
ORIGINATION FORM

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

Contact Information:

Date: March 12, 2020

Originator: Cheryl Hudson

Phone: 414-5332

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

Standard Plans:

Index Number: 455-124

Sheet Number (s): 1, 2

Index Title: 24" CFRP & SS Prestressed Concrete Piles

Summary of the changes:

Sheet 1: Changed 0.5" CFRP strand layout; Sheet 2: Added 0.6" HSSS strand

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:

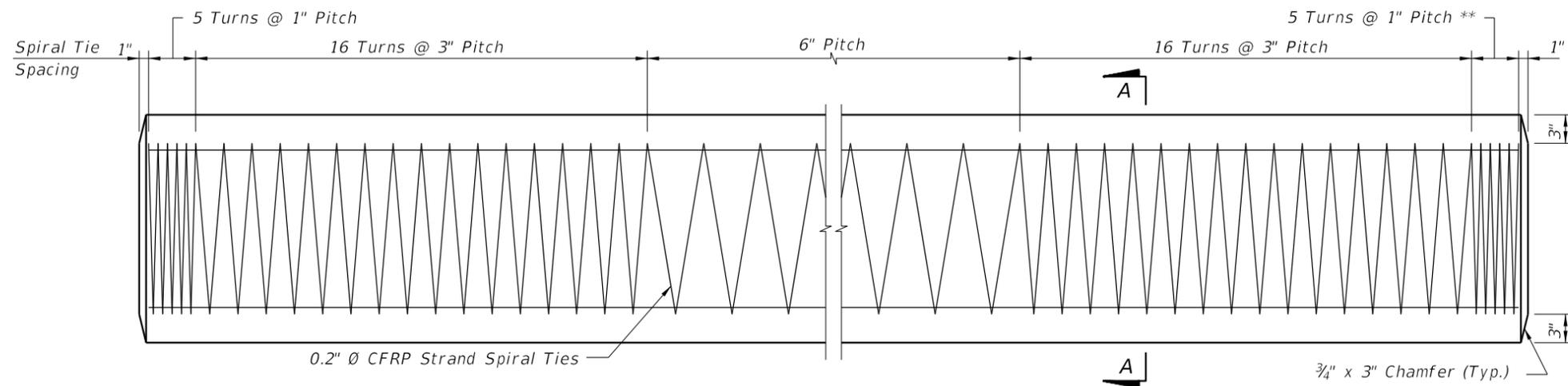
(Email or hand deliver package to Rick Jenkins)

- | Yes | N/A | |
|-------------------------------------|-------------------------------------|------------------------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input 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:

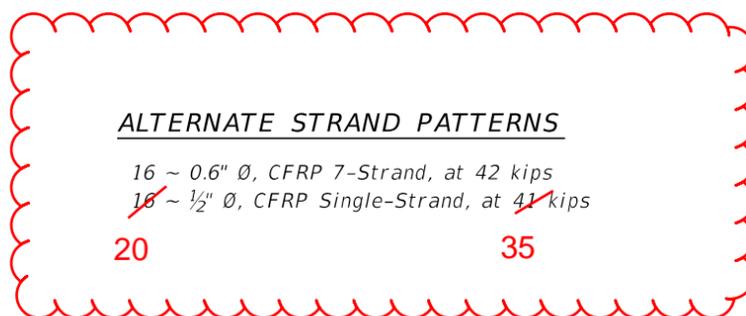
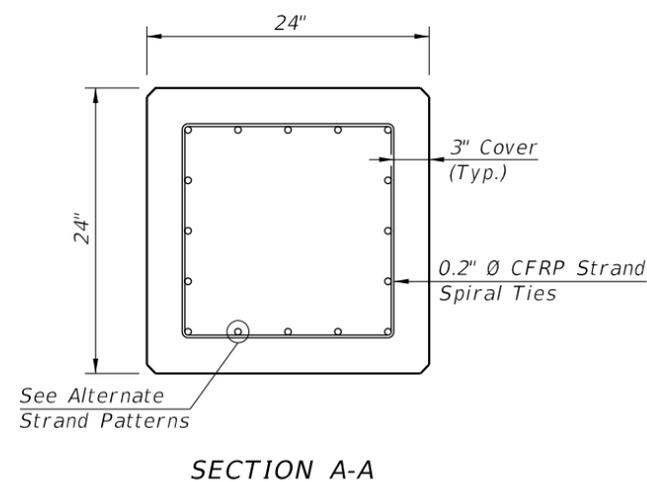
- Design Bulletin (Interim)
- DCE Memo
- Program Mgmt. Bulletin
- FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form



