

ORIGINATION FORM

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

Contact Information:

Date: June 19, 2019
Originator: Cheryl Hudson
Phone: (850) 414-5332
Email: cheryl.hudson@dot.state.fl.us

Standard Plans:

Index Number: 455-130
Sheet Number (s): 1, 2
Index Title: 30" Square CFRP & SS Prestressed Concrete Pile
-



Summary of the changes:

Added void length dimension for EDC

Commentary / Background:

Double dimensioned void length for PDA & EDC

Other Affected Offices / Documents: (Provide name of responsible personnel)

- | 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 – |

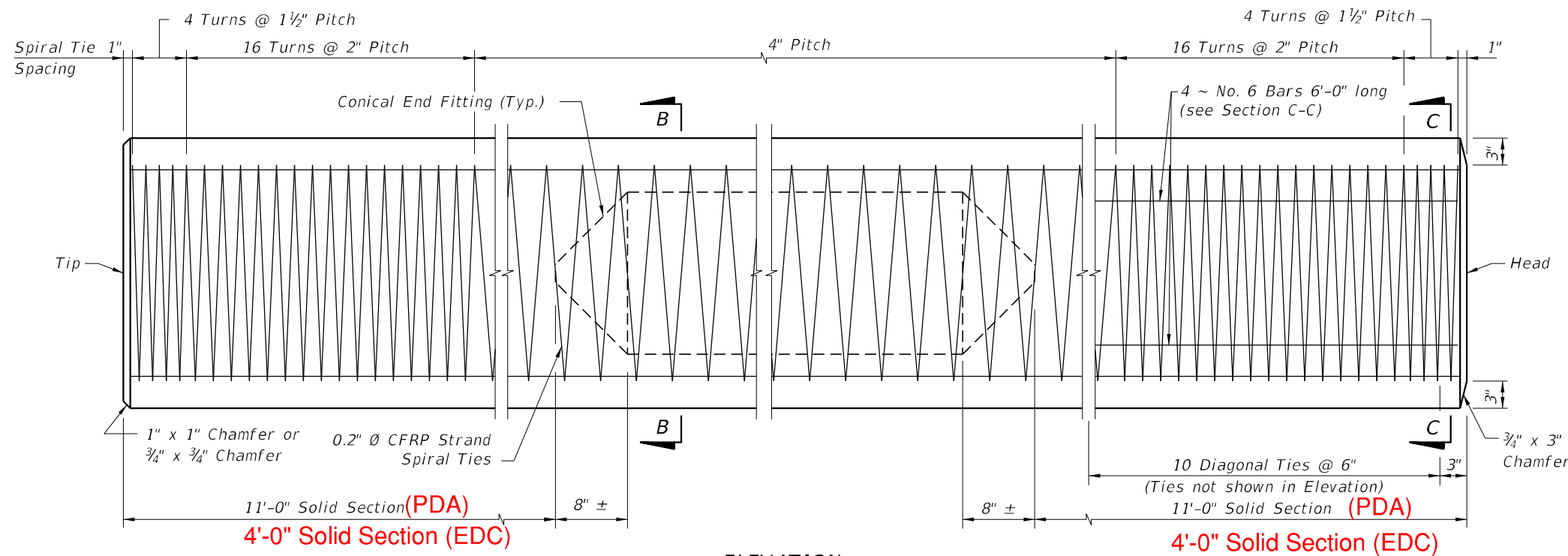
Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

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

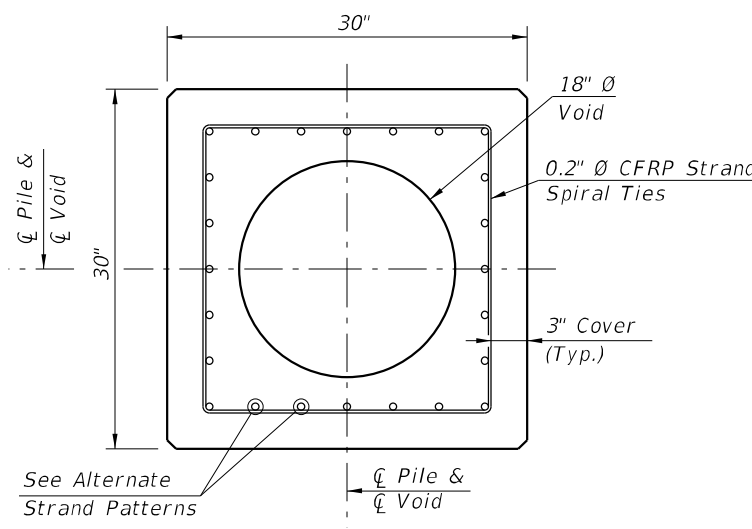
Implementation:

