**PRESTRESSED CONCRETE PILE NOTES:**

**DESIGN SPECIFICATIONS:**

**SPIRAL TIES:**
Each wrap of spirals shall be tied to at least two corner strands. One turn required for spiral splices.

**CONCRETE CLASS:**
Concrete for all CFRP & SS piles shall be Class V (Special).
See "GENERAL NOTES" in Structures Plans for any specific locations where the use of Silica Fume is required for stainless steel reinforcing.

**CONCRETE STRENGTH:**
The pile cylinder strength shall be 4,000 psi minimum at time of transfer of the Prestressing Force.

**SPLICE BONDING MATERIAL:**
The material to fill dowel holes and form the joint between pile sections shall be a Type B Epoxy Compound in accordance with Specification Section 926 and shall be contained on the Approved Products List (APL). Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the Manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

**PICK-UP POINTS:**
Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

**REINFORCING BARS:**
Stainless Steel: All reinforcing steel shall meet the requirements of Specification Section 931 for Type 304, Grade 75.
Carbon FRP: All reinforcing bars shall be CFRP meeting the requirements of Specification Section 932.

**PRESTRESSING STRAND:**
Stainless Steel: Prestressing steel shall be seven-wire HSSS, UNS S32205 (Type 2205) or UNS S31803 strand, meeting the requirements of Specification Section 933.
Carbon FRP: Prestressing strand shall be CFRP Strand meeting the requirements of Specification Section 933.

**PROTECTION OF EXPOSED STRANDS:**
For all pile ends exposed to the environment and not embedded under final conditions, protect strands in accordance with Specification Section 450.

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**TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS**

<table>
<thead>
<tr>
<th>Maximum Pile Length (Feet)</th>
<th>D = Square Pile Size (inches)</th>
<th>Required Storage and Transportation Detail</th>
<th>Pick-Up Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>14</td>
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<td>140</td>
</tr>
</tbody>
</table>

---

**DESIGN STANDARDS**

**FY 2016-17**

**NOTES AND DETAILS FOR SQUARE CFRP & SS PRESTRESSED CONCRETE PILES**

**INDEX NO.**

**SHEET NO.**

**LAST REVISION:**
01/01/16

**DESCRIPTION:**
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 1/2" 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**

- **REV 2/17/2015 2:15:26 PM**
- **INDEX NO. 22601**

**DESCRIPTION:**
- SQUARE CFRP & SS Prestressed Concrete Pile Splices

**REVISED:**
- 01/01/16

**DESIGN STANDARDS:**
- FY 2016-17

**INDEX NO. 22601 SHEET NO. 1 of 1**
ALTERNATE STRAND PATTERNS

8 - 0.6" Ø, CFRP 7-Strand, at 24 kips
8 - 0.6" Ø, CFRP Single-Strand, at 23.3 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 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.

CFRP PRESTRESSED PILE DETAILS
**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**

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

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

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

ALTERNATE STRAND PATTERNS
8 - 0.6' Ø, CFRP 7-Strand, at 31.5 kips
8 - 0.3' Ø, CFRP Single-Strand, at 30.5 kips

SECTION A-A
3" Cover (Typ.)
0.3" Ø CFRP Strand Spiral Ties

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 D22600 - Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index D22601 - 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
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
ELEVATION

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

ALTERNATE STRAND PATTERNS

12 ~ 0.6" Ø, CFRP 7-Strand, at 34 kips
12 ~ 0.5" Ø, CFRP Single-Strand, at 33 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.

SEE ALTERNATE STRAND PATTERNS

SECTION A-A

SEE ALTERNATE STRAND PATTERNS

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 Splice Detail)

CFRP PRESTRESSED PILE DETAILS

18" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE
SS PRESTRESSED PILE DETAILS

SS PILE SPLICE REINFORCEMENT DETAILS

16" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE

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.