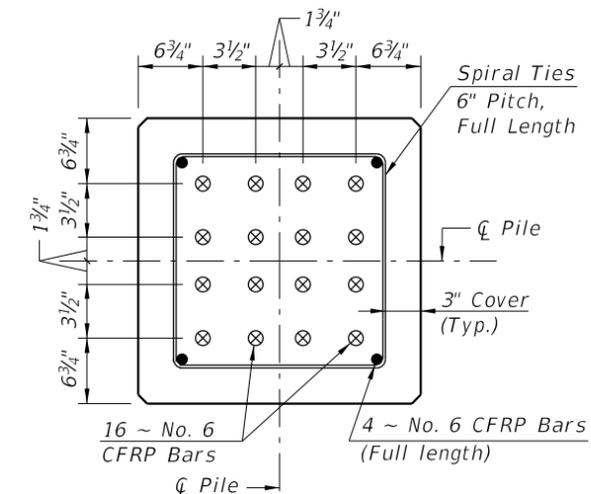
SPIRAL TIE ELEVATION

** See Note 4 on Index 455-102

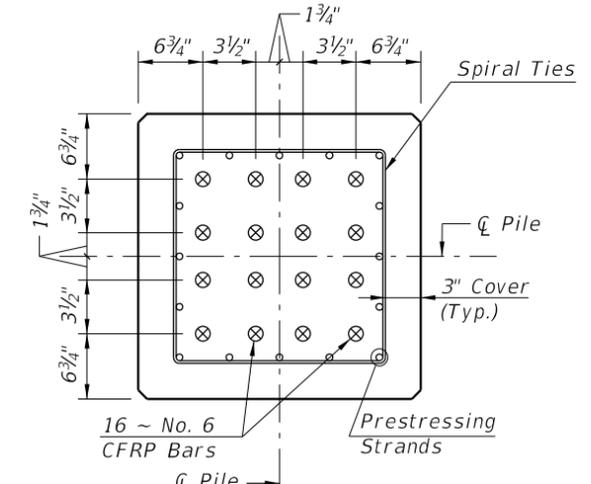


NOTES:

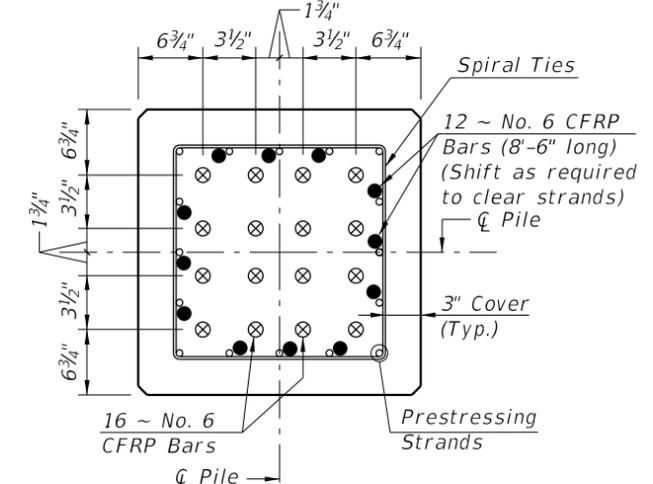
1. Work this Index with Index 455-101 - Typical Details and Notes for Square CFRP & SS Prestressed Concrete Piles and Index 455-102 - Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Strand Patterns may be utilized.
The strands shall be located as follows:
Place one strand at each corner and place the remaining strands equally spaced between the corner strands.
The total strand pattern shall be concentric with the nominal concrete section of the pile.