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

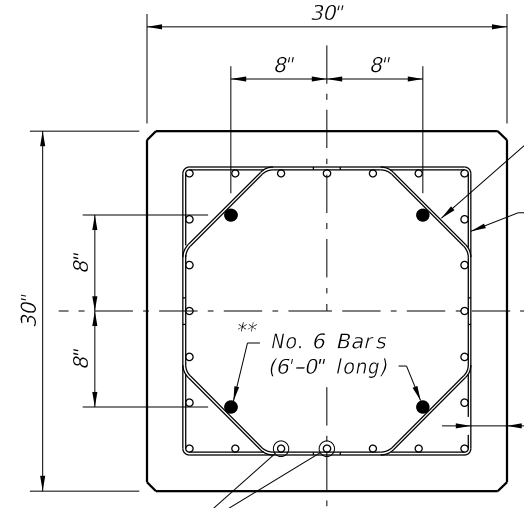
Contact the Roadway Design Office for assistance in completing this form



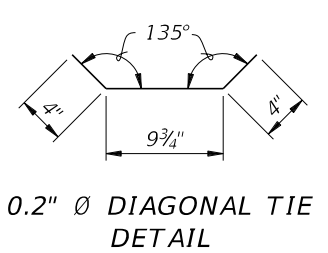
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)

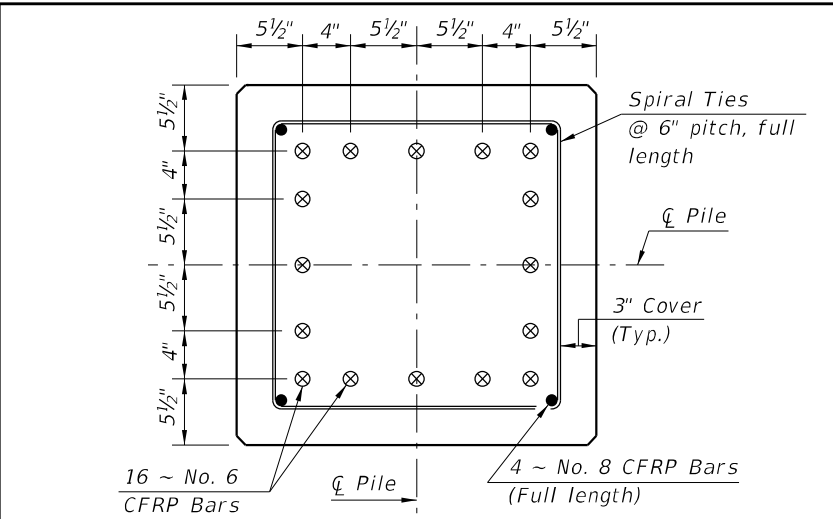


SECTION C-C
(See Pile Splice Reinforcement Details)

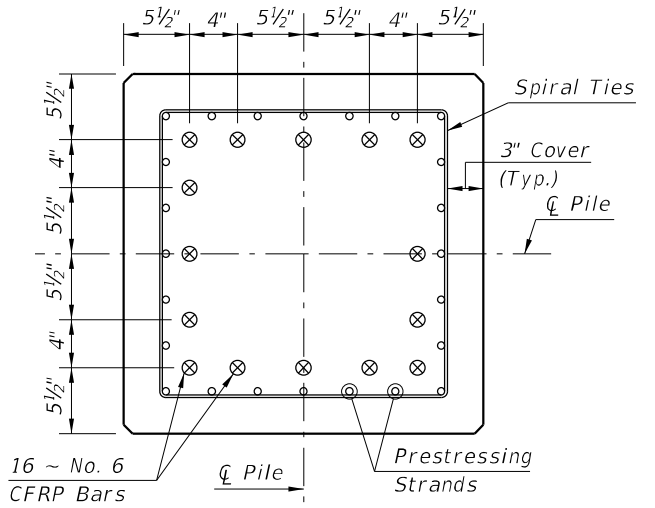


0.2" Ø DIAGONAL TIE DETAIL

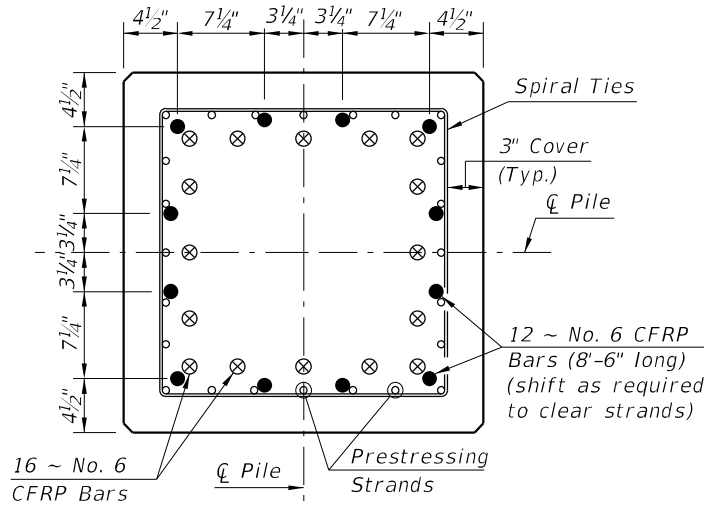
** Omit 4 ~ No. 6 Bars and Diagonal Ties in pre-planned mechanical splice.



