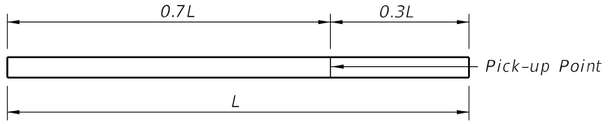
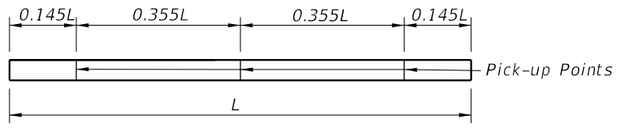


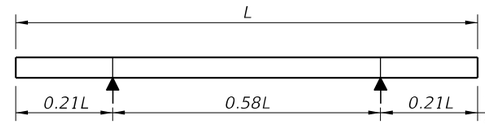
1-POINT PICK-UP

2-POINT PICK-UP

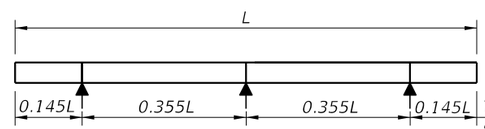


3-POINT PICK-UP

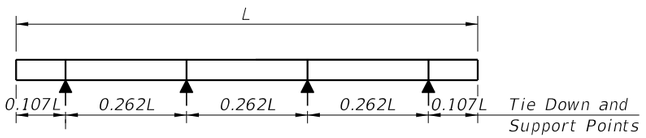
PILE PICK-UP DETAILS



2-POINT SUPPORT



3-POINT SUPPORT



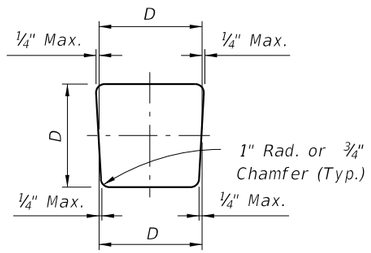
4-POINT SUPPORT

STORAGE AND TRANSPORTATION SUPPORT DETAILS

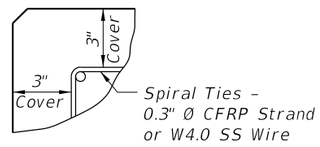
PRESTRESSED CONCRETE PILE NOTES:

1. Work this Index with the Square Prestressed Concrete Pile Splices (Index 22601), the Prestressed Concrete Pile Standards (Index 22612, 22614, 22618, 22624, 22630, 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 strand, meeting the requirements of pecification 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 962. Use an Epoxy Bonding Compound or an Epoxy Mortar as recommended by the Manufacturer.

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



TYPICAL PILE SHAPE FOR MOLD FORMS



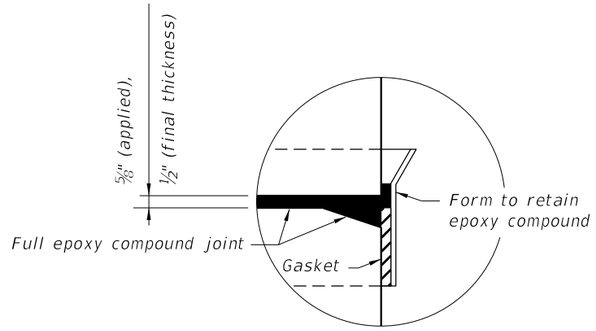
DETAIL SHOWING TYPICAL COVER

10/26/2016 9:20:51 AM

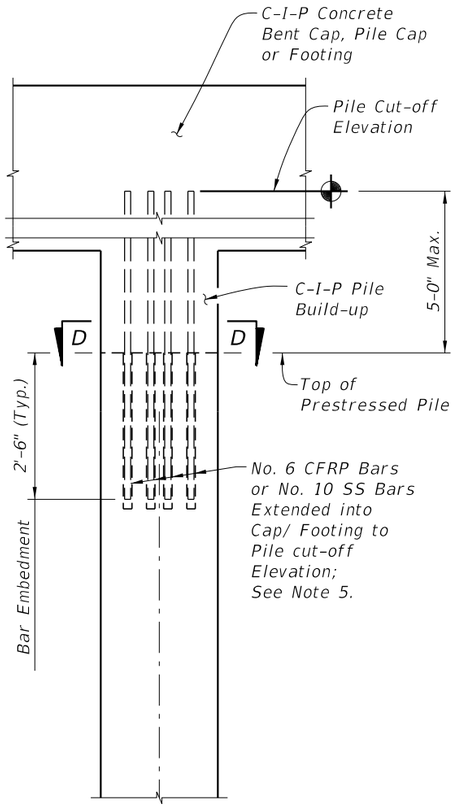
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	NOTES AND DETAILS FOR SQUARE CFRP & SS PRESTRESSED CONCRETE PILES	INDEX NO.	SHEET NO.
11/01/16						22600	1 of 1

NOTES:

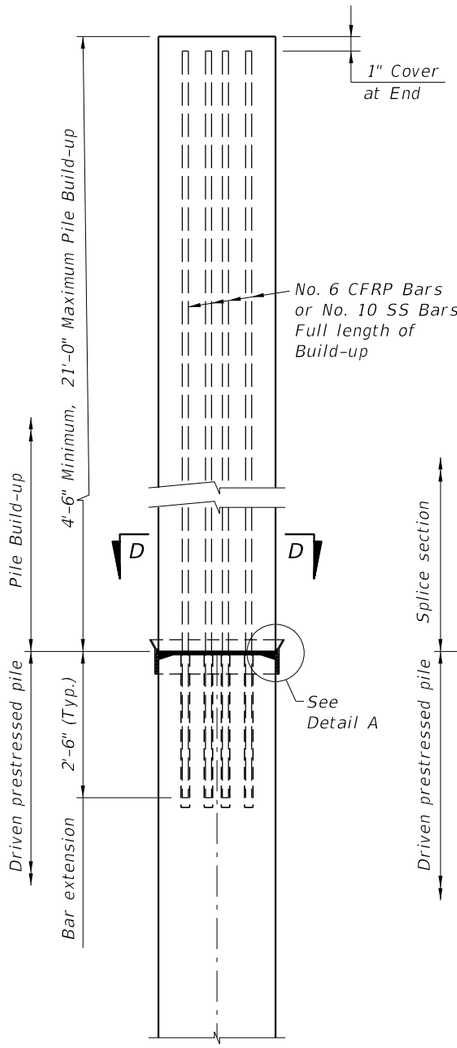
1. For Sections D-D, & E-E, see Index Nos. 22612, 22614, 22618, 22624 or 22630 for applicable concrete pile size and Pile Splice Reinforcement Details.
2. Prestressing strands, spiral ties and/or reinforcement are not shown for clarity.
3. In cases where pile splices are desired due to length limitations in shipping and/or handling, the "Drivable Preplanned Prestressed Precast Splice Detail" shall be used.
4. When preformed dowel holes are utilized, the 1" spiral tie pitch shall be continued to 4'-0" below the head of the pile, See Index Nos. 22618, 22624. Preformed holes shall utilize either removable preforming material or stay-in-place corrugated galvanized steel ducts. Stay-in-place ducts shall be fabricated from galvanized sheet steel meeting the requirements of ASTM A653, Coating Designation G90, 26 gauge. Ducts shall be 1½" diameter for CFRP Bars, and 2" diameter for SS Bars with a minimum corrugation (rib) height of 0.12 in. Ducts shall be fabricated with either welded or interlocked seams. Galvanizing of welded seams will not be required.
5. For tension piles where top of Prestressed Pile is less than 3 feet below Pile Cut-off Elevation, extend No. 6 CFRP Bars or No. 10 SS into cap beyond Pile Cut-off Elevation to achieve development as approved by the Engineer.



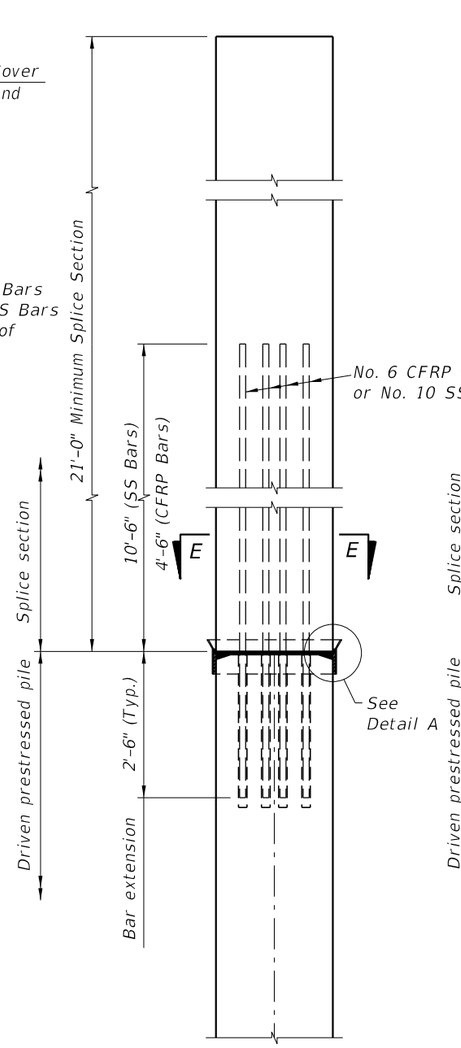
DETAIL A



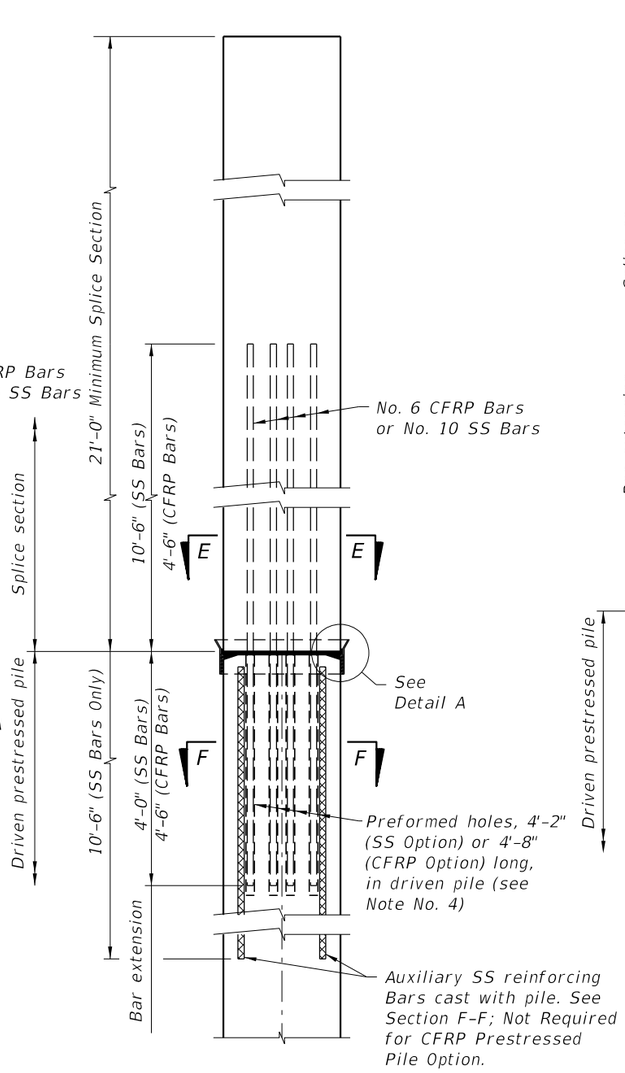
UNFORESEEN
REINFORCED C-I-P
PILE BUILD-UP DETAIL



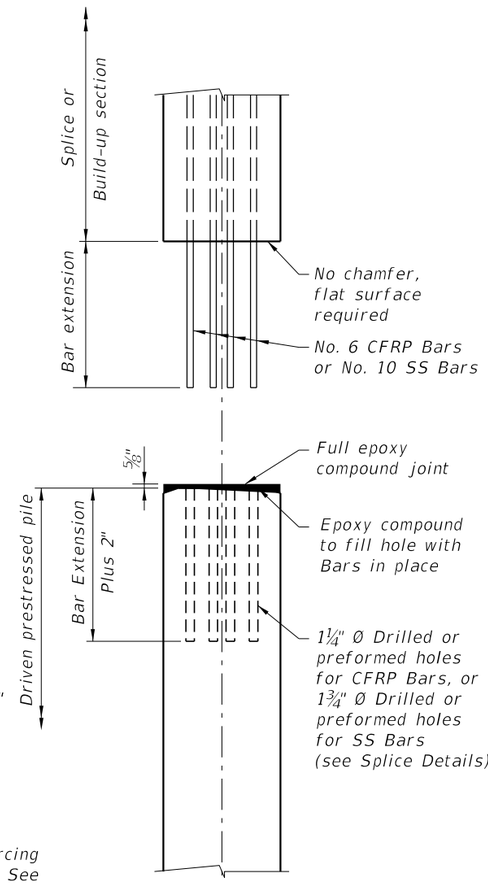
NONDRIVABLE UNFORESEEN
REINFORCED PRECAST
PILE BUILD-UP DETAIL