SECTION D-D
(See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)

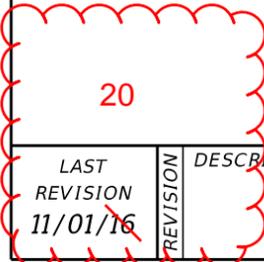


SECTION E-E
(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)
CFRP PILE SPLICE REINFORCEMENT DETAILS

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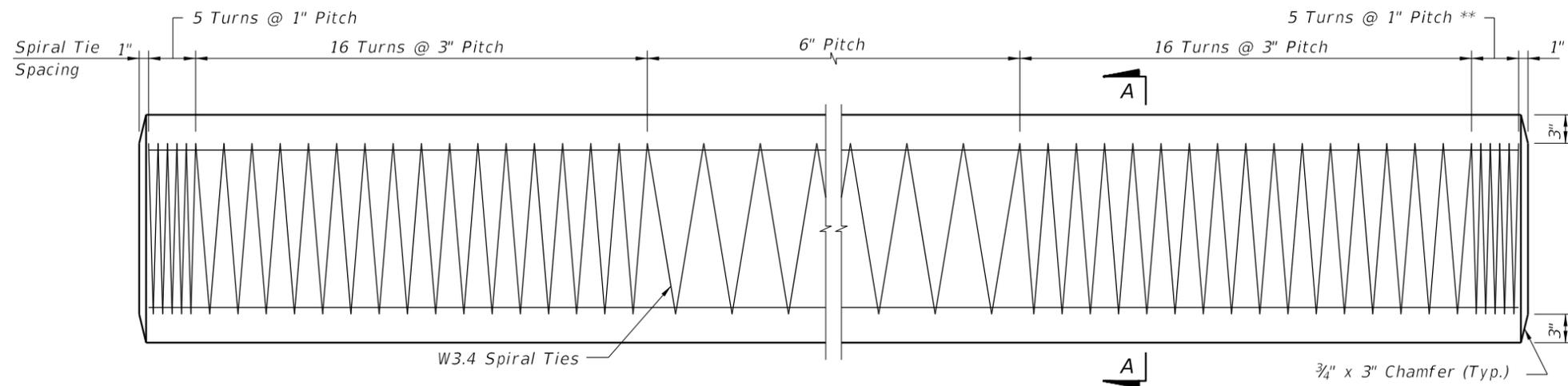
**FY 2020-21
STANDARD PLANS**