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 DETAILS

CFRP PRESTRESSED PILE DETAILS

ALTERNATE STRAND PATTERNS

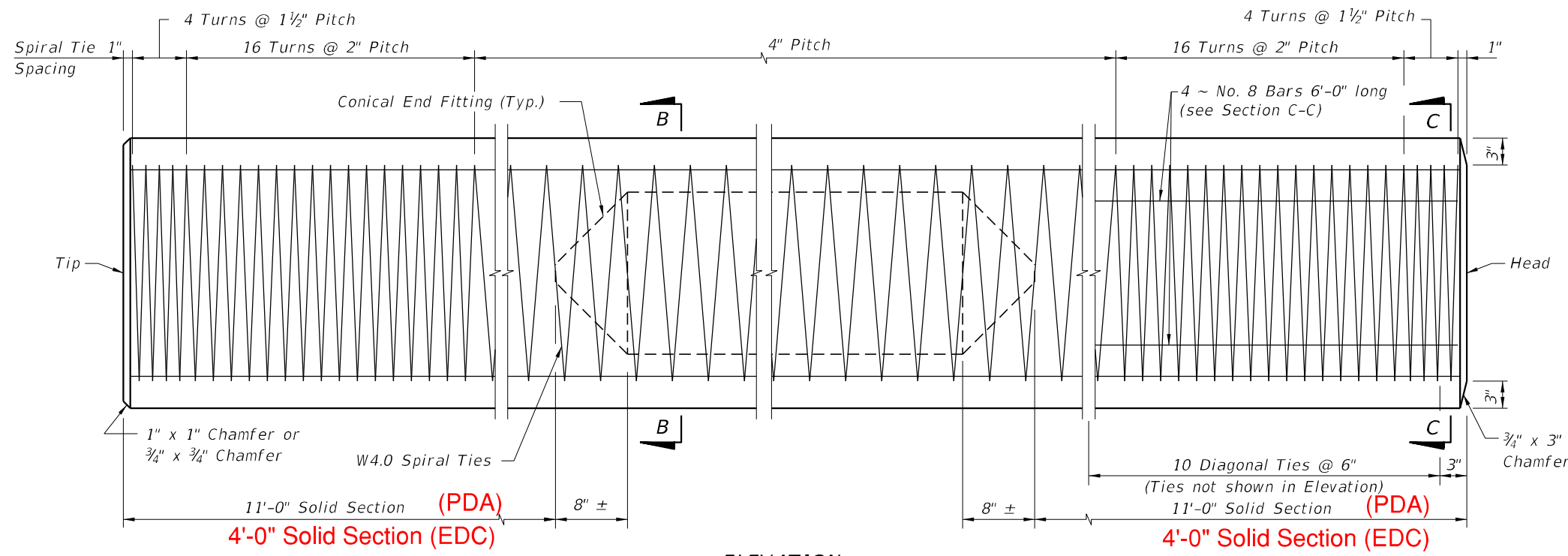
- 20 ~ 0.6" Ø, CFRP 7-Strand at 38 kips
- 20 ~ 1/2" Ø, CFRP Single-Strand at 37 kips

NOTES:

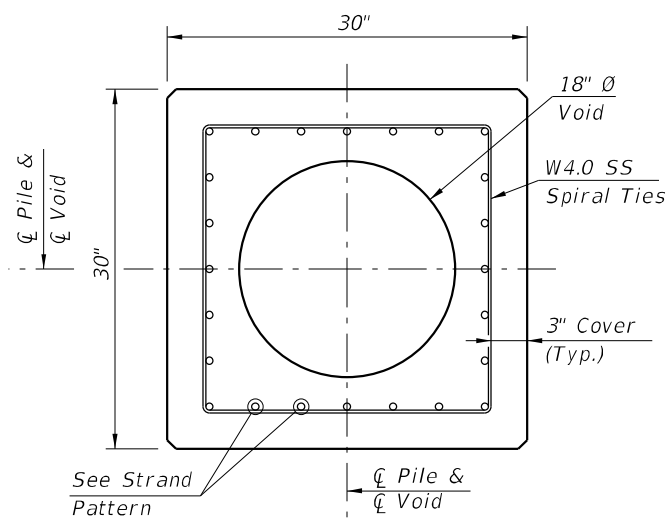
- Any of the given Strand Patterns may be utilized. The strands shall be located as follows: Place one strand at each corner and place the remaining strands equally spaced between the corner strands. The total strand pattern shall be concentric with the nominal concrete section of the pile.
- CONTRACTOR OPTION: The 30" pile may be cast SOLID by omitting the 18" Ø void. In this event, the Contractor shall submit calculations for approval and a proposed strand configuration that provide net prestressing after losses equal to 1000 psi. Alternate configurations for the Diagonal Ties, to maintain the position of the 4 ~ #6 Bars, may be approved by the Engineer.
- 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.