DRIVABLE UNFORESEEN
PRESTRESSED PRECAST
PILE SPLICE DETAIL



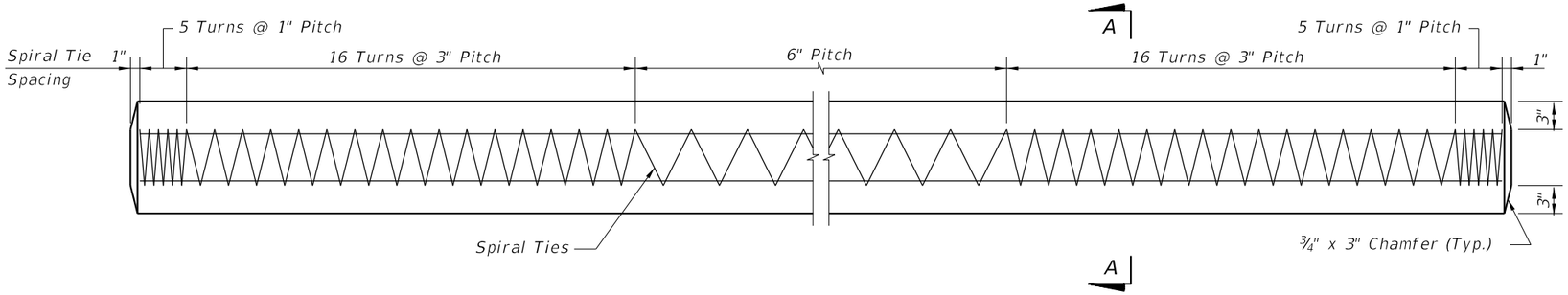
DRIVABLE PREPLANNED
PRESTRESSED PRECAST
PILE SPLICE DETAIL



TYPICAL SPLICE
BEFORE BONDING

10/26/2016 9:21:08 AM

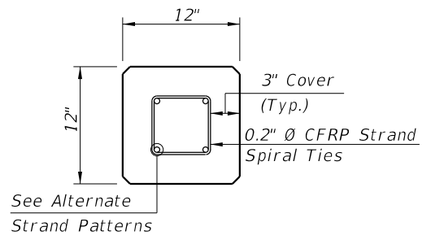
LAST REVISION	REVISION	DESCRIPTION:			
01/01/16			FY 2017-18 DESIGN STANDARDS	SQUARE CFRP & SS PRESTRESSED CONCRETE PILE SPLICES	INDEX NO. 22601 / SHEET NO. 1 of 1



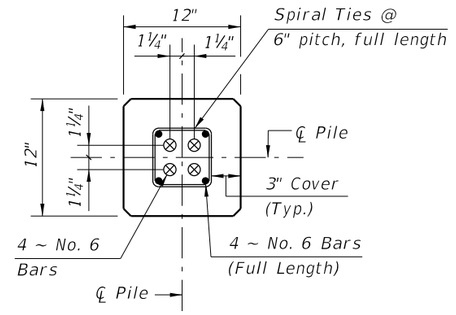
ELEVATION

ALTERNATE STRAND PATTERNS

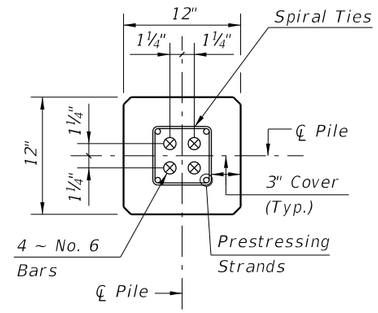
4 ~ 0.6" Ø, CFRP 7-Strand, at 42 kips
4 ~ ½" Ø, CFRP Single-Strand, at 41 kips



SECTION A-A



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



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

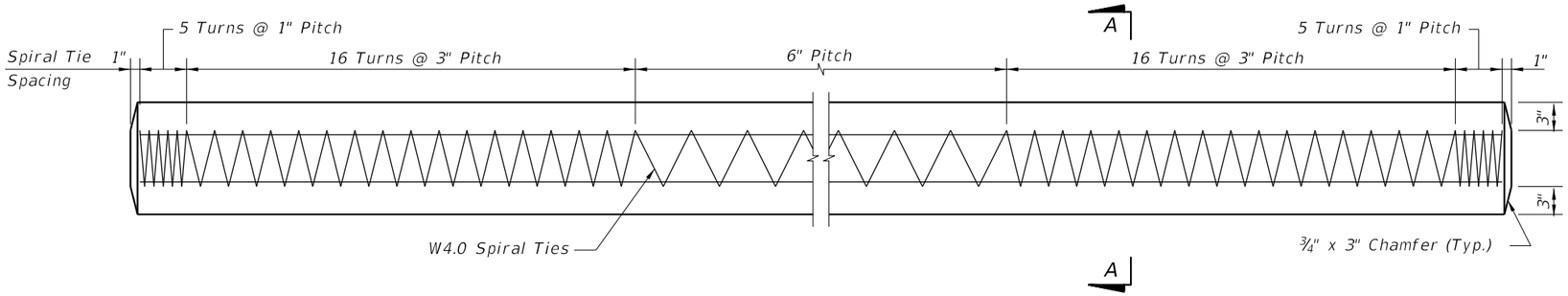
CFRP PILE SPLICE REINFORCEMENT DETAILS

NOTES:
1. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Alternate Strand Patterns may be utilized.

CFRP PRESTRESSED PILE DETAILS

10/26/2016 9:21:35 AM

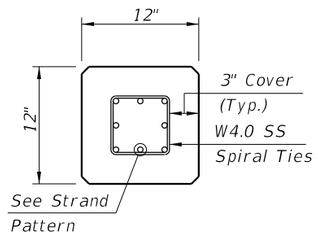
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	12" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
11/01/16						22612	1 of 2



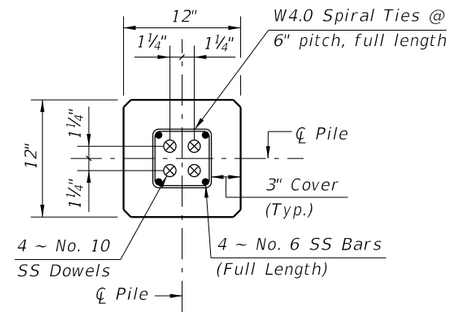
ELEVATION

STRAND PATTERN

8 ~ ½" Ø, HSSS at 24 kips

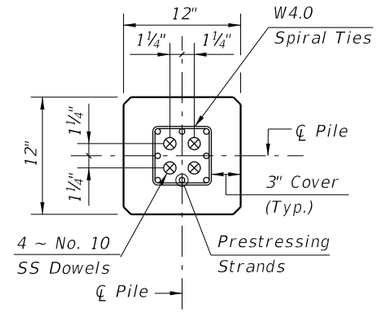


SECTION A-A



SECTION D-D

(See Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E

(See Drivable Unforeseen Prestressed Precast Pile Splice Detail)

SS PILE SPLICE REINFORCEMENT DETAILS

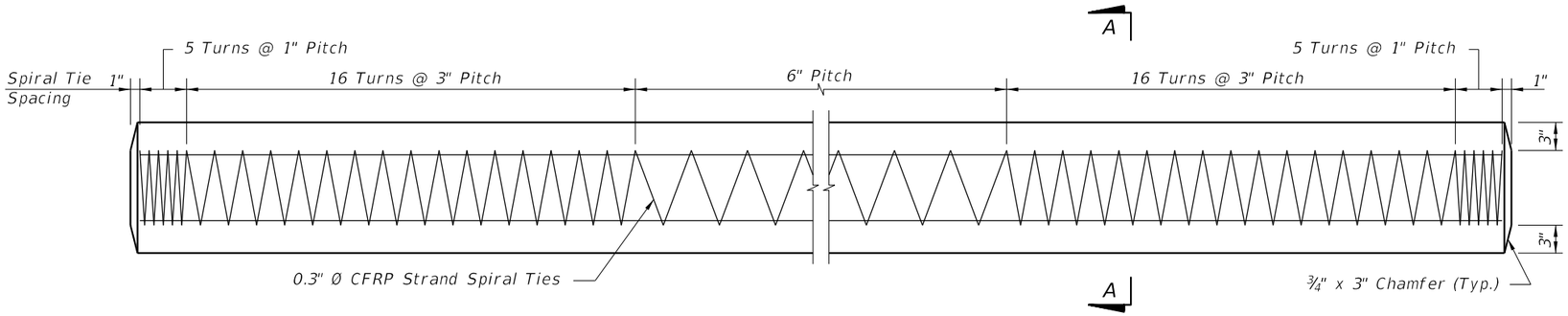
NOTES:

1. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – 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.

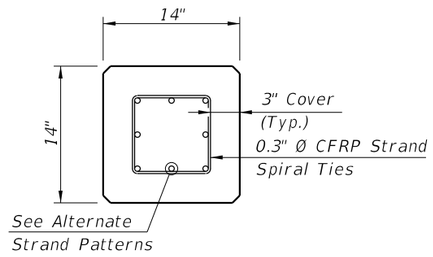
SS PRESTRESSED PILE DETAILS

10/26/2016 9:21:38 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FDOT FY 2017-18 DESIGN STANDARDS	12" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	22612	2 of 2



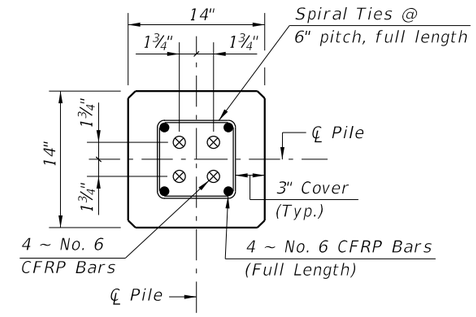
ELEVATION



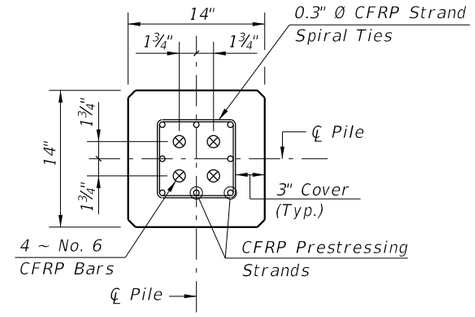
SECTION A-A

ALTERNATE STRAND PATTERNS

8 ~ 0.6" Ø, CFRP 7-Strand, at 31.5 kips
8 ~ ½" Ø, CFRP Single-Strand, at 30.5 kips



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



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

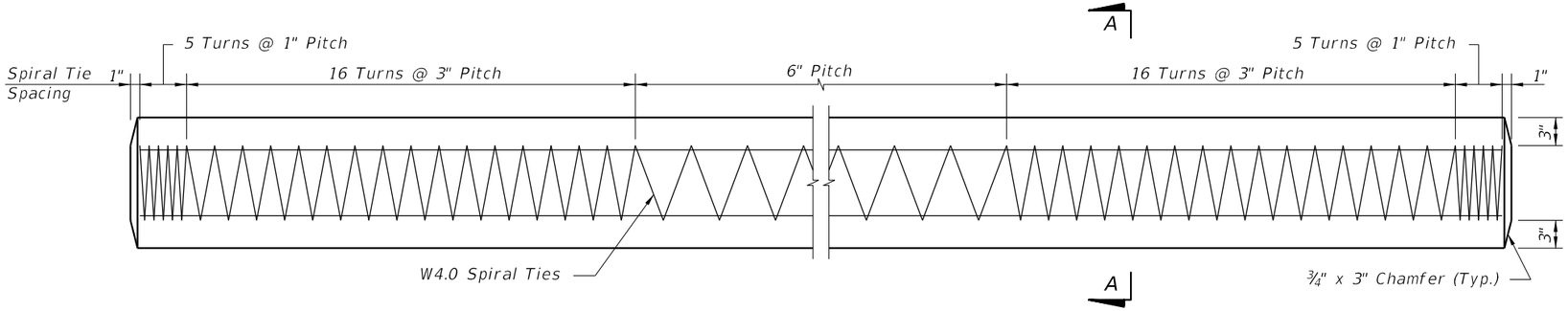
CFRP PILE SPLICE REINFORCEMENT DETAILS

NOTES:
1. Work this Index with Index 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Alternate Strand Patterns may be utilized. The strands shall be located as follows:
   Place one strand at each corner and equally space the remaining strands between the corner strands.
   The total strand pattern shall be concentric with the nominal concrete section of the pile.