**24" SQUARE CFRP & SS PRESTRESSED
CONCRETE PILE**

CFRP PRESTRESSED PILE DETAILS

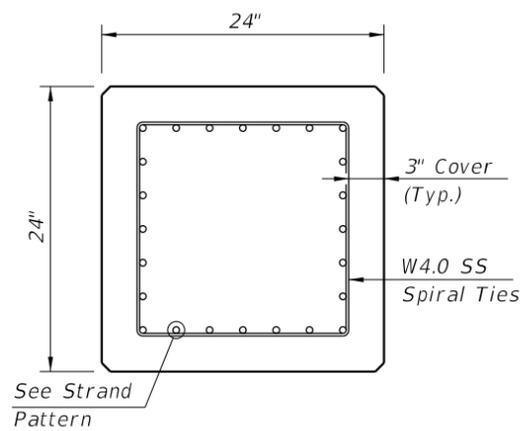
INDEX
455-124

SHEET
1 of 2

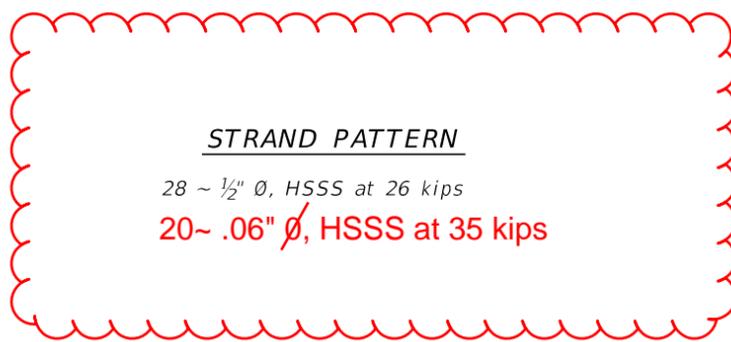


ELEVATION

** See Note 4 on Index 455-102



SECTION A-A

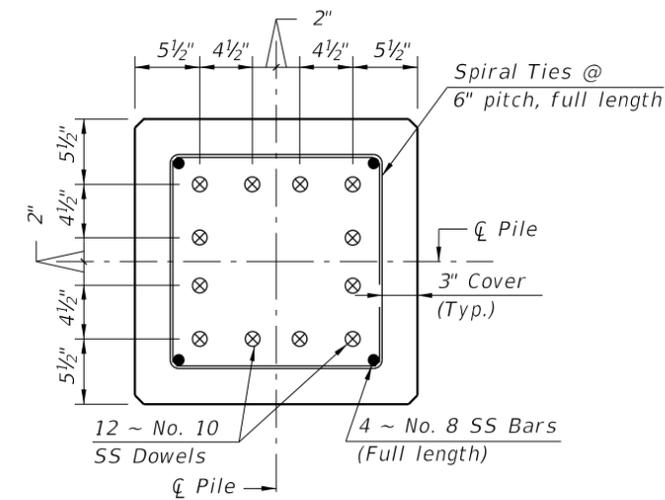


STRAND PATTERN

28 ~ 1/2" Ø, HSSS at 26 kips
 20 ~ .06" Ø, HSSS at 35 kips

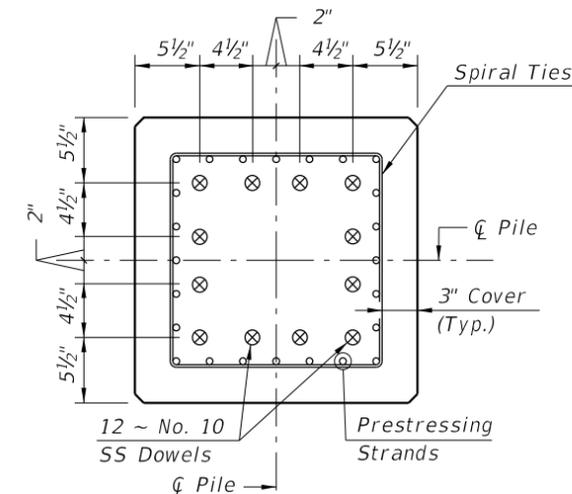
NOTES:

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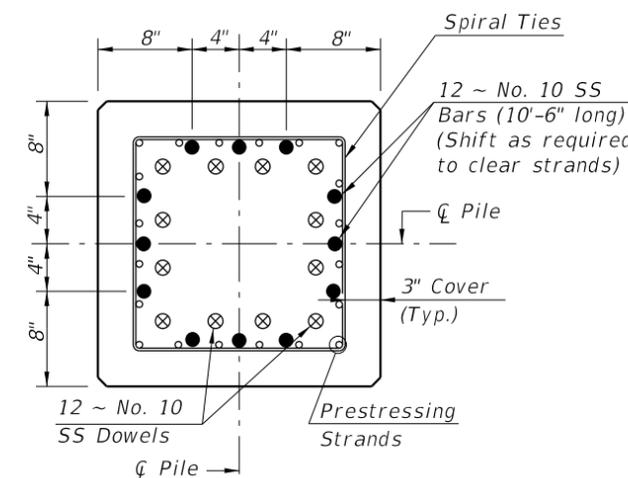
SECTION D-D

(See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E

(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F

(See Drivable Preplanned Pile Splice Detail)

SS PILE SPLICE REINFORCEMENT DETAILS

SS PRESTRESSED PILE DETAILS

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LAST REVISION	DESCRIPTION:
01/01/16	

