

**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:**

(Email or hand deliver package to Rick Jenkins)

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

**Implementation:**

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

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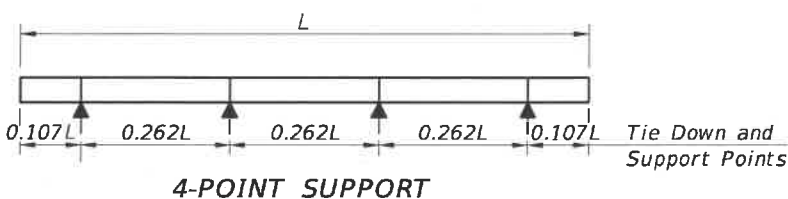
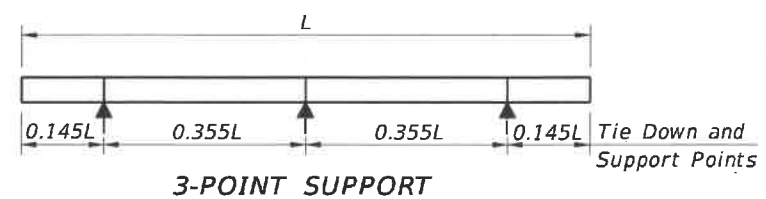
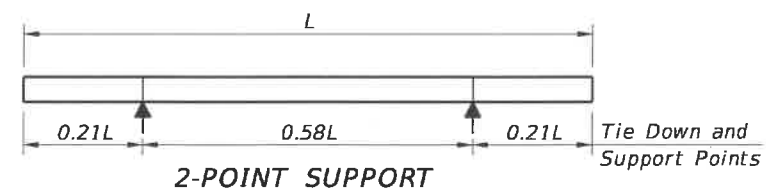
Contact the Roadway Design Office for assistance in completing this form

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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)

**PRESTRESSED CONCRETE PILE NOTES:**

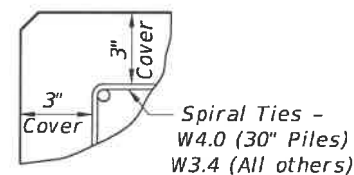
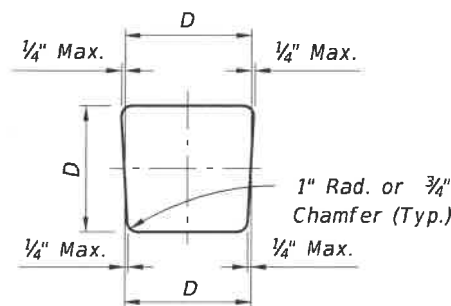
1. Work this Index with the Square Prestressed Concrete Pile Splices (Index 455-002), the Prestressed Concrete Pile Standards (Index 455-012 thru 455-030), the High Moment Capacity Square Prestressed Concrete Pile (Index 455-031) and the Pile Data Table in the Structures Plans.
2. Concrete:
  - A. Piles: Class V (~~Special~~), except use Class VI for High Moment Capacity Pile (Index 455-031).
  - B. High Capacity Splice Collar: Class V (~~Special~~).
  - C. See "GENERAL NOTES" in the Structures Plans for locations where the use of Highly Reactive Pozzolans is required.
3. Concrete strength at time of prestress transfer:
  - A. Piles: 4,000 psi minimum.
  - B. High Moment Capacity Piles: 6,500 psi minimum.
4. Carbon-Steel Reinforcing:
  - A. Bars: Meet the requirements of Specification Section 415.
  - B. Prestressing Strands: Meet the requirements of Specification Section 933.
  - C. Protect all strands permanently exposed to the environment and not embedded under final conditions in accordance with Specification Section 450.
5. Spiral Ties:
  - A. Tie each wrap of the spiral strand to a minimum of two corner strands.
  - B. One full turn required for spiral splices.
6. Pile Splices: Fill dowel holes and form the joint between pile sections with a Type AB Epoxy Compound in accordance with Specification Section 962. Use an Epoxy Bonding Compound or an Epoxy Mortar as recommended by the Manufacturer.