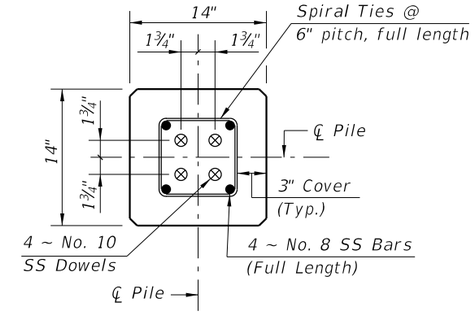
CFRP PRESTRESSED PILE DETAILS

10/31/2016 11:50:19 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	14" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
01/01/16						22614	1 of 2

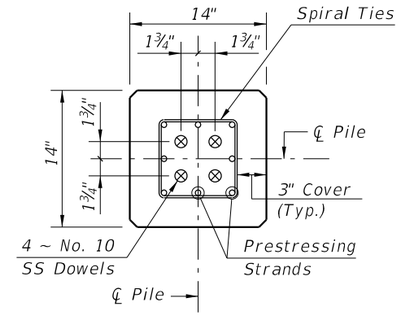


ELEVATION



SECTION D-D

(See Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)

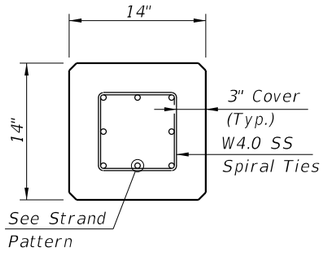


SECTION E-E

(See Drivable Unforeseen Prestressed Precast Splice Detail)

STRAND PATTERN

12 ~ ½" Ø, HSSS at 23 kips



SECTION A-A

SS PILE SPLICE REINFORCEMENT DETAILS

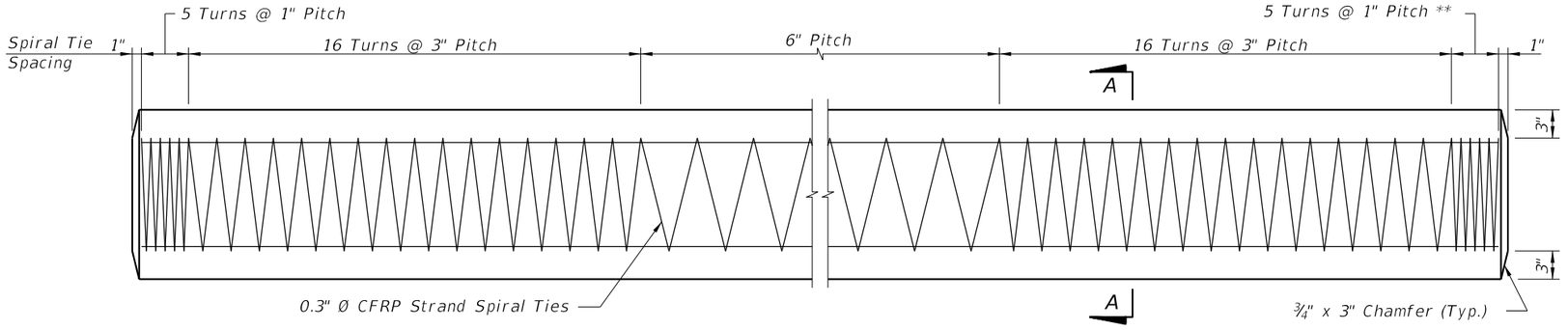
NOTES:

1. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Alternate 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.

SS PRESTRESSED PILE DETAILS

10/26/2016 9:21:53 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FY 2017-18 DESIGN STANDARDS	14" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	22614	2 of 2

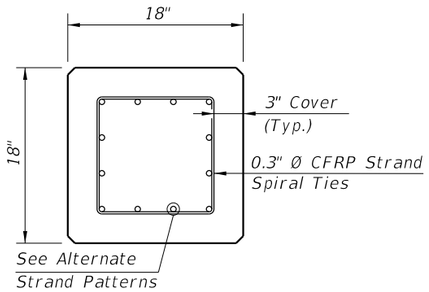


ELEVATION

** See Note No. 4 on Index No. 22601

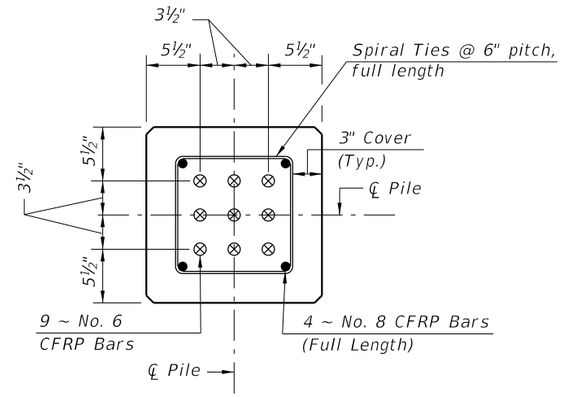
ALTERNATE STRAND PATTERNS

12 ~ 0.6" Ø, CFRP 7-Strand, at 34 kips
12 ~ ½" Ø, CFRP Single-Strand, at 33 kips

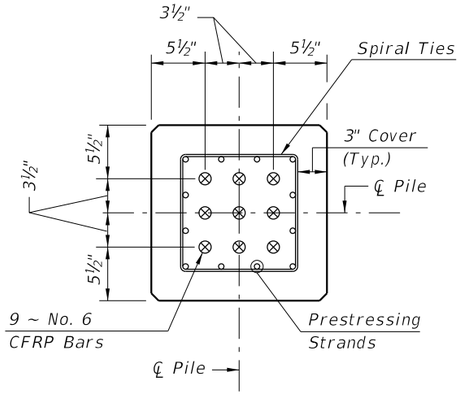


SECTION A-A

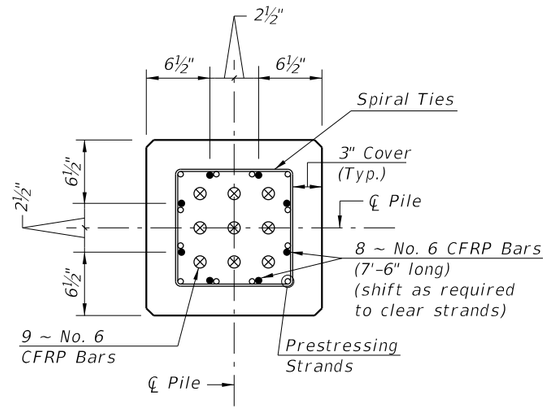
NOTES:
1. Work this Index with Index 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Strand Patterns may be utilized. The strands shall be located as follows:
   Place one strand at each 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 Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)



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



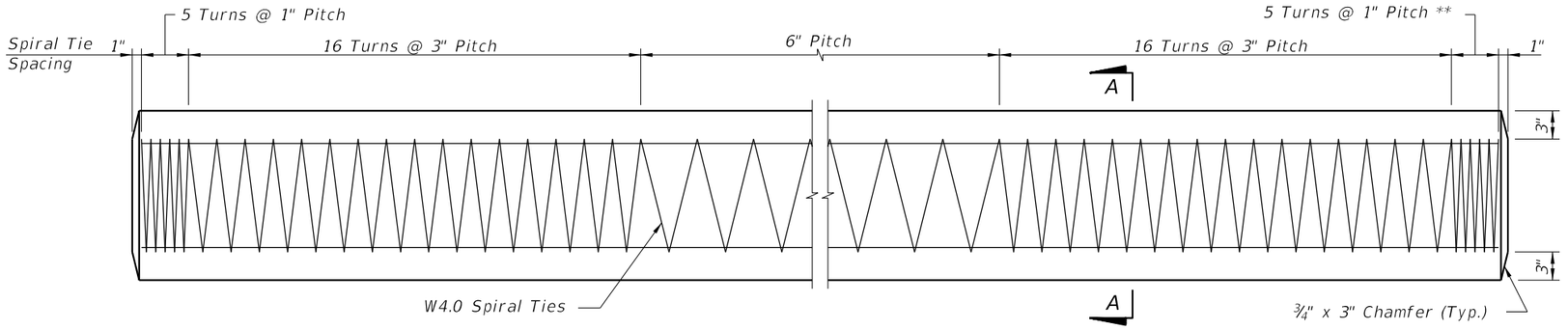
SECTION F-F
(See Drivable Preplanned Prestressed Precast Splice Detail)

CFRP PILE SPLICE REINFORCEMENT DETAILS

10/26/2016 9:22:17 AM

CFRP PRESTRESSED PILE DETAILS

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	18" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
01/01/16						22618	1 of 2

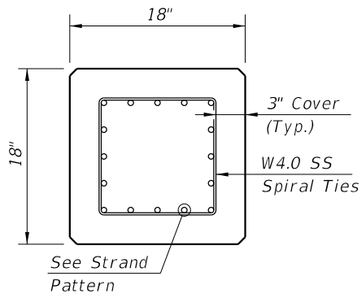


ELEVATION

** See Note No. 4 on Index No. 22601

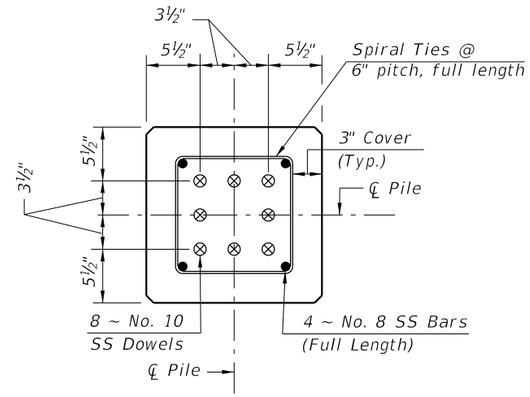
STRAND PATTERN

16 ~ ½" Ø, HSSS, at 26 kips



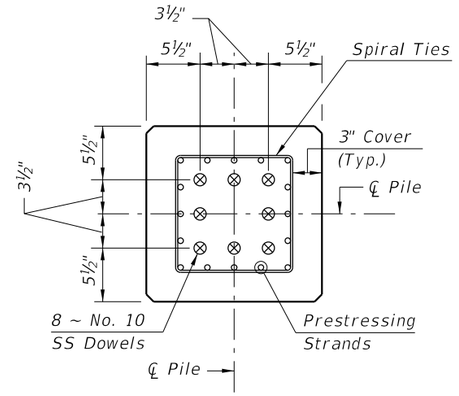
SECTION A-A

NOTES:
1. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – 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.



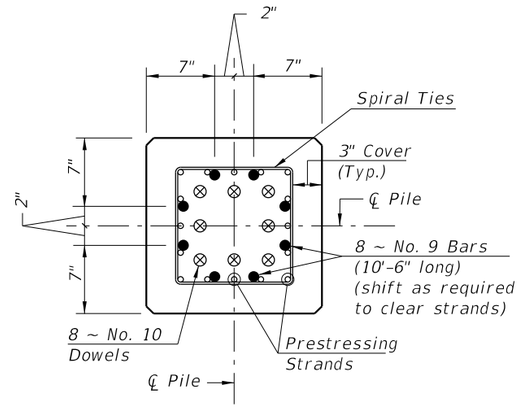
SECTION D-D

(See Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E

(See Drivable Prestressed Precast Splice Detail)



SECTION F-F

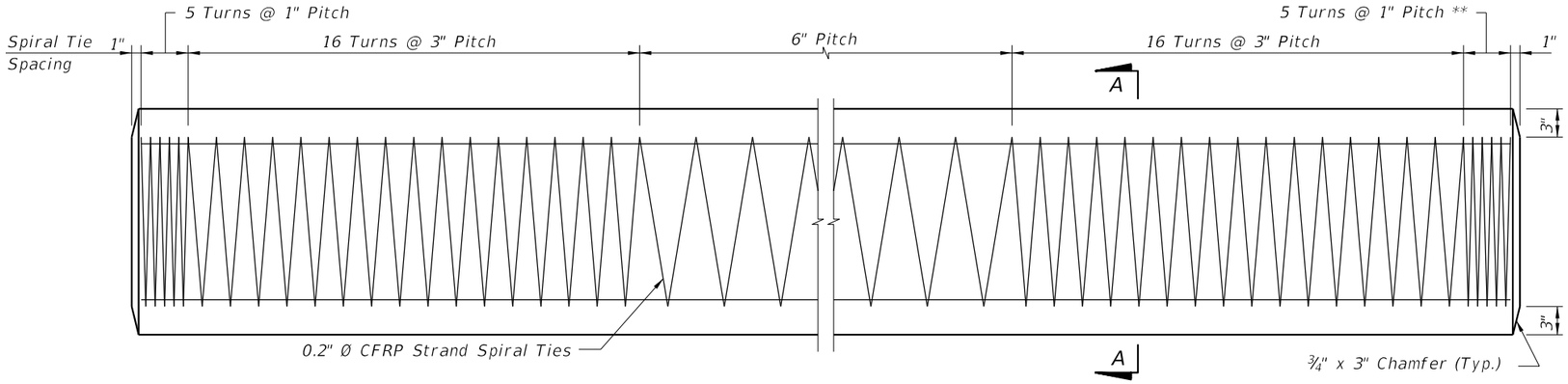
(See Drivable Preplanned Predtresses Precast Splice Detail)