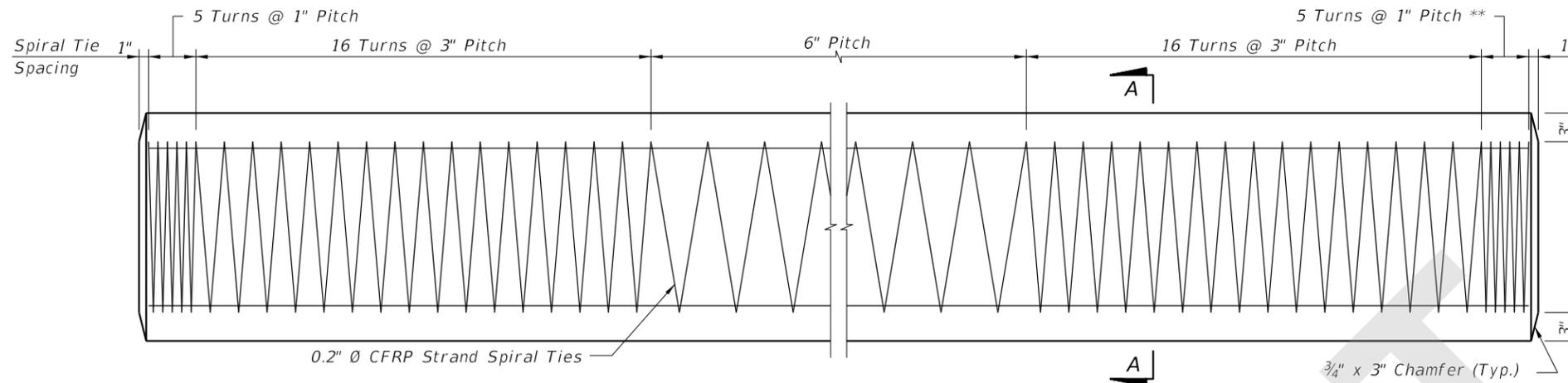


FY 2020-21
 STANDARD PLANS

24" SQUARE CFRP & SS PRESTRESSED
 CONCRETE PILE

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 455-124

SHEET
 2 of 2

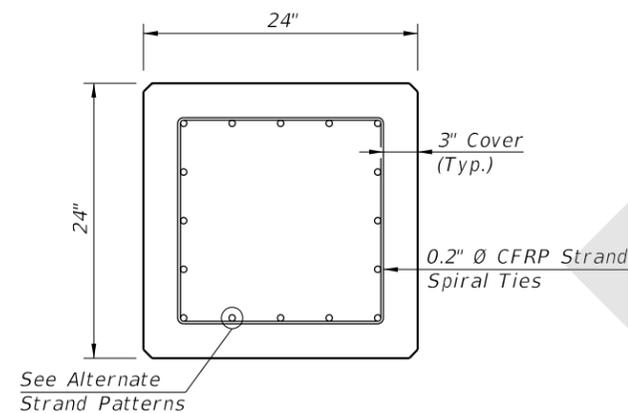


SPIRAL TIE ELEVATION

** See Note 4 on Index 455-102

ALTERNATE STRAND PATTERNS

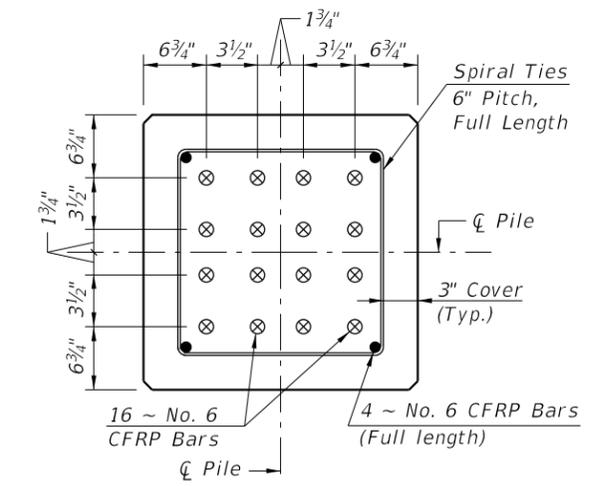
16 ~ 0.6" Ø, CFRP 7-Strand, at 42 kips
 20 ~ 1/2" Ø, CFRP Single-Strand, at 35 kips