**PILE PICK-UP DETAILS**

**STORAGE AND TRANSPORTATION SUPPORT DETAILS**

TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS							
	D = Square Pile Size (inches)					Required Storage and Transportation Detail	Pick-Up Detail
	12	14	18	24	30		
Maximum Pile Length (Feet)	48	52	59	68	87	2, 3, or 4 point	1 Point
	69	75	85	98	124	2, 3, or 4 point	2 Point
	99	107	121	140	178	3 or 4 point	3 Point

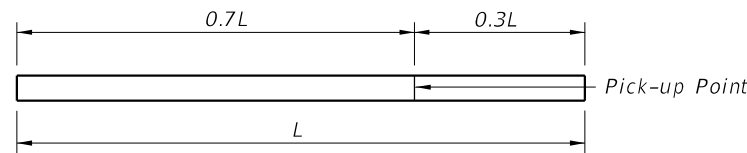


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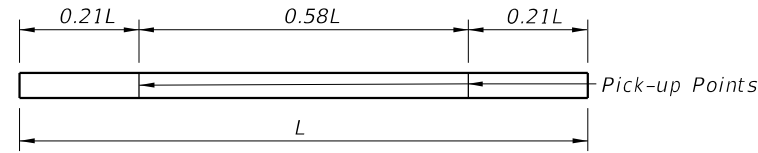
LAST REVISION	DESCRIPTION:
11/01/20	
	11/01/22

**PRESTRESSED CONCRETE PILE NOTES:**

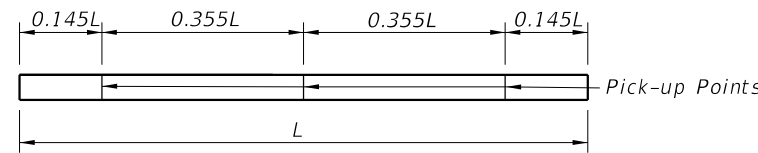
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2. Concrete:
  - A. Piles: Class V, except use Class VI for High Moment Capacity Pile (Index 455-031).
  - B. High Capacity Splice Collar: Class V.
  - C. See "GENERAL NOTES" in the Structures Plans for locations where the use of Highly Reactive Pozzolans is required.
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  - A. Piles: 4,000 psi minimum.
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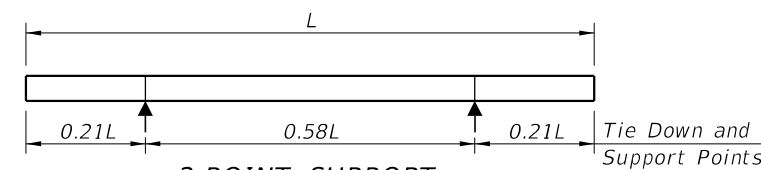
**1-POINT PICK-UP**



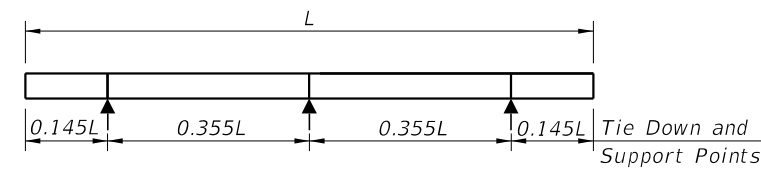
**2-POINT PICK-UP**



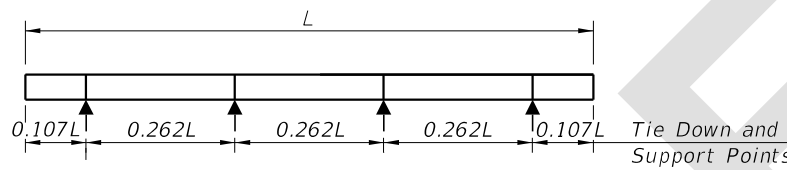
**3-POINT PICK-UP**  
**PILE PICK-UP DETAILS**



**2-POINT SUPPORT**



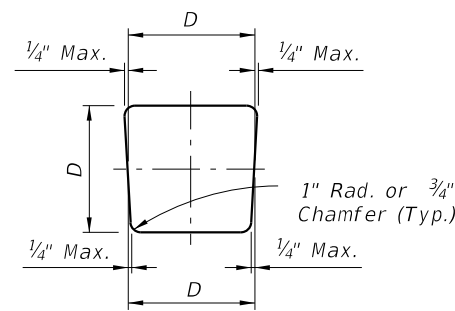
**3-POINT SUPPORT**



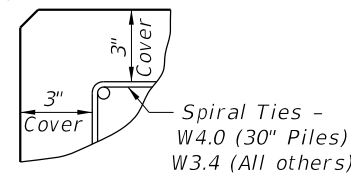
**4-POINT SUPPORT**

**STORAGE AND TRANSPORTATION SUPPORT DETAILS**

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	69	75	85	98	124	2, 3, or 4 point	2 Point
	99	107	121	140	178	3 or 4 point	3 Point



**TYPICAL PILE SHAPE FOR MOLD FORMS**



**DETAIL SHOWING TYPICAL COVER**

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