SS PILE SPLICE REINFORCEMENT DETAILS

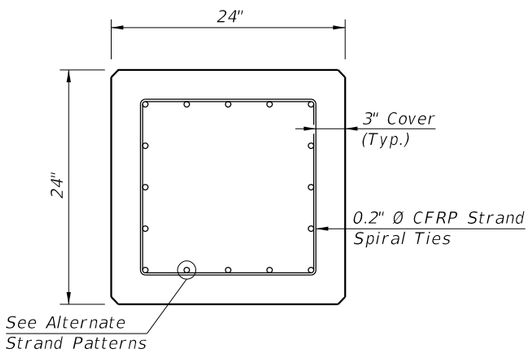
SS PRESTRESSED PILE DETAILS

10/26/2016 9:22:22 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	18" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
01/01/16					22618	2 of 2



SPIRAL TIE ELEVATION

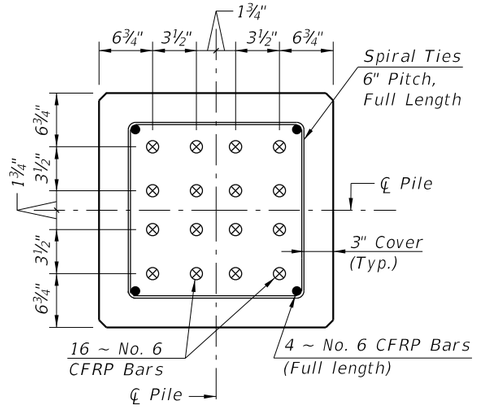


SECTION A-A

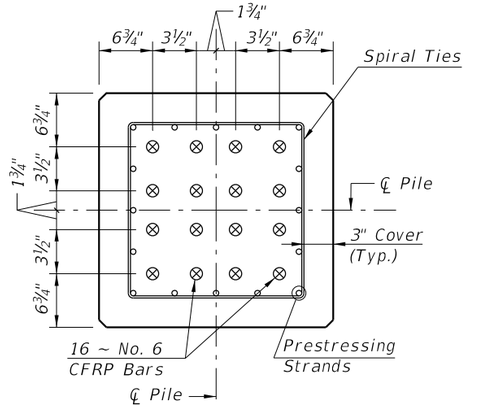
ALTERNATE STRAND PATTERNS

16 ~ 0.6" Ø, CFRP 7-Strand, at 42 kips
16 ~ ½" Ø, CFRP Single-Strand, at 41 kips

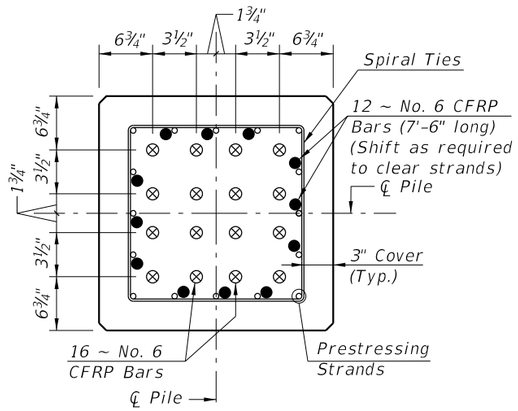
NOTES:
1. Work this Index with Index 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Strand Patterns may be utilized.
   The strands shall be located as follows:
   Place one strand at 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 Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)



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



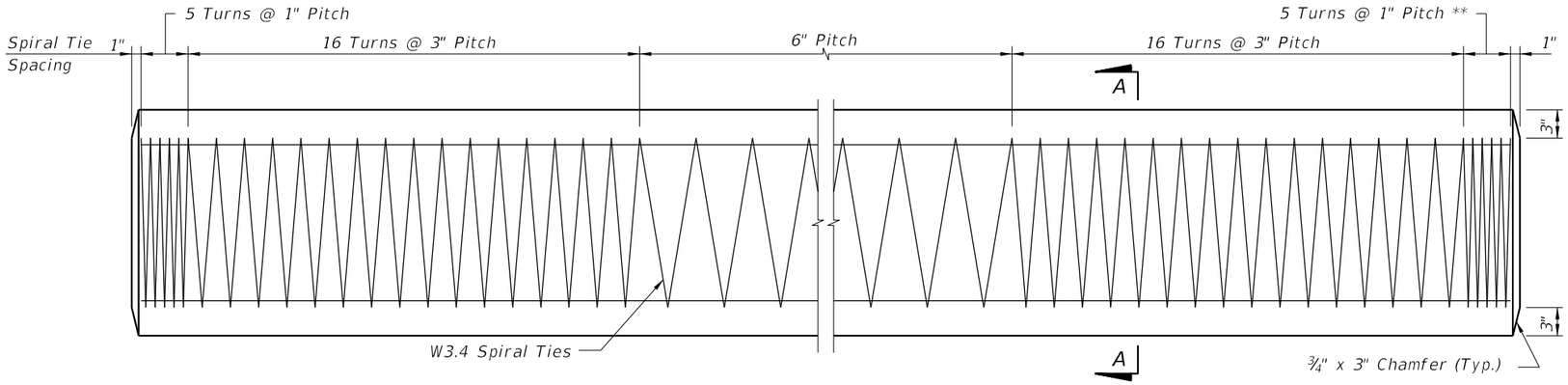
SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)

CFRP PILE SPLICE REINFORCEMENT DETAILS

CFRP PRESTRESSED PILE DETAILS

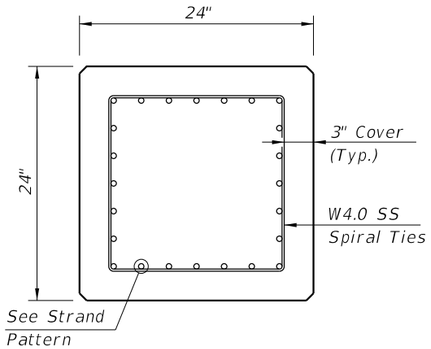
10/31/2016 11:50:45 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	24" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
11/01/16						22624	1 of 2



ELEVATION

** See Note No. 4 on Index No. 22601

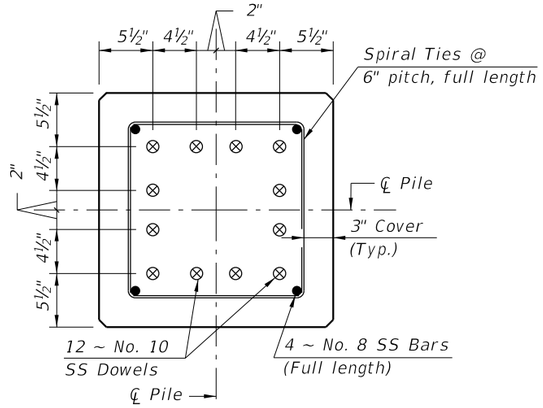


SECTION A-A

STRAND PATTERN

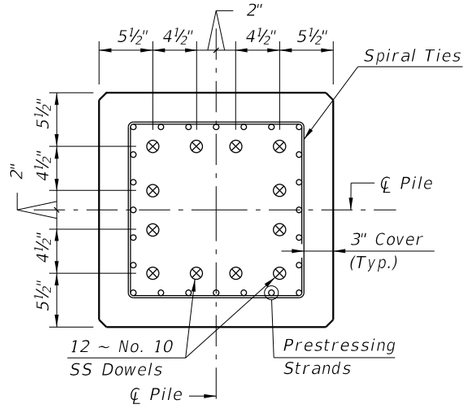
28 ~ ½" Ø, HSSS at 26 kips

NOTES:
1. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – 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.



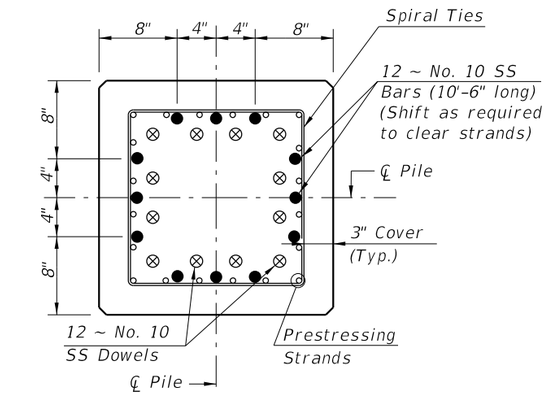
SECTION D-D

(See Nondrivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E

(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F

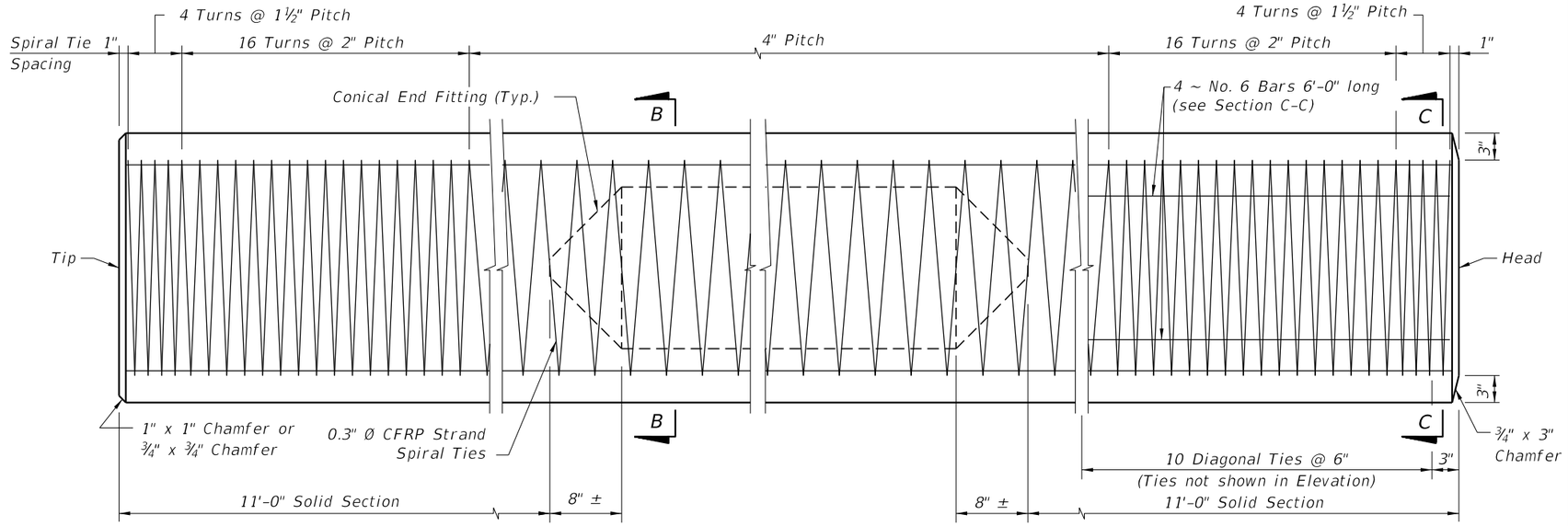
(See Drivable Preplanned Pile Splice Detail)

SS PILE SPLICE REINFORCEMENT DETAILS

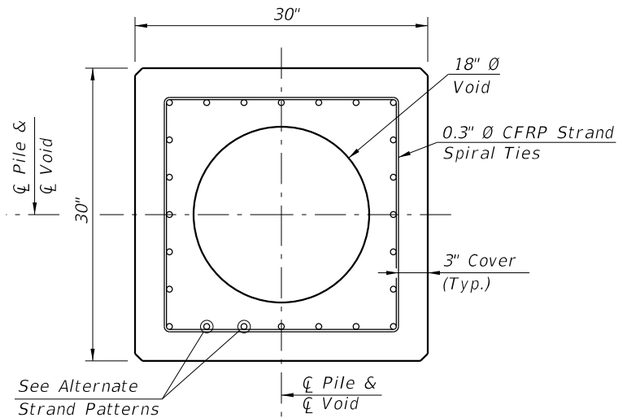
SS PRESTRESSED PILE DETAILS

10/26/2016 9:22:44 AM

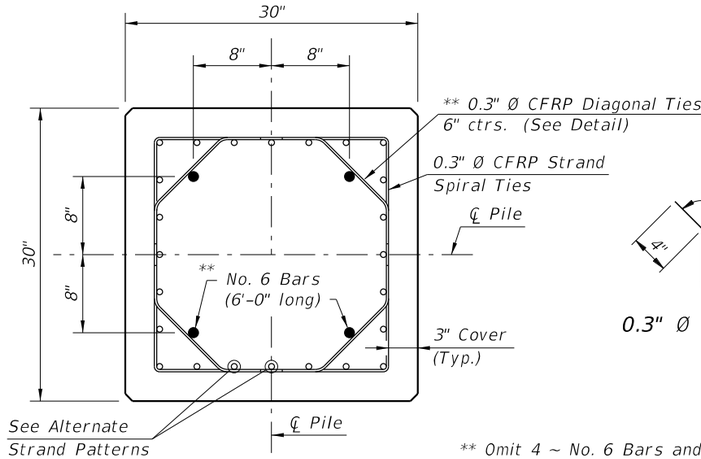
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	24" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
01/01/16						22624	2 of 2



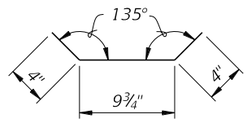
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)



SECTION C-C
(See Pile Splice Reinforcement Details)