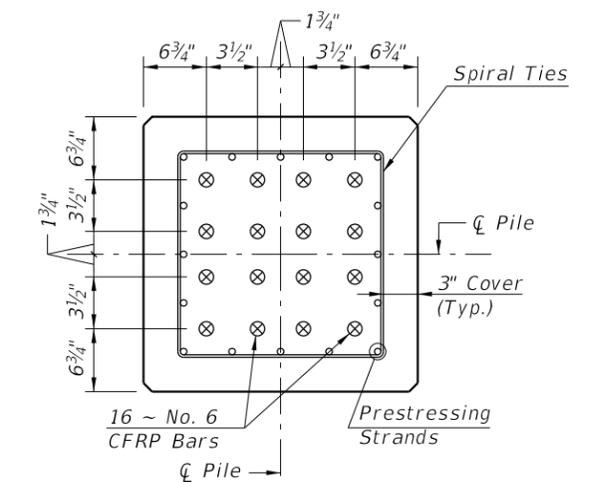
SECTION A-A

NOTES:

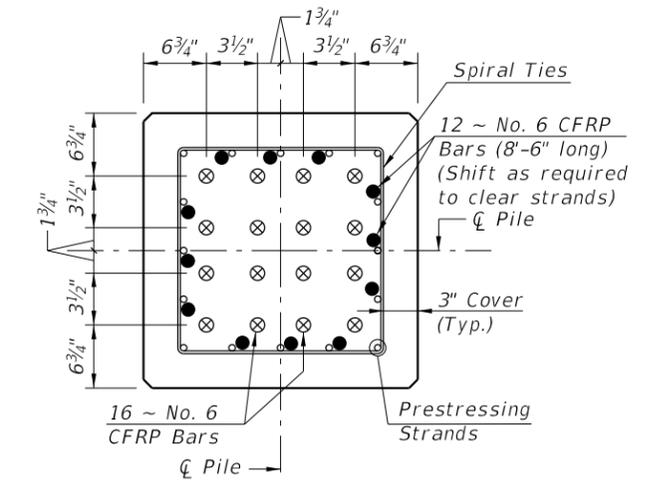
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SECTION D-D
 (See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E
 (See Drivable Prestressed Precast Pile Splice Detail)



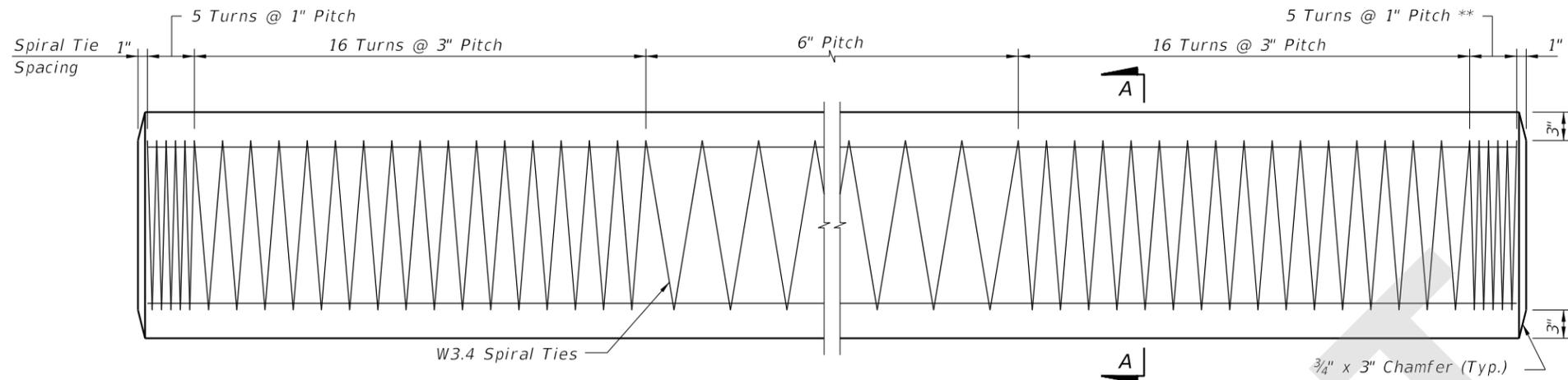
SECTION F-F
 (See Drivable Preplanned Prestressed Precast Pile Splice Detail)