SEE CONSTRUCTION DOCUMENTATION FOR ACCEPTABLE STRAND PATTERN

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

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

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

SECTION A-A

STRAND PATTERN
16 - ½" Ø, HSSS, at 26 kips

ELEVATION

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

INDEX NO. 22618

REV 2 0 1 6-1 7

DESIGN STANDARDS

18" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE

INDEX No.
22618

SHEET No.
2 of 2
ALTERNATE STRAND PATTERNS

20 - 0.6" Ø, CFRP 7-Strand, at 34 kips
20 - 1/2" Ø, CFRP Single-Strand, at 33 kips

NOTES:
1. Work this Index with Index D22600 - Notes and Details for Square CFRP & SS Prestressed Concrete Piles and Index D22601 - Square CFRP & SS Prestressed Concrete Pile Splices.
2. Any of the given Strand Patterns may be utilized.
   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.
** See Note No. 4 on Index No. 22601

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.
### ALTERNATE STRAND PATTERNS

20 ~ 0.6" Ø, CFRP 7-Strand at 38 kips
20 ~ 0.5" Ø, CFRP Single-Strand at 37 kips

### SECTION B-B
(See Pile Splice Reinforcement Details)

### SECTION C-C
(See Pile Splice Reinforcement Details)

**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 local 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.

---

**CFRP PRESTRESSED PILE DETAILS**

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

**SECTION E-E**
(See Pile Splice Reinforcement Details)

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

2. 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.
**Design Specifications:**

**Spiral Ties:**
One full wrap of spirals is required at both the head and tip of pile. One half turn required for spiral splices.

**Concrete Class:**
Concrete for all piles shall be Class V (Special). Concrete for pile splices shall be Class IV. See "GENERAL NOTES" in Structures Plans for any specific locations where the use of Silica Fume is required.

**Concrete Strength:**
The cylinder strength shall be 6,000 psi minimum at time of transfer of the Prestressing Force.

**Splice Bonding Material:**
The material to form the joint between pile sections shall be a Type B Epoxy Compound in accordance with Section 926 of the Specifications. The bonding agent used on internal pile surfaces shall be a Type A Epoxy Compound in accordance with Section 926 of the Specifications. Epoxy Compounds used shall be contained on the Approved Products List (APL). Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

**Pick-Up Points:**
Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

**Reinforcing Steel:**
Stainless Steel: All reinforcing steel shall meet the requirements of Specification Section 931 for Type 304, Grade 75.
Carbon FRP: All reinforcing bars shall be CFRP meeting the requirements of Specification Section 932.

**Prestressing Steel:**
Stainless Steel: Prestressing steel shall be seven-wire strand HSSS, UNS S32205 (Type 2205) or UNS S31803, meeting the requirements of Specification Section 933.
Carbon FRP: Prestressing strand shall be CFRP Strand meeting the requirements of Specification Section 933.

**Pile Driving After Splicing:**
Pile splices shall reach a minimum strength of 5500 psi before driving is resumed.

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**Table of Maximum Pile Pick-Up and Support Lengths**

<table>
<thead>
<tr>
<th>Maximum Pile Length (Feet)</th>
<th>Required Storage and Transportation Detail</th>
<th>Pick-Up Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>2, 3, or 4 point</td>
<td>1 Point</td>
</tr>
<tr>
<td>170</td>
<td>2, 3, or 4 point</td>
<td>2 Point</td>
</tr>
</tbody>
</table>
Roughen inside surface of 54" Ø Pile to 1/2" amplitude for Spliced Pile Section

Clean inside surface of 54" Ø Pile with a high pressure water blast (3000 psi Min.) and apply bonding agent for Driven Prestressed Pile

Concrete Seal

Full Epoxy Compound Joint around cylinder pile wall only (See Detail "A")

54" Ø Void, open top and bottom to allow through venting of sections

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.

ALTERNATE STRAND PATTERNS
48 - 0.5" Ø, Single-Strand, at 28 kips

48 - 0.6" Ø, 7-Strand, at 29 kips

* 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.