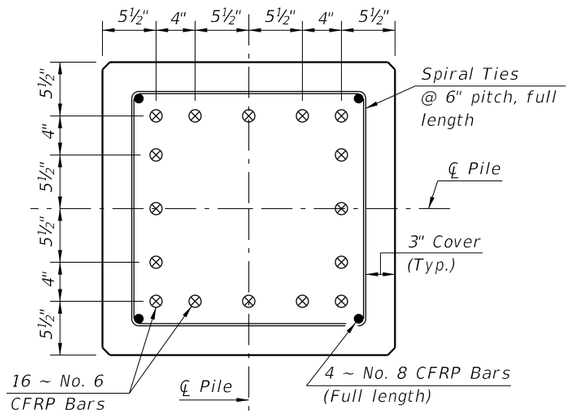
0.3" Ø DIAGONAL TIE DETAIL

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

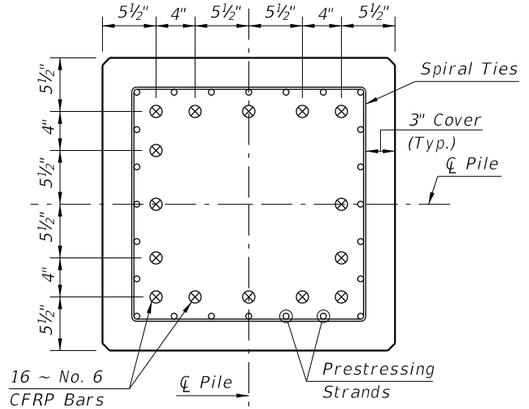
ALTERNATE STRAND PATTERNS

20 ~ 0.6" Ø, CFRP 7-Strand at 38 kips
20 ~ ½" Ø, CFRP Single-Strand at 37 kips

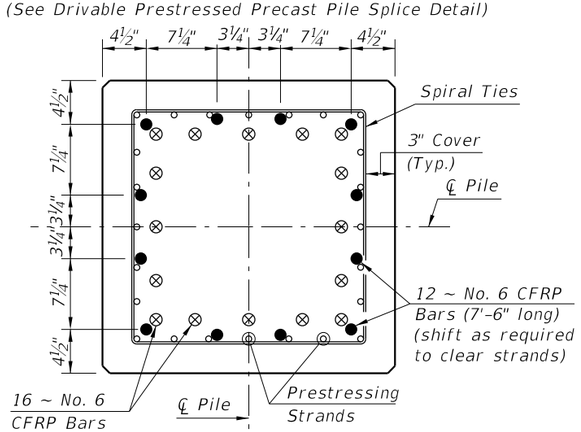
NOTES:
1. Any of the given Strand Patterns may be utilized. The strands shall be located as follows: Place one strand at each corner and place the remaining strands equally spaced between the corner strands. The total strand pattern shall be concentric with the nominal concrete section of the pile.
2. 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 ~ No. 6 Bars, may be approved by the Engineer.
3. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.



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



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



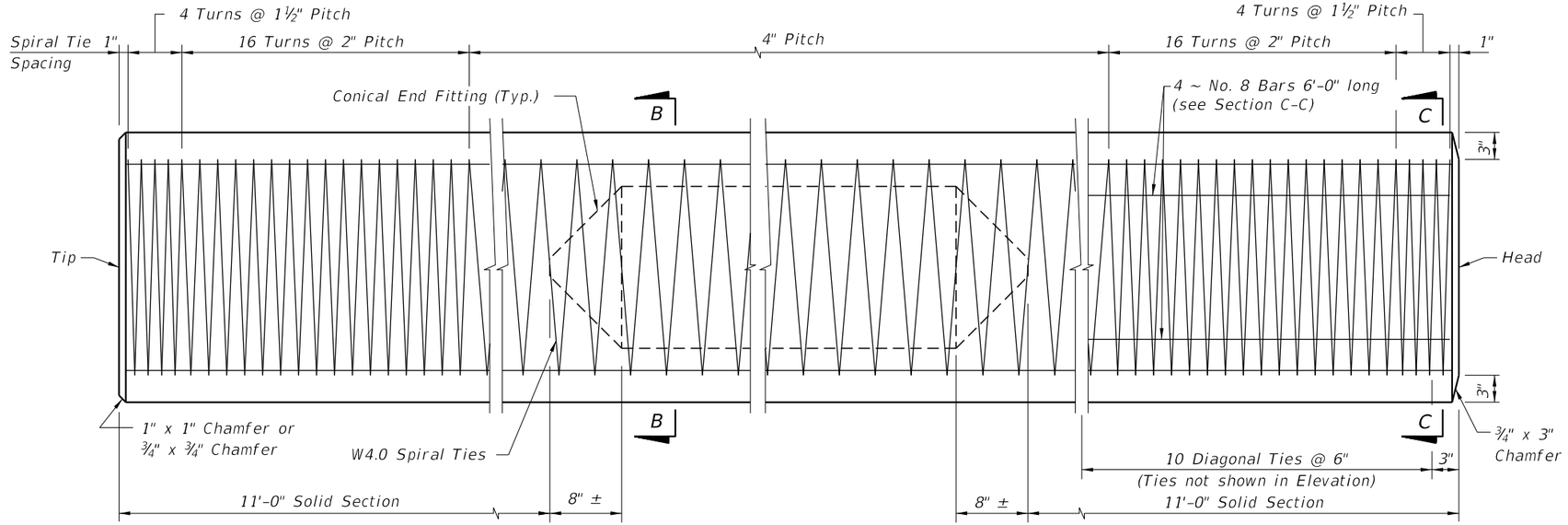
SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)

CFRP PILE SPLICE DETAILS

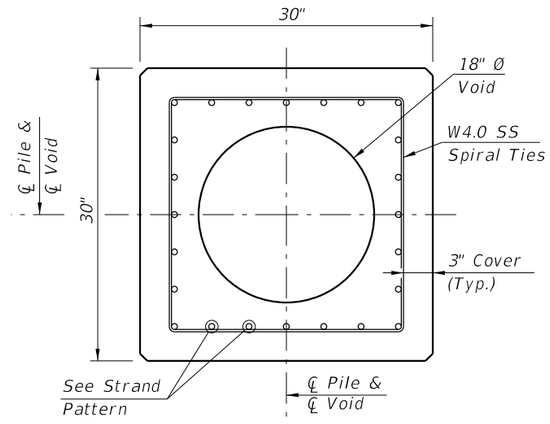
CFRP PRESTRESSED PILE DETAILS

10/26/2016 9:23:18 AM

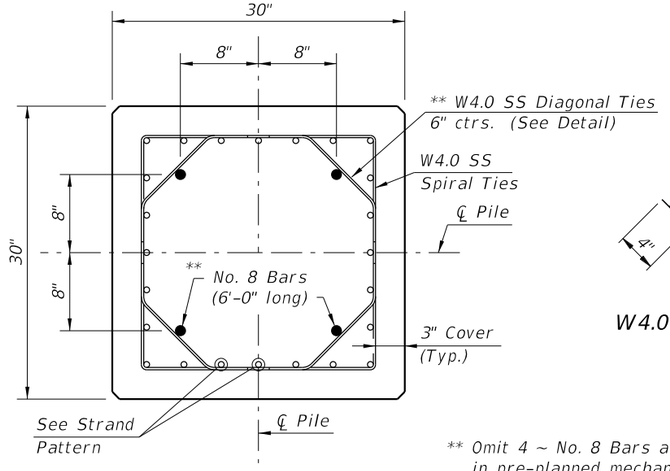
LAST REVISION	REVISION	DESCRIPTION:			
01/01/16			FY 2017-18 DESIGN STANDARDS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO. 22630 / SHEET NO. 1 of 2



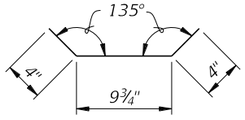
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)



SECTION C-C
(See Pile Splice Reinforcement Details)



W4.0 DIAGONAL TIE DETAIL

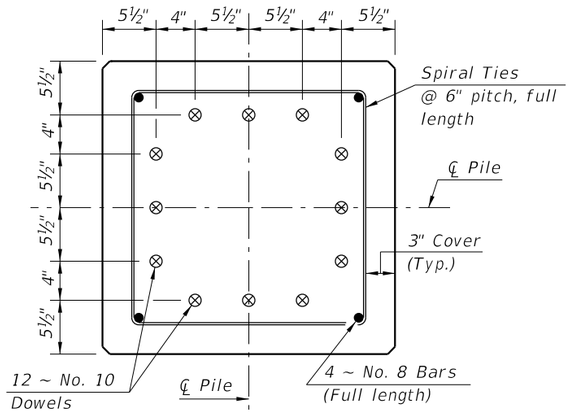
** Omit 4 ~ No. 8 Bars and Diagonal Ties in pre-planned mechanical splice.

STRAND PATTERN

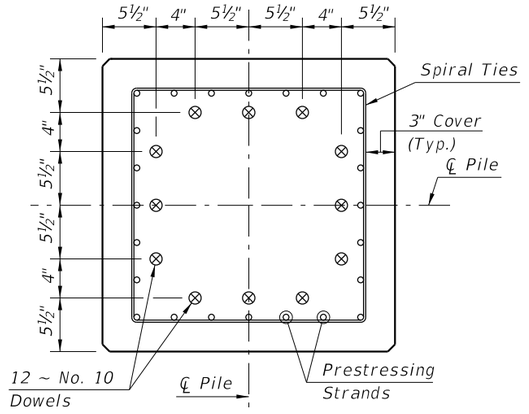
32 ~ ½" Ø, HSSS at 26 kips

NOTES:

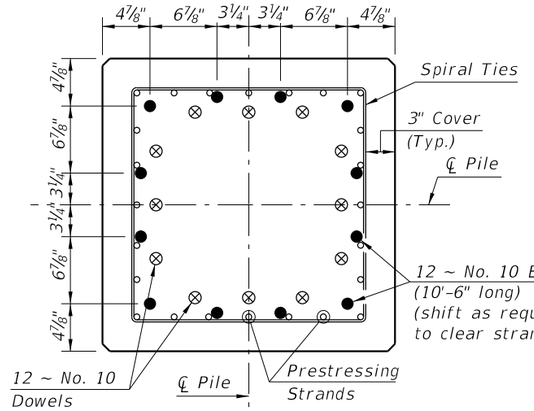
1. Any of the given Strand Patterns may be utilized. The strands shall be located as follows: Place one strand at each corner and place the remaining strands equally spaced between the corner strands. The total strand pattern shall be concentric with the nominal concrete section of the pile.
2. CONTRACTOR 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 ~ No. 8 Bars, may be approved by the Engineer.
3. Work this Index with Index No. 22600 – Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index No. 22601 – Square CFRP & SS Prestressed Concrete Pile Splices.



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



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



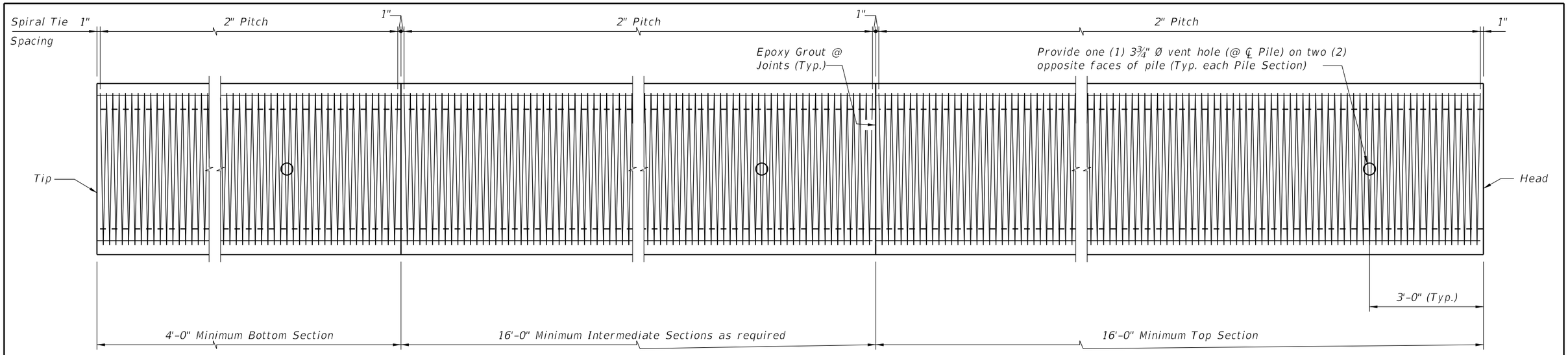
SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)

SS PILE SPLICE DETAILS

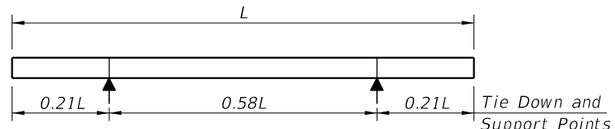
SS PRESTRESSED PILE DETAILS

10/26/2016 9:23:21 AM

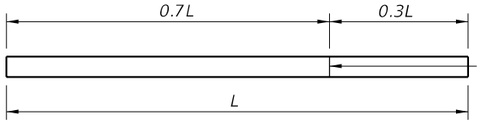
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX NO.	SHEET NO.
01/01/16					22630	2 of 2