CFRP PILE SPLICE REINFORCEMENT DETAILS

CFRP PRESTRESSED PILE DETAILS

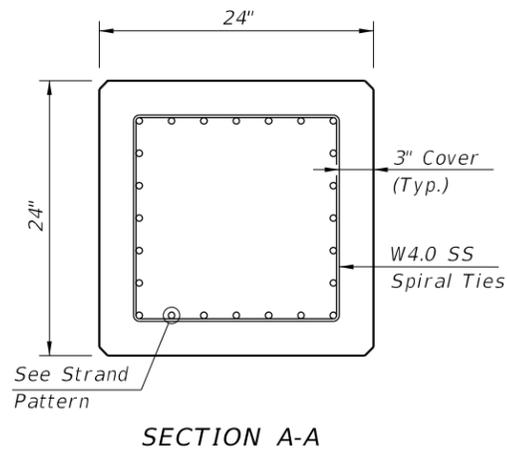
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LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	24" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX 455-124	SHEET 1 of 2
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ELEVATION

** See Note 4 on Index 455-102



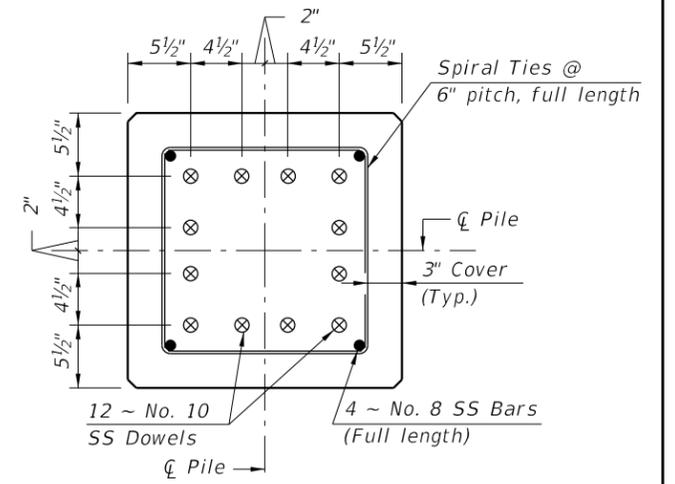
SECTION A-A

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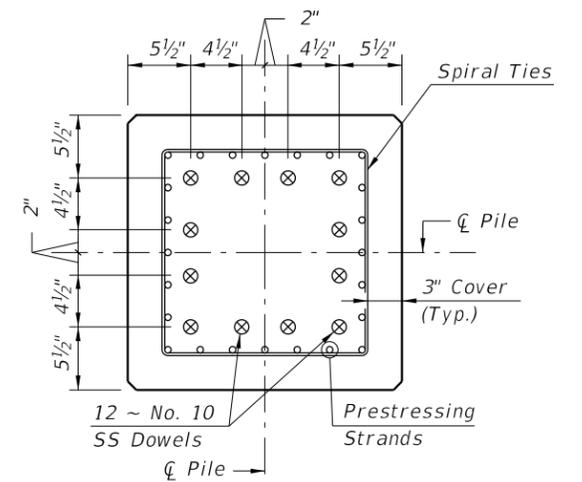
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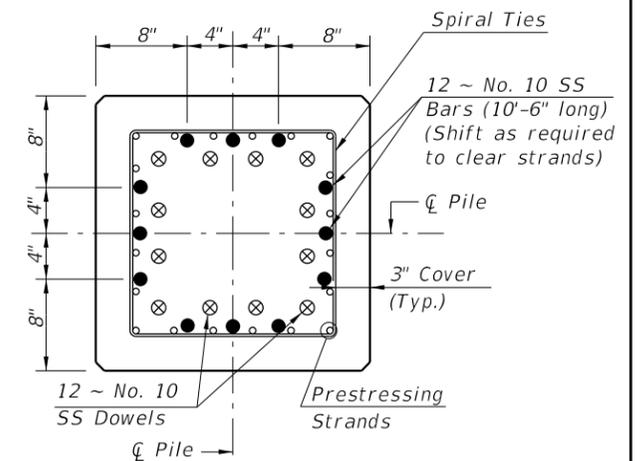
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SECTION E-E

(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F

(See Drivable Preplanned Pile Splice Detail)

SS PILE SPLICE REINFORCEMENT DETAILS

SS PRESTRESSED PILE DETAILS

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7/17/2020

LAST REVISION	REVISION	DESCRIPTION:		FY 2020-21 STANDARD PLANS	24" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX	SHEET
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