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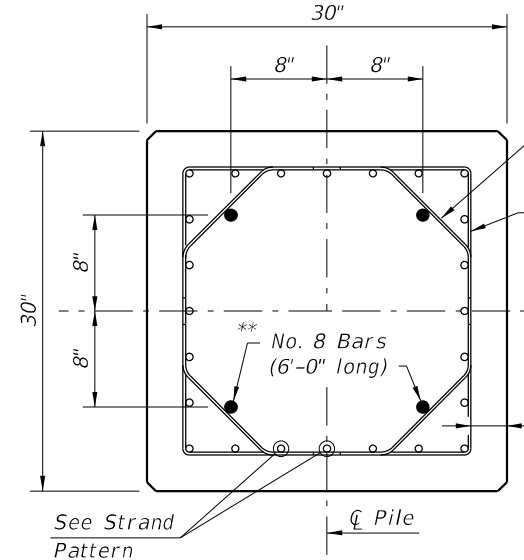
LAST REVISION 11/01/16	REVISION 19	DESCRIPTION:	<p>FY 2019-20 STANDARD PLANS</p>	<p>30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE</p>	INDEX 455-130	SHEET 1 of 2
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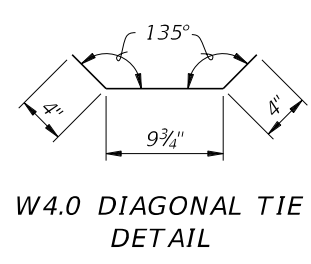
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)



SECTION C-C
(See Pile Splice Reinforcement Details)

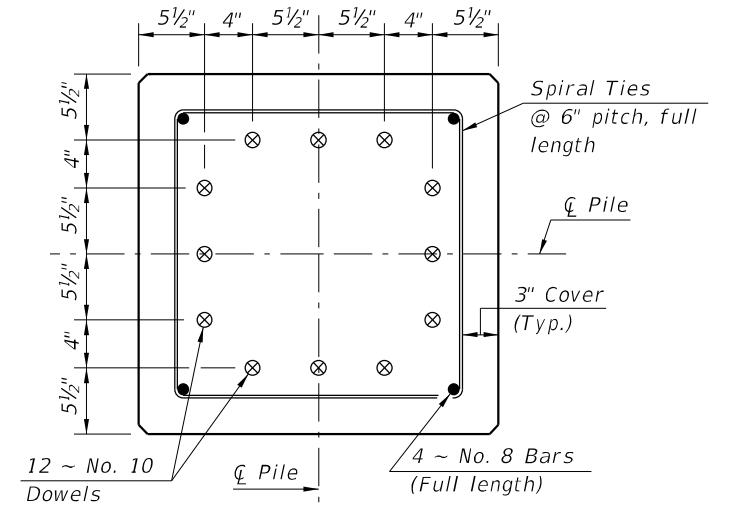


W4.0 DIAGONAL TIE DETAIL

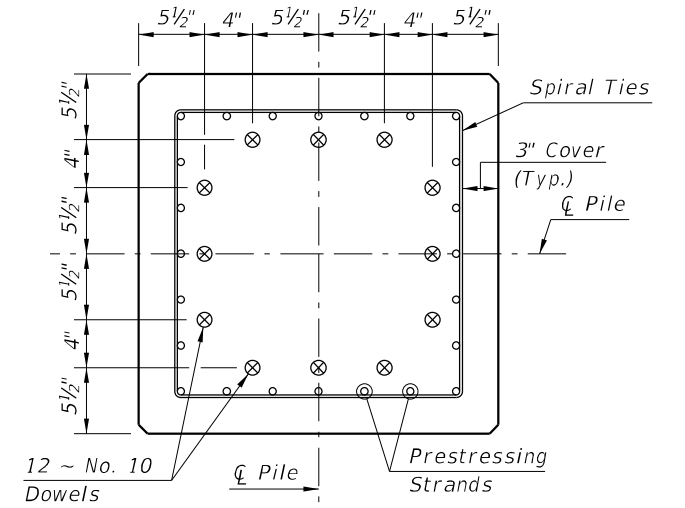
** Omit 4 ~ No. 8 Bars and Diagonal Ties in pre-planned mechanical splice.

NOTES:

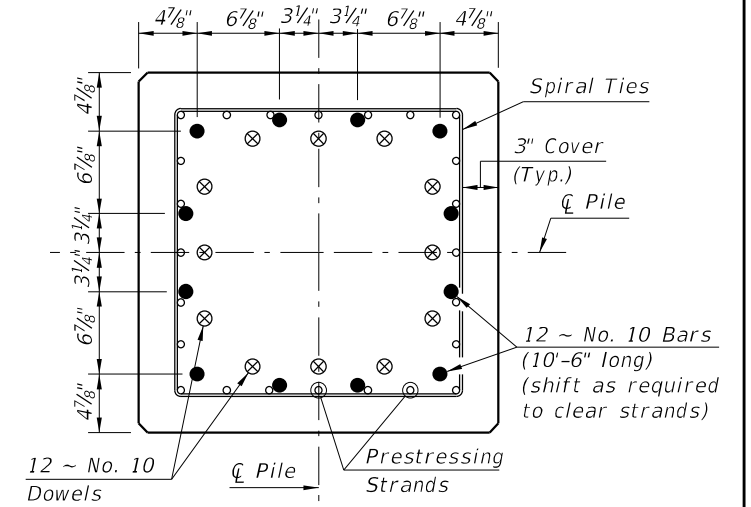
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SECTION D-D
(See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)