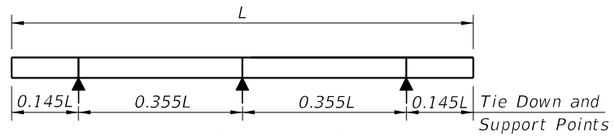
ELEVATION



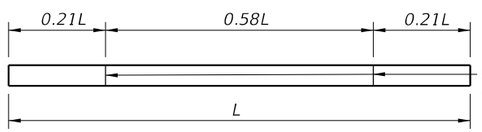
2-POINT SUPPORT



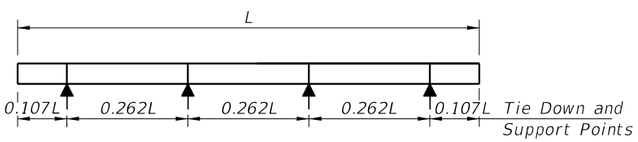
1-POINT PICK-UP



3-POINT SUPPORT



2-POINT PICK-UP



4-POINT SUPPORT

PILE PICK-UP DETAILS

STORAGE AND TRANSPORTATION SUPPORT DETAILS

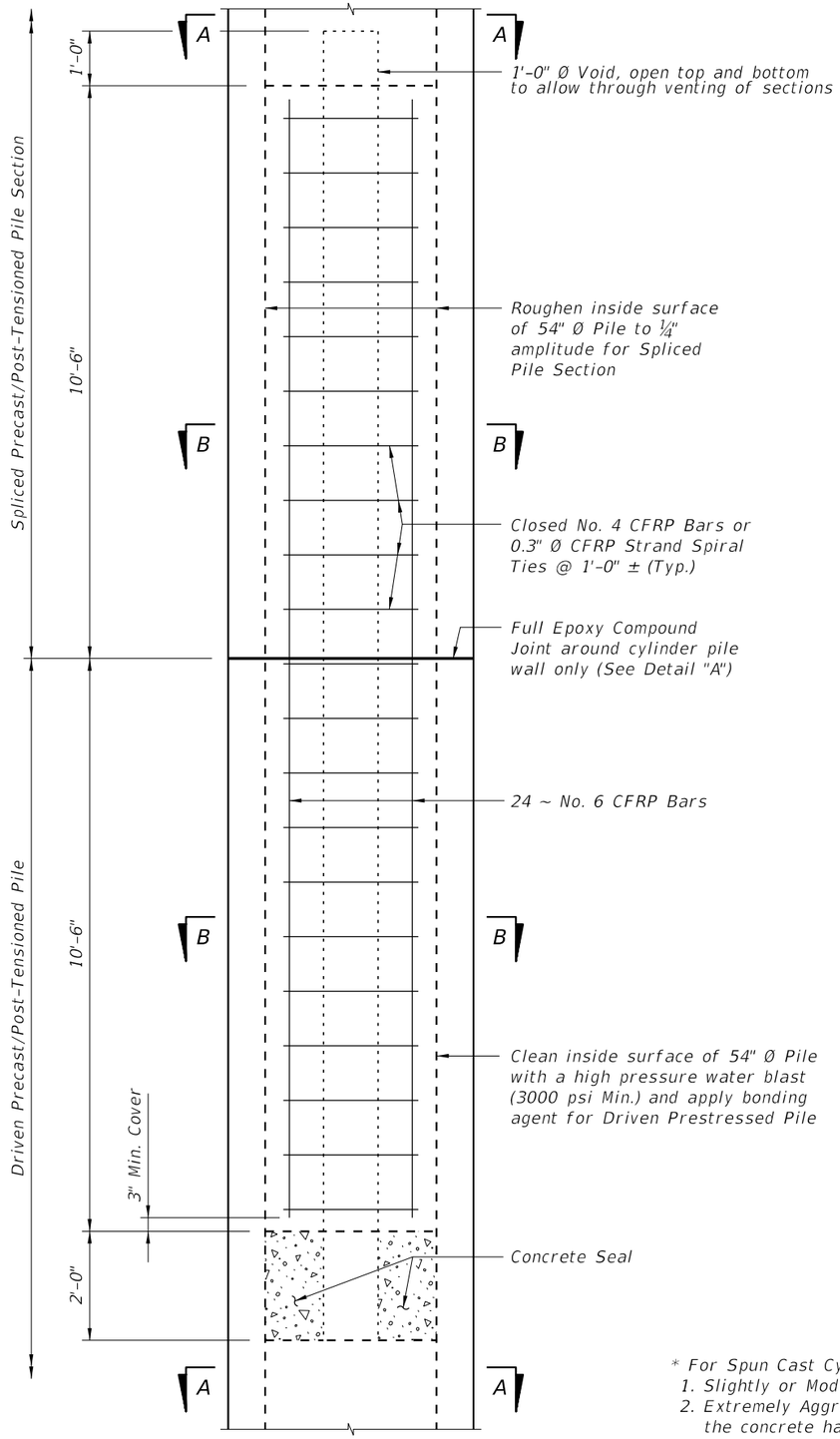
TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS		
Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
119	2, 3, or 4 point	1 Point
170	2, 3, or 4 point	2 Point

NOTES

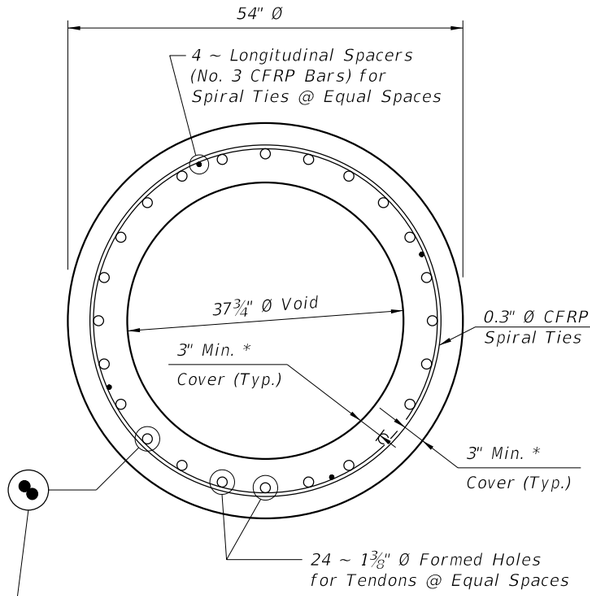
1. Work this Index with the Pile Data Table in the Structures Plans.
2. Concrete:
   - A. Piles: Class V (Special)
   - B. Splice: Class IV
   - C. Silica Fume: See "GENERAL NOTES" in Structures Plans for locations where the use of silica fume, metakaolin or ultra-fine flyash is required for options using stainless steel strand and reinforcing.
3. Concrete Strength at time of prestress transfer:
   - A. Piles: 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.

10/26/2016 9:23:39 AM

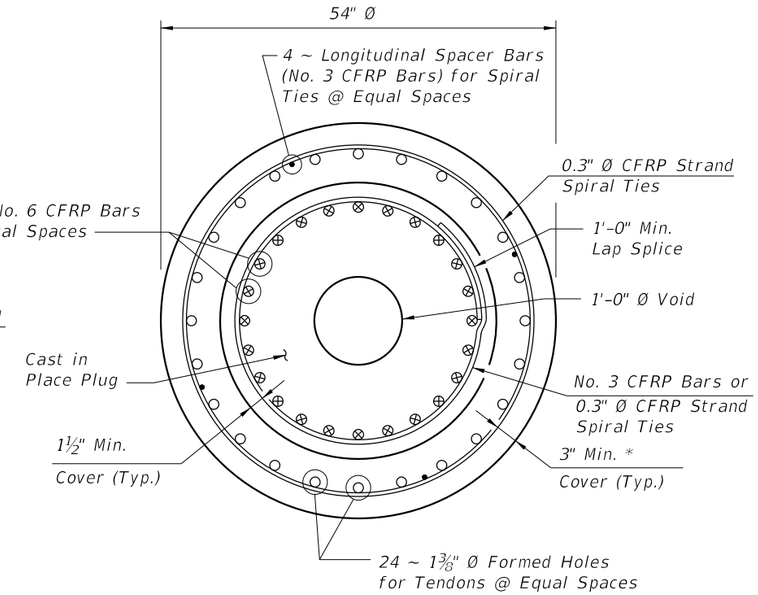
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
11/01/16			FDOT FY 2017-18 DESIGN STANDARDS	54" PRECAST/POST-TENSIONED CFRP & SS CONCRETE CYLINDER PILE	22654	1 of 3



DRIVABLE UNFORESEEN FIELD SPLICE DETAIL
(Cast-In-Place Plug)



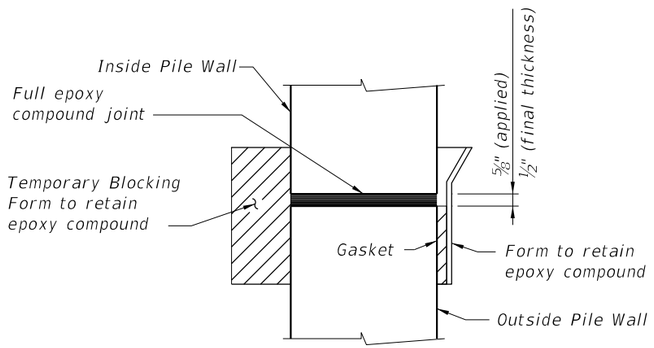
SECTION A-A



SECTION B-B

ALTERNATE STRAND PATTERNS

48 ~ 0.5" Ø, Single-Strand, at 28 kips
48 ~ 0.6" Ø, 7-Strand, at 29 kips



DETAIL "A"

* For Spun Cast Cylinder Piles, the following requirements for concrete cover apply:
1. Slightly or Moderately Aggressive Environments: The concrete cover may be reduced to 2 inches.
2. Extremely Aggressive Environments: The concrete cover may be reduced to 2 inches as long as the concrete has a documented chloride ion penetration apparent diffusion coefficient with a mean value of 0.005 in² per year or less; otherwise, a 3-inch concrete cover is required.

CFRP POST-TENSIONED PILE DETAILS

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FY 2017-18 DESIGN STANDARDS	54" PRECAST/POST-TENSIONED CFRP & SS CONCRETE CYLINDER PILE	22654	2 of 3

