
ORIGINATION FORM

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

Contact Information:

Date: February 12, 2020

Originator: Cheryl Hudson

Phone: 414-5332

Email: cheryl.hudson@dot.state.fl.us

Standard Plans:

Index Number: 455-101

Sheet Number (s): 1

Index Title: Square CFRP & SS Prestressed Concrete Piles -
Typical Details & Notes +**Summary of the changes:**

Change Silica Fume, metakaolin or ultra-fine flyash to Highly Reactive Pozzolans ; Changed Note 4B

Commentary / Background: +

Specification changed to fit silica fume, metakaolin and ultra-fine flyash under Highly Reactive Pozzolans. SS strand now covered by specification so only need Grade called out.

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 checked="" type="checkbox"/>	Proposed Standard Plan Instruction (SPI)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Revised SPI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other Support Documents

Implementation:

- Design Bulletin (Interim)
- DCE Memo
- Program Mgmt. Bulletin
- FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form

PRESTRESSED CONCRETE PILE NOTES:

1. Work this Index with the Square Prestressed Concrete Pile Splices (Index 455-102), the Prestressed Concrete Pile Standards (Index 455-112, 455-114, 455-118, 455-124, 455-130, and the Pile Data Table in the Structures Plans.

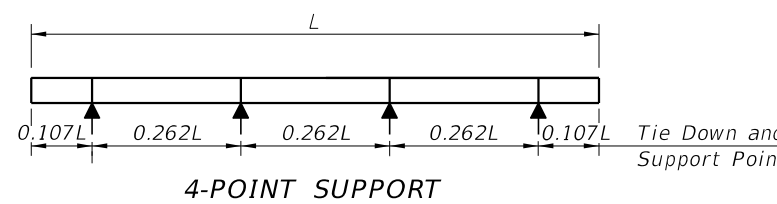
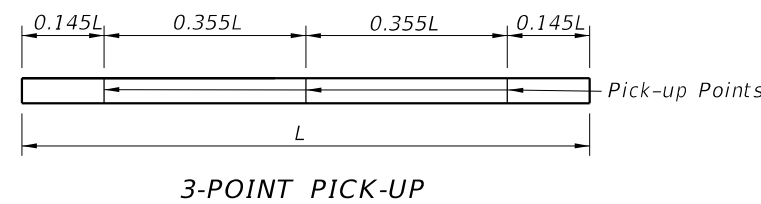
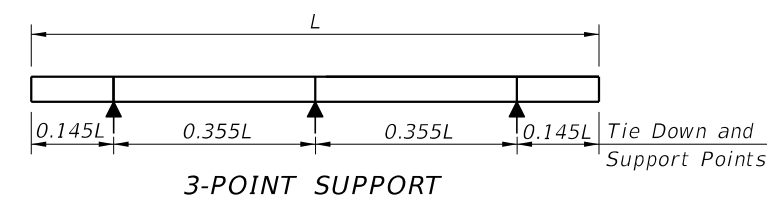
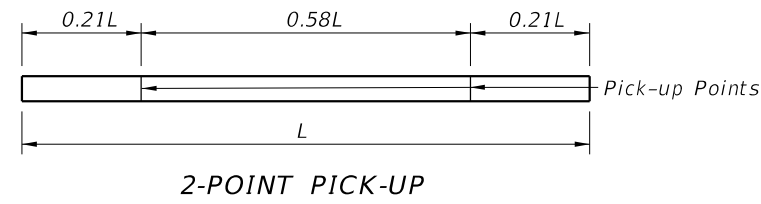
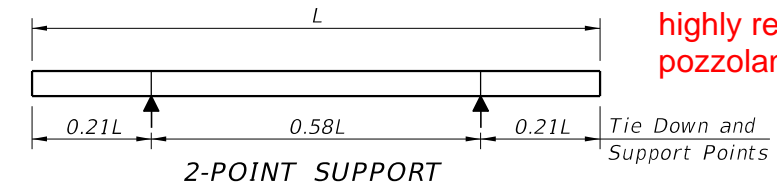
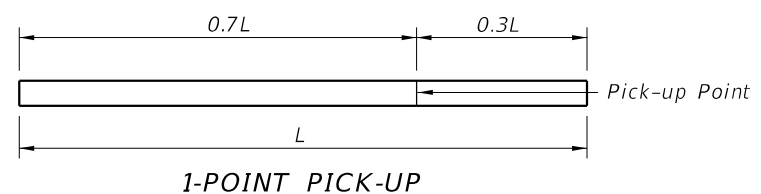
2. Concrete:
 - A. Piles: Class V (Special)
 - B. Silica Fume: See "GENERAL NOTES" in the Structures Plans for locations where the use of silica fume, metakaolin or ultra-fine flyash is required for options using stainless steel strand and reinforcing.

3. Concrete strength at time of prestress transfer:
 - A. Piles: 4,000 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~~ **Grade 240** strand, meeting the requirements of Specification Section 933.
 - b. Carbon FRP: Meet the requirements of Specification Section 933.

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 926. Use an Epoxy Bonding Compound or an Epoxy Mortar as recommended by the Manufacturer.