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



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

SS PILE SPLICE DETAILS

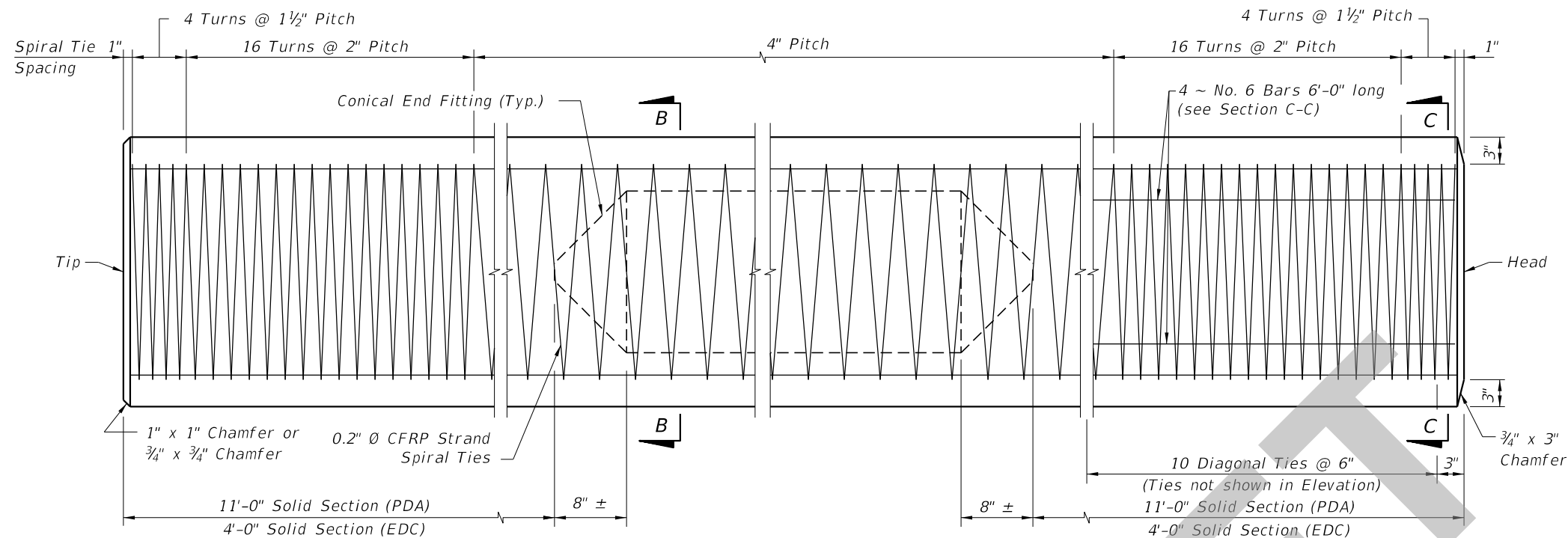
SS PRESTRESSED PILE DETAILS

STRAND PATTERN

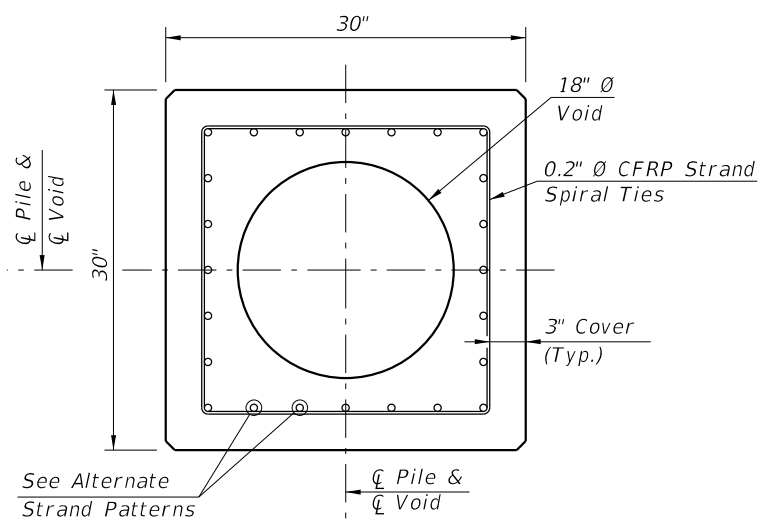
32 ~ 1/2" Ø, HSSS at 26 kips

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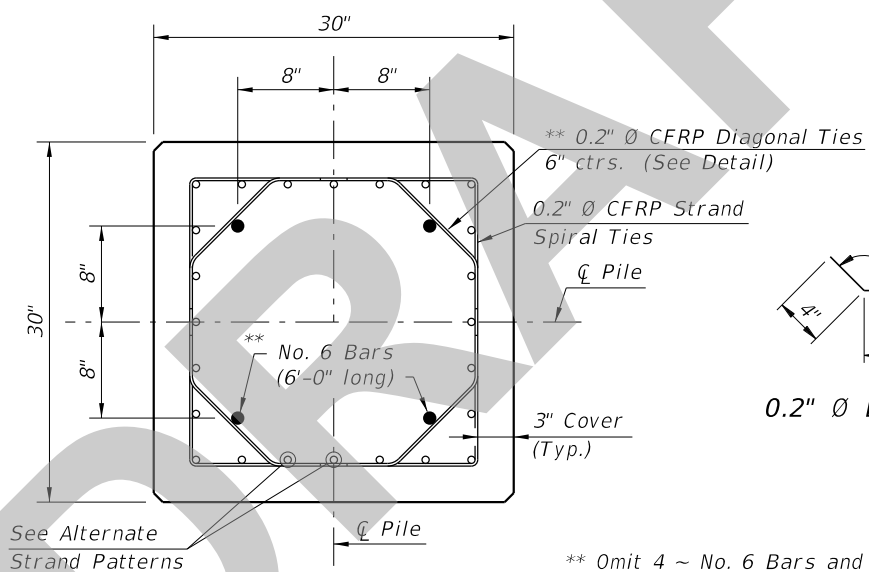