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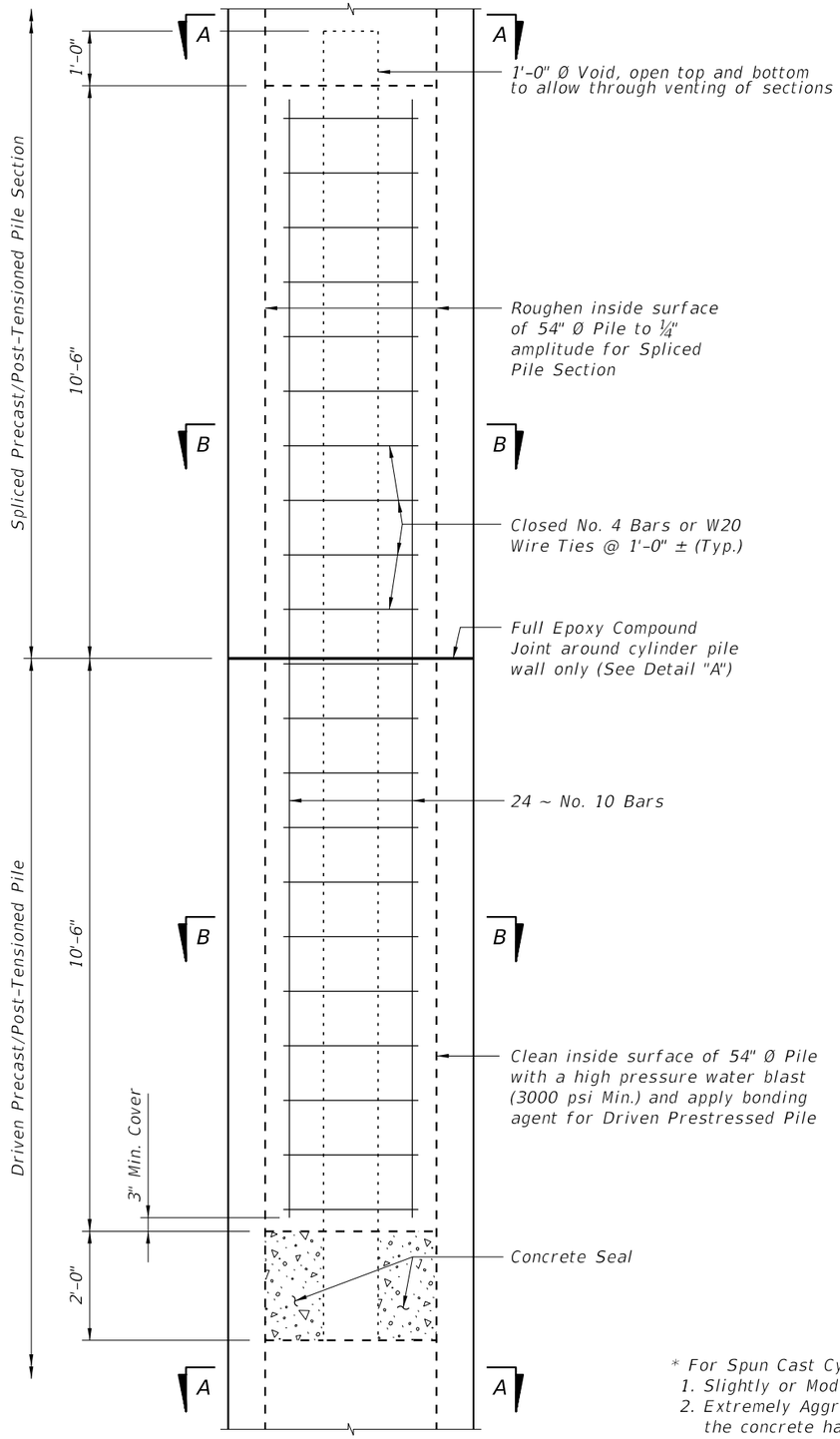
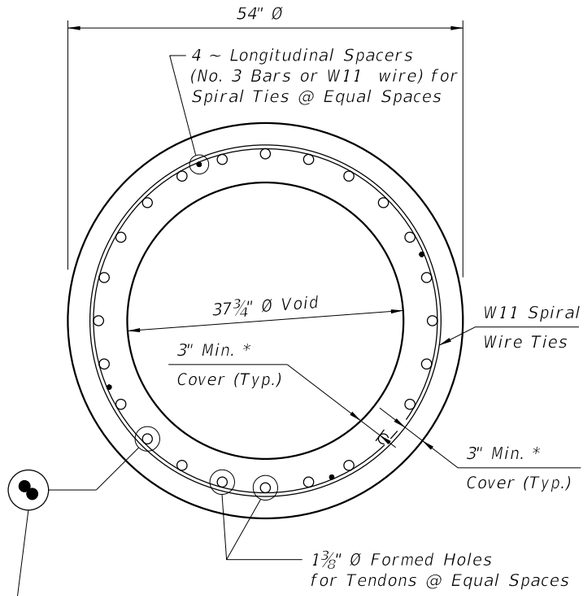
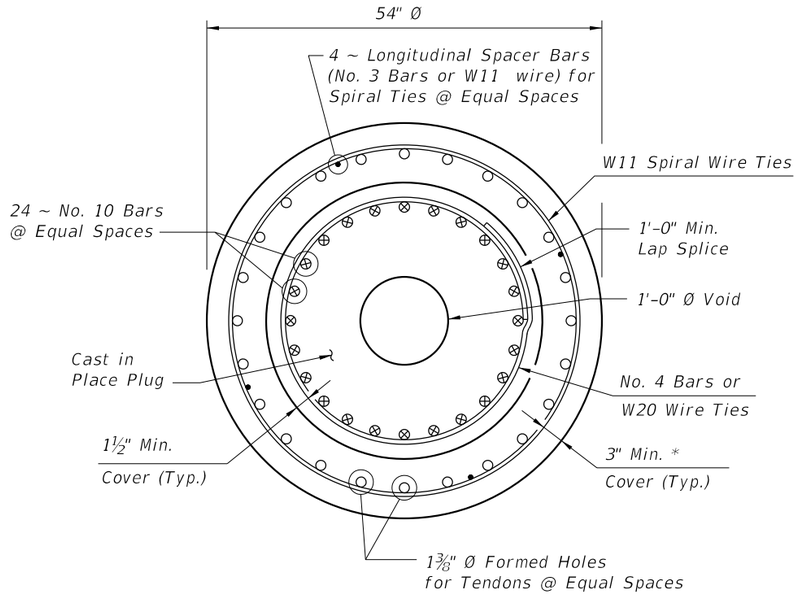


DRIVABLE UNFORESEEN FIELD SPLICE DETAIL
(Cast-In-Place Plug)



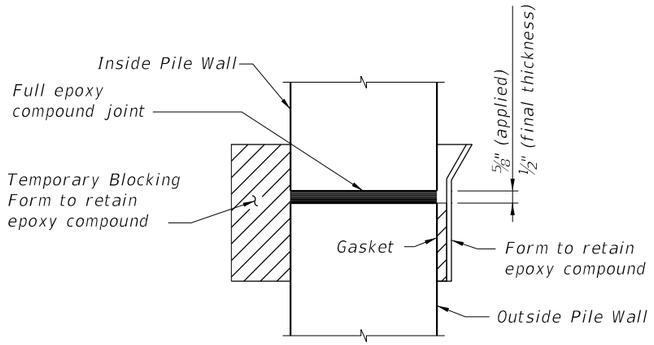
SECTION A-A



SECTION B-B

ALTERNATE STRAND PATTERNS

72 ~ ½" Ø, HSSS Strands, at 21 kips (24~3 strand tendons)
58 ~ ½" Ø, HSSS Strands, at 24 kips (29~2 strand tendons)
48 ~ 0.6" Ø, HSSS Strands, at 32 kips (24~2 strand tendons)



DETAIL "A"

* For Spun Cast Cylinder Piles, the following requirements for concrete cover apply:
1. Slightly or Moderately Aggressive Environments: The concrete cover may be reduced to 2 inches.
2. Extremely Aggressive Environments: The concrete cover may be reduced to 2 inches as long as the concrete has a documented chloride ion penetration apparent diffusion coefficient with a mean value of 0.005 in² per year or less; otherwise, a 3-inch concrete cover is required.

SS POST-TENSIONED PILE DETAILS

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FDOT FY 2017-18 DESIGN STANDARDS	54" PRECAST/POST-TENSIONED CFRP & SS CONCRETE CYLINDER PILE	22654	3 of 3

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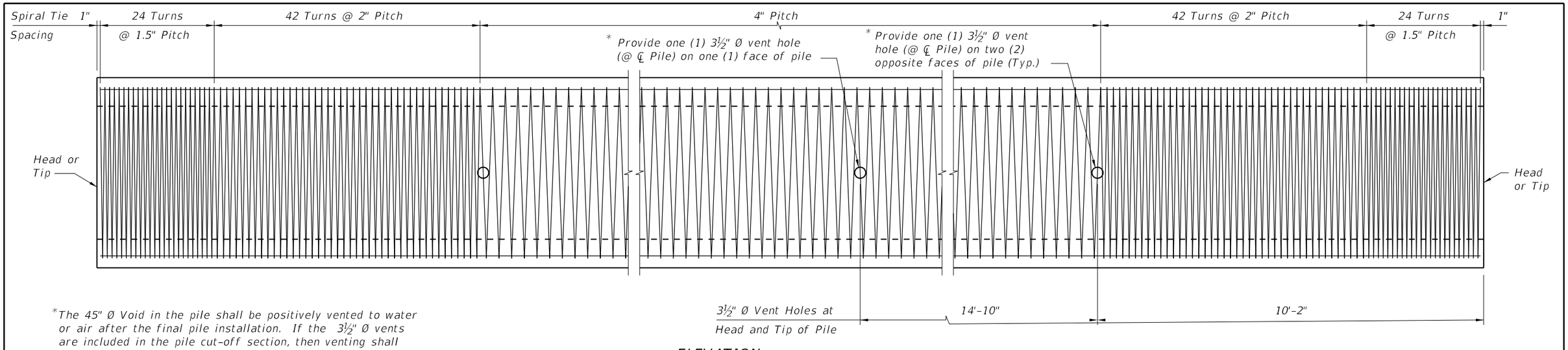
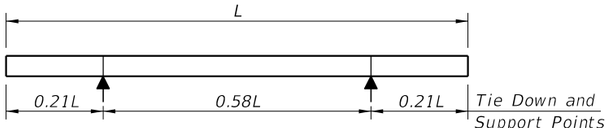
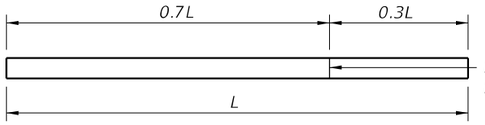


*The 45" Ø Void in the pile shall be positively vented to water or air after the final pile installation. If the 3½" Ø vents are included in the pile cut-off section, then venting shall be provided by the use of a 1" Ø PVC conduit through the substructure cap or column.

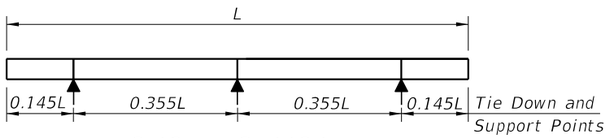
ELEVATION



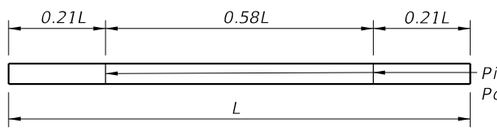
2-POINT SUPPORT



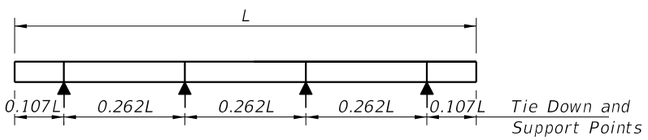
1-POINT PICK-UP



3-POINT SUPPORT



2-POINT PICK-UP



4-POINT SUPPORT

PILE PICK-UP DETAILS

STORAGE AND TRANSPORTATION SUPPORT DETAILS

TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS		
Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
122	2, 3, or 4 point	1 Point
174	2, 3, or 4 point	2 Point

NOTES

1. Work this Index with the Pile Data Table in the Structures Plans.
2. Concrete:
   - A. Piles: Class V (Special)
   - B. Splice Collar: Class IV
   - C. Silica Fume: See "GENERAL NOTES" in the Structures Plans for locations where the use of silica fume, metakaolin or ultra-fine flyash is required.
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 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 Epoxy 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. Splices: Resume pile driving after the 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.