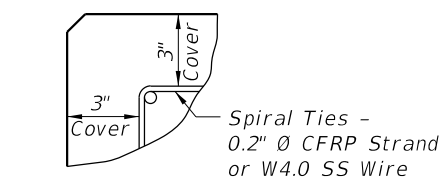
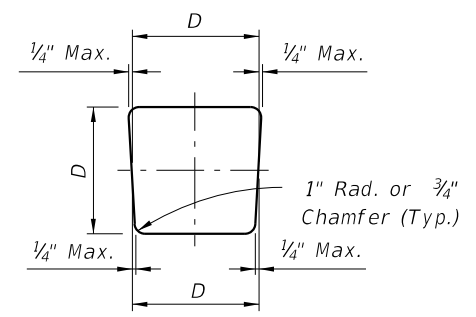
highly reactive
pozzolans



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

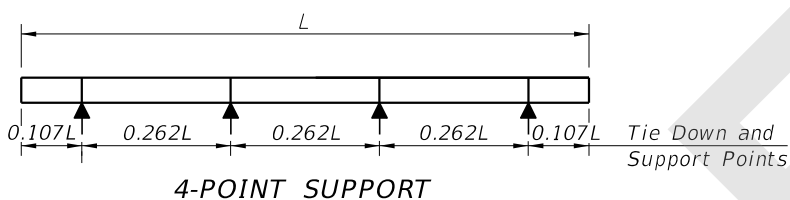
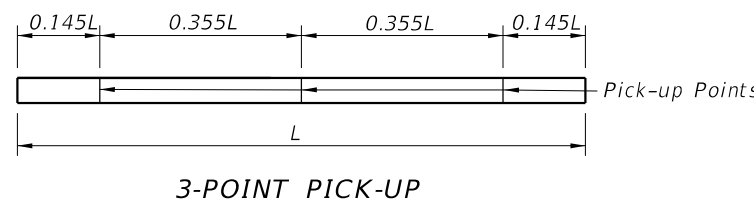
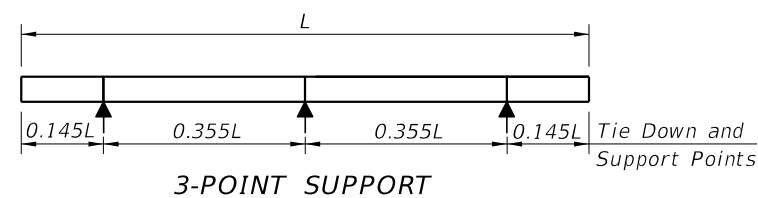
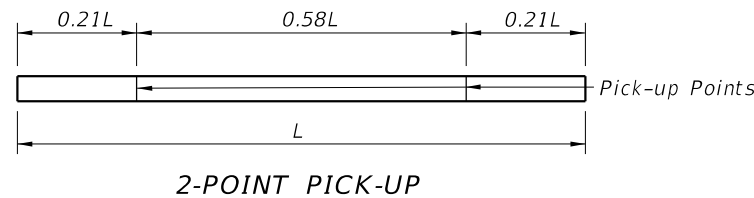
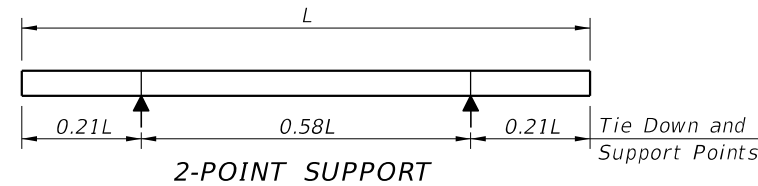
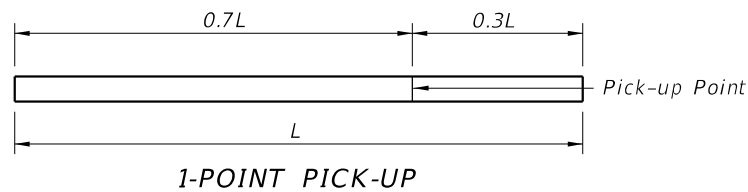


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LAST REVISION 11/01/16
REVISION DESCRIPTION:

PRESTRESSED CONCRETE PILE NOTES:

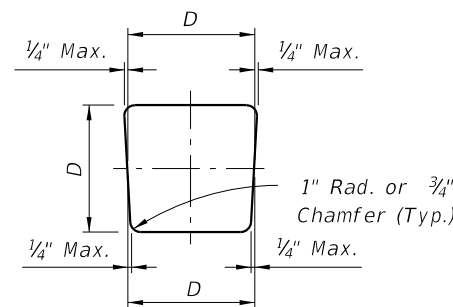
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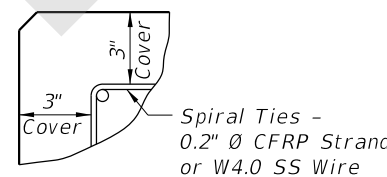
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TYPICAL PILE SHAPE FOR MOLD FORMS



DETAIL SHOWING TYPICAL COVER

SDATES STIMES

LAST REVISION	11/01/20	REVISION	DESCRIPTION:
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FY 2020-21
STANDARD PLANS

SQUARE CFRP & SS PRESTRESSED CONCRETE PILES
- TYPICAL DETAILS & NOTES

INDEX
455-101

SHEET
1 of 1