LAST REVISION	REVISION	DESCRIPTION:		FY 2019-20 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX	SHEET
01/01/16		11/01/19				455-130	2 of 2



ELEVATION

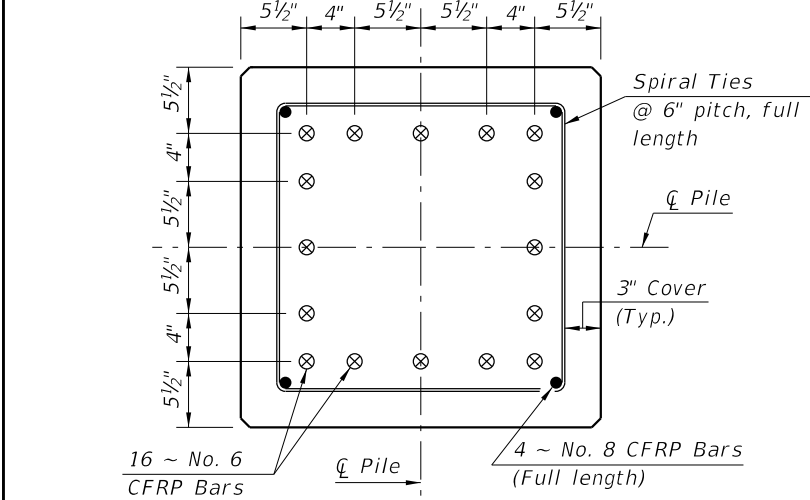


SECTION B-B
(See Pile Splice Reinforcement Details)

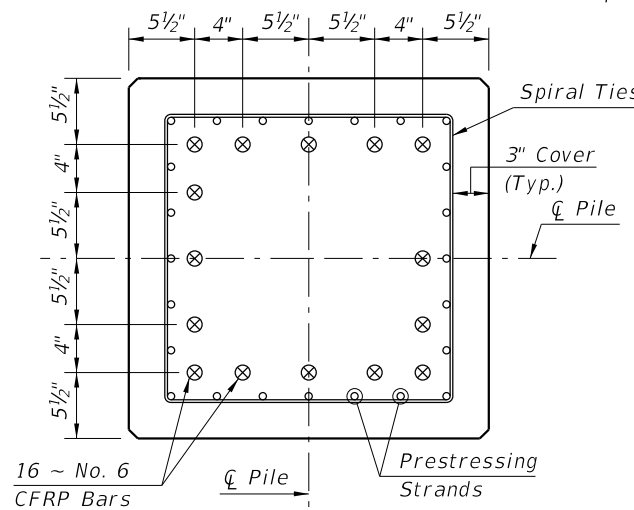


SECTION C-C
(See Pile Splice Reinforcement Details)

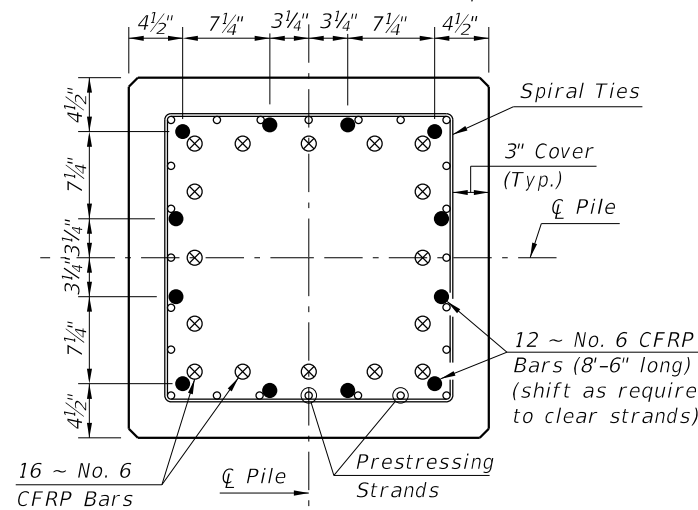
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CFRP PILE SPLICE DETAILS