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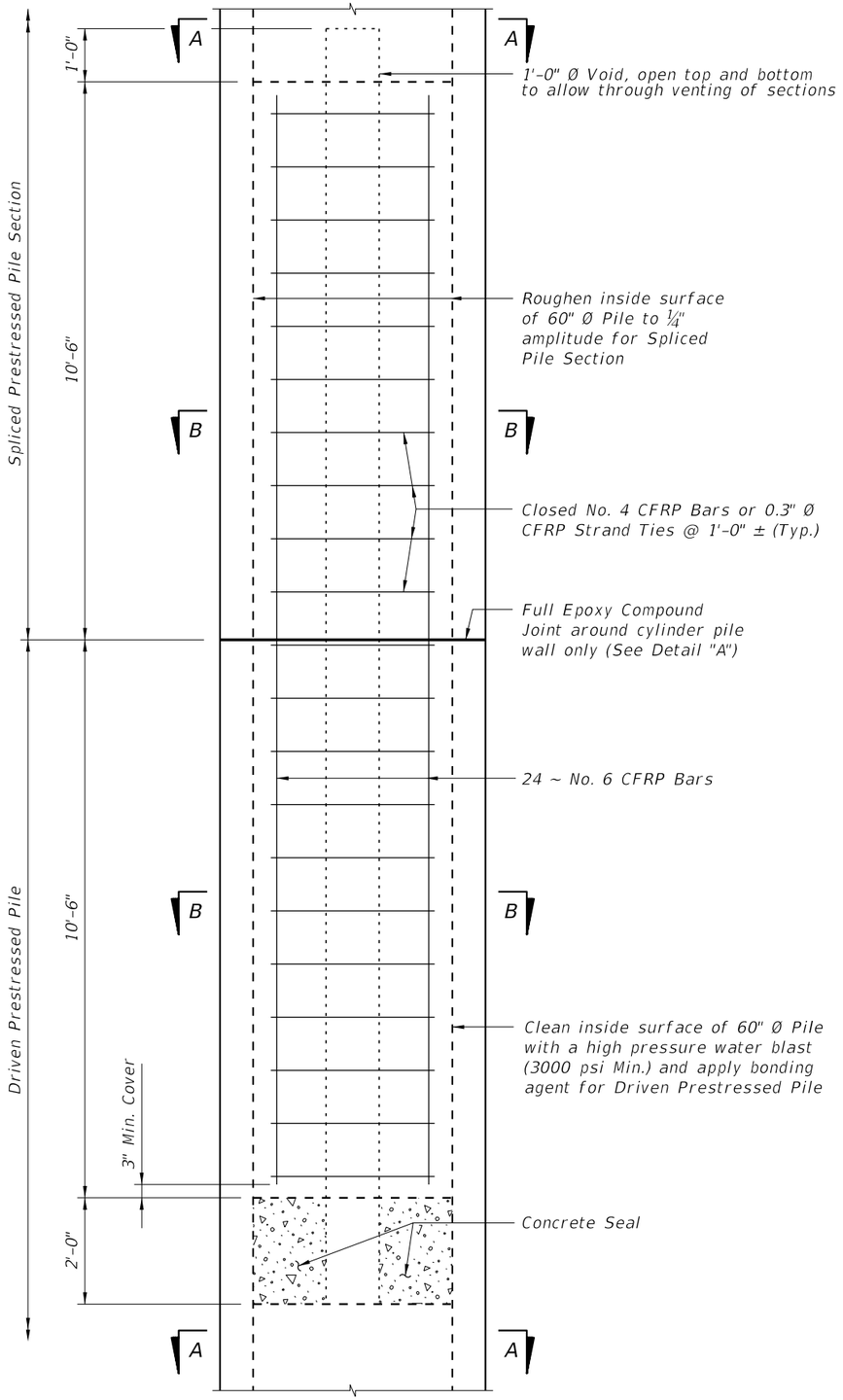
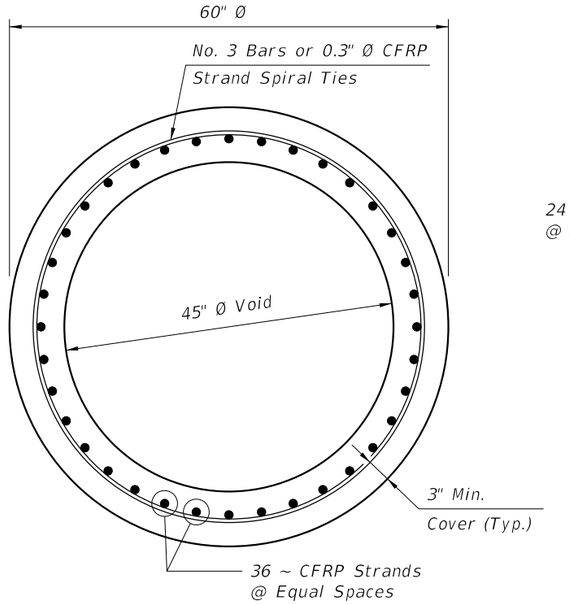
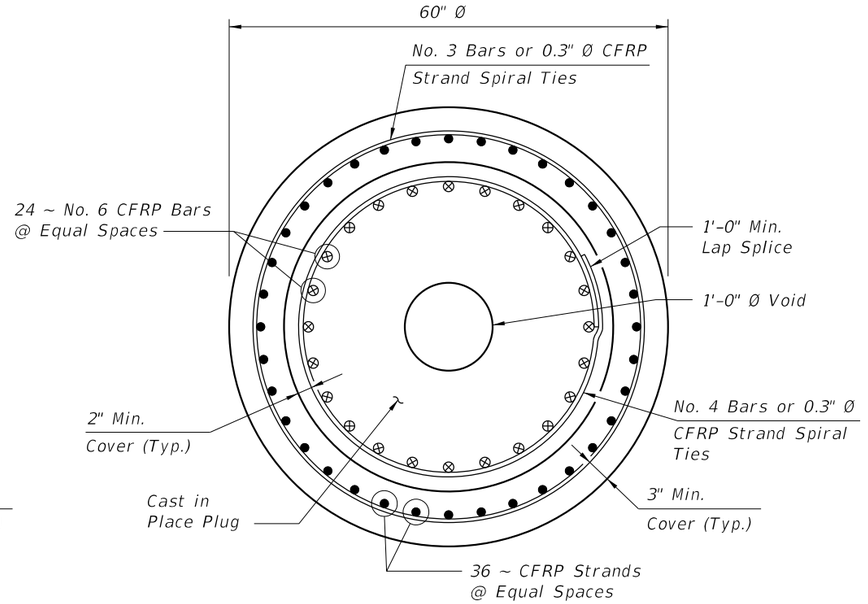
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	60" PRESTRESSED CFRP & SS CONCRETE CYLINDER PILE	INDEX NO.	SHEET NO.
11/01/16					22660	1 of 3



DRIVABLE UNFORESEEN FIELD SPLICE DETAIL
(Cast in Place Plug)



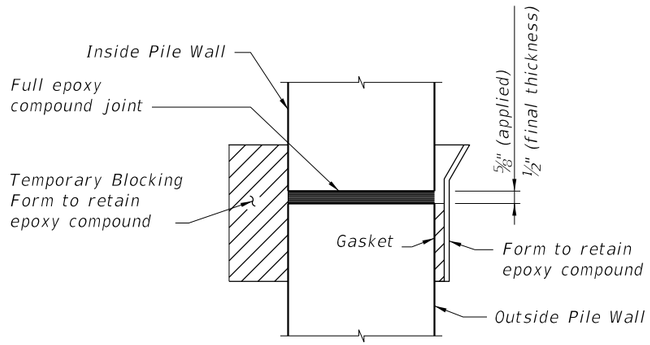
SECTION A-A



SECTION B-B

ALTERNATE STRAND PATTERNS

0.5" Ø, CFRP Single-Strand, at 39 kips
0.6" Ø, CFRP 7-Strand, at 40 kips



DETAIL "A"

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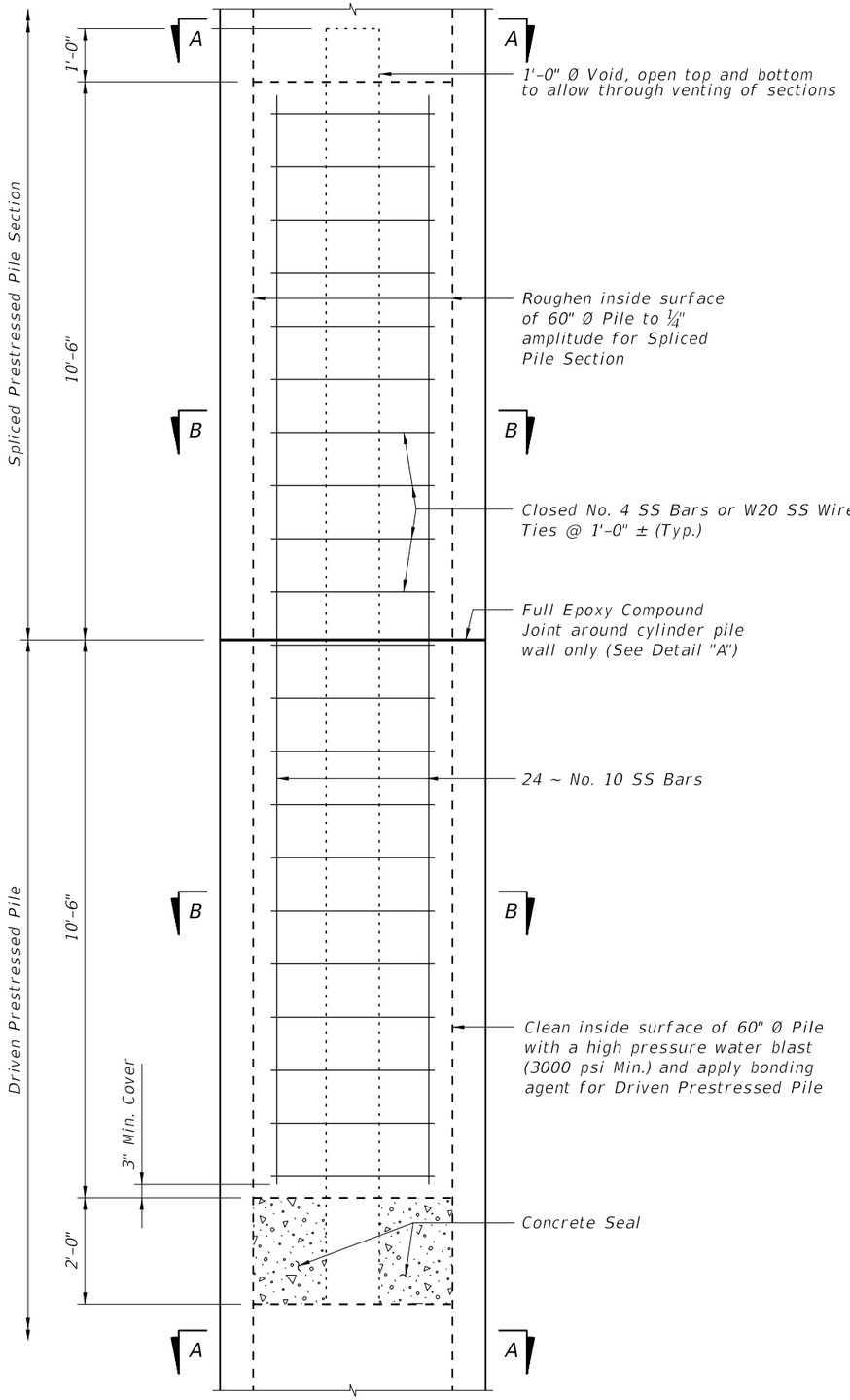
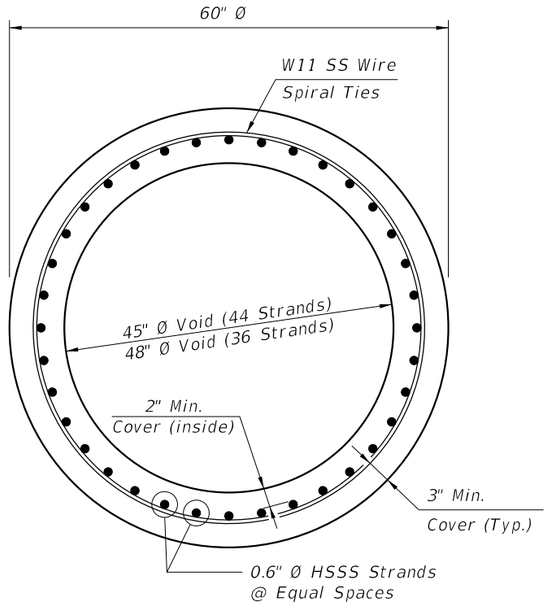
CFRP POST-TENSIONED PILE DETAILS

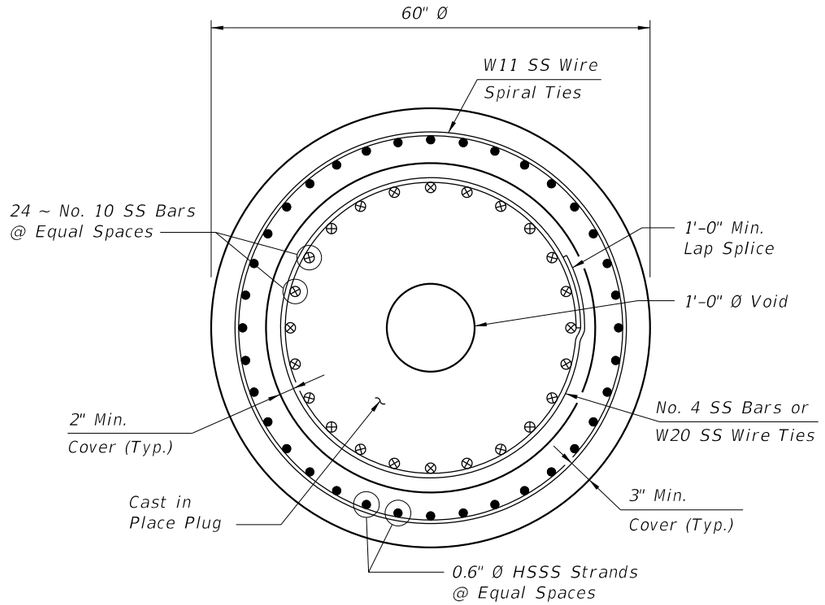
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	60" PRESTRESSED CFRP & SS CONCRETE CYLINDER PILE	INDEX NO.	SHEET NO.
01/01/16					22660	2 of 3



DRIVABLE UNFORESEEN FIELD SPLICE DETAIL
(Cast in Place Plug)



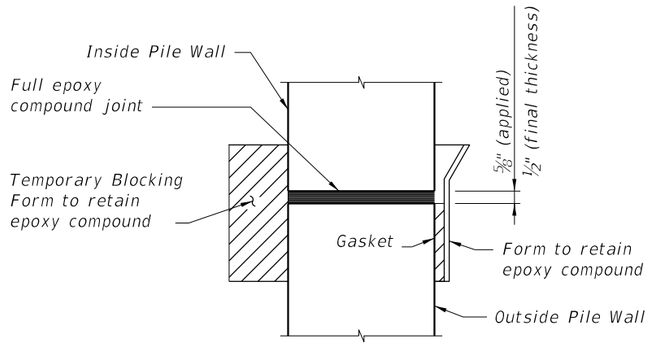
SECTION A-A



SECTION B-B

ALTERNATE STRAND PATTERNS

44 ~ 0.6" Ø, HSSS Strand, at 36 kips
36 ~ 0.6" Ø, HSSS Strand, at 36 kips



DETAIL "A"

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SS POST-TENSIONED PILE DETAILS

LAST REVISION	REVISION	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	60" PRESTRESSED CFRP & SS CONCRETE CYLINDER PILE	INDEX NO.	SHEET NO.
01/01/16					22660	3 of 3