ALTERNATE STRAND PATTERNS

- 20 ~ 0.6" Ø, CFRP 7-Strand at 38 kips
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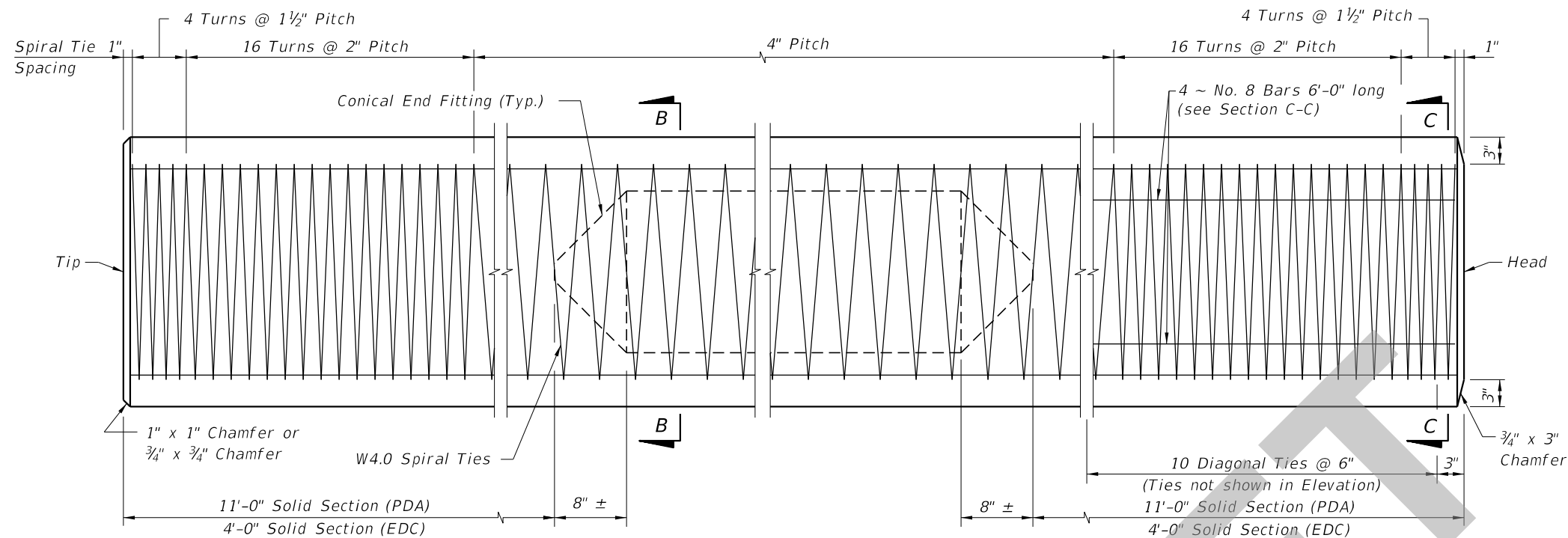
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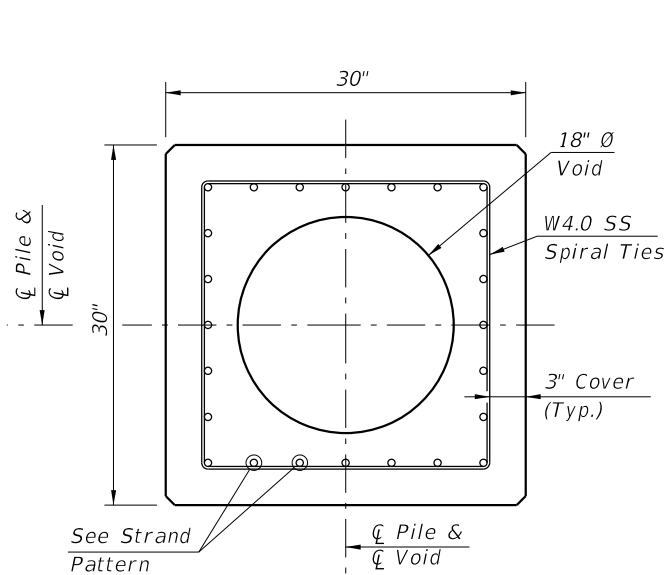
CFRP PRESTRESSED PILE DETAILS

SDATES

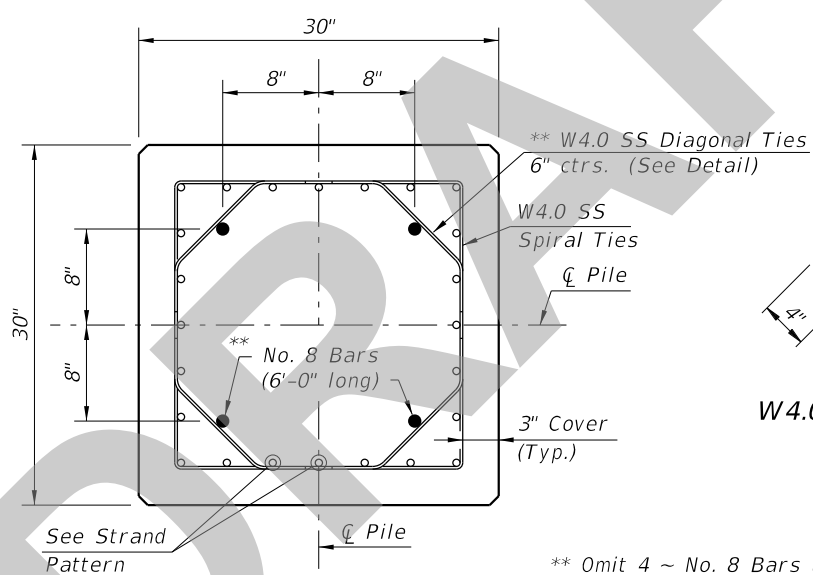
LAST REVISION 11/01/19	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX 455-130	SHEET 1 of 2
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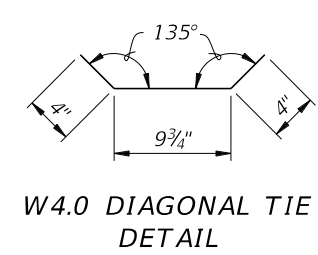
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)



SECTION C-C
(See Pile Splice Reinforcement Details)



W4.0 DIAGONAL TIE DETAIL

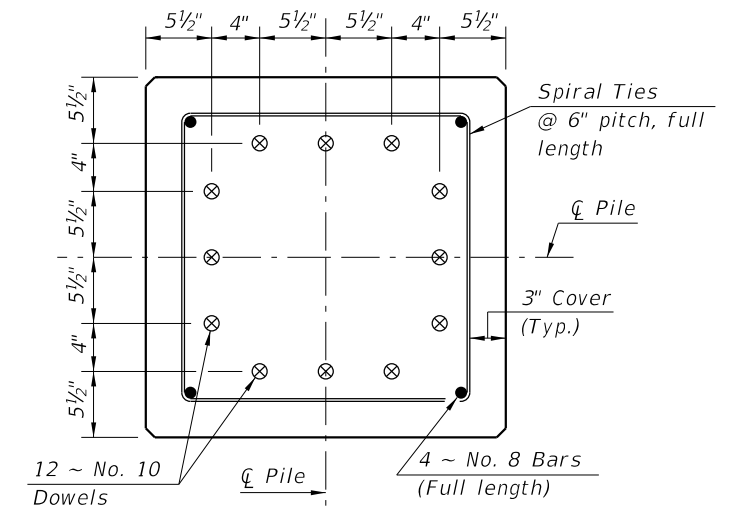
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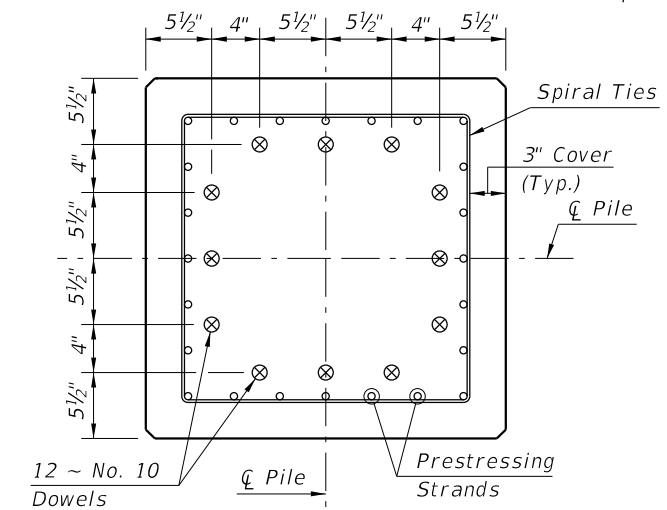
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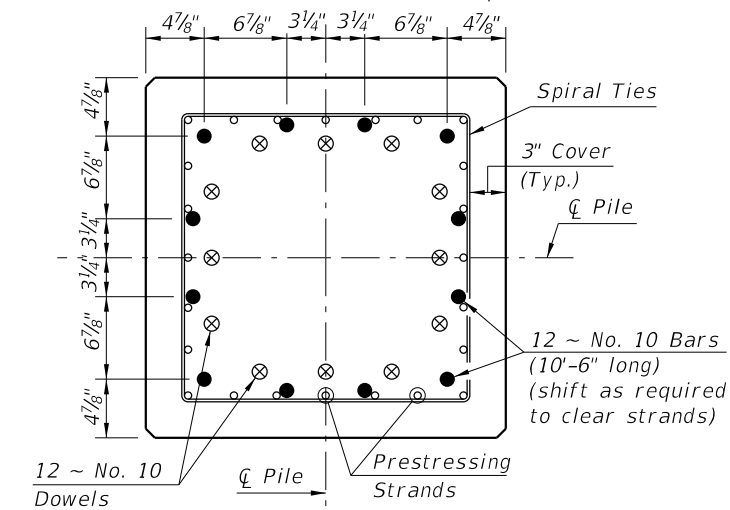
32 ~ 1/2" Ø, HSSS at 26 kips



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SS PILE SPLICE DETAILS

SS PRESTRESSED PILE DETAILS

SDATES

LAST REVISION 11/01/19	REVISION	DESCRIPTION:		FY 2020-21 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX 455-130	SHEET 2 of 2
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