54 PRECAST/POST-TENSIONED CFRP & SS CONCRETE CYLINDER PILE

CFRP POST-TENSIONED PILE DETAILS

INDEX
NO. 22654

SHEET
NO. 2 of 3
**54" PRECAST/POST-TENSIONED CFRP & SS CONCRETE CYLINDER PILE**

**REVISION NO.**

**INDEX NO.**

**DESCRIPTION:**

Outside Pile Wall
- Form to retain epoxy compound
- Inside Pile Wall
- Temporary Blocking Form to retain epoxy compound
- Gasket
- Cover (Typ.)
- W20 Wire Ties
- No. 4 Bars or 1'-0" Min. Lap Splice
- W11 Spiral Wire Ties
- 4 ~ Longitudinal Spacer Bars (No. 3 Bars or W11 wire) for Spiral Ties @ Equal Spaces

Inside Pile Wall
- Cover (Typ.)
- W11 Spiral Wire Ties
- Cast in Place Plug
- No. 4 Bars or W20 Wire Ties
- 24 ~ No. 10 Bars @ Equal Spaces
- 1'-0" Ø Void

**Gasket**

**Cover (Typ.)**

**Concrete Seal**

**Drivable Unforeseen Field Splice Detail** (Cast-In-Place Plug)

**Alternate Strand Patterns**

- 72 ~ 1/2" Ø, HSSS Strands, at 21 kips (24~3 strand tendons)
- 58 ~ 1/2" Ø, HSSS Strands, at 24 kips (29~2 strand tendons)
- 48 ~ 0.6" Ø, HSSS Strands, at 32 kips (24~2 strand tendons)

**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.

**SECTION A-A**

**SECTION B-B**

**DETAIL "A"**
**Design Specifications:**

**Concrete Class:**
Concrete for all piles shall be Class V (Special). Concrete for pile splices shall be Class IV. See "General Notes" in Structures Plans for any specific locations where the use of Silica Fume is required for stainless steel reinforcing.

**Concrete Strength:**
The cylinder strength shall be 4,000 psi minimum at time of transfer of the Prestressing Force.

**Splice Bonding Material:**
The material to form the joint between pile sections shall be a Type B Epoxy Compound in accordance with Specification Section 926. The bonding agent used on internal pile surfaces shall be a Type A Epoxy Compound in accordance with Specification Section 926. Epoxy Compounds used shall be contained on the Approved Products List (APL). Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the Manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

**Pick-Up Points:**
Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

**Reinforcing Bars:**
- Stainless Steel: All reinforcing steel shall meet the requirements of Specification Section 931 for Type 304, Grade 75. Carbon FRP: All reinforcing bars shall be CFRP meeting the requirements of Specification Section 932.
- Prestressing Strand: Stainless Steel: Prestressing steel shall be seven-wire strand HSSS, UNS S32205 (Type 2205) or UNS S31803 strand meeting the requirements of Specification Section 933. Carbon FRP: Prestressing strand shall be CFRP Strand meeting the requirements of Specification Section 933.

**Pile Driving After Splicing:**
Pile splices shall reach a minimum strength of 5500 psi before driving is resumed.

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**Table of Maximum Pile Pick-Up and Support Lengths**

<table>
<thead>
<tr>
<th>Maximum Pile Length (Feet)</th>
<th>Required Storage and Transportation Detail</th>
<th>Pick-Up Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>122</td>
<td>2, 3, or 4 point</td>
<td>1 Point</td>
</tr>
<tr>
<td>174</td>
<td>2, 3, or 4 point</td>
<td>2 Point</td>
</tr>
</tbody>
</table>

**Elevation**

*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.*

**Splice Ties:**
One full wrap of spirals is required at both the head and tip of pile. One half turn required for spiral splices.

**Concrete Class:**
Concrete for all piles shall be Class V (Special). Concrete for pile splices shall be Class IV. See "GENERAL NOTES" in Structures Plans for any specific locations where the use of Silica Fume is required for stainless steel reinforcing.

**Concrete Strength:**
The cylinder strength shall be 4,000 psi minimum at time of transfer of the Prestressing Force.

**Splice Bonding Material:**
The material to form the joint between pile sections shall be a Type B Epoxy Compound in accordance with Specification Section 926. The bonding agent used on internal pile surfaces shall be a Type A Epoxy Compound in accordance with Specification Section 926. Epoxy Compounds used shall be contained on the Approved Products List (APL). Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the Manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

**Pick-Up Points:**
Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

**Reinforcing Bars:**
- Stainless Steel: All reinforcing steel shall meet the requirements of Specification Section 931 for Type 304, Grade 75. Carbon FRP: All reinforcing bars shall be CFRP meeting the requirements of Specification Section 932.
- Prestressing Strand: Stainless Steel: Prestressing steel shall be seven-wire strand HSSS, UNS S32205 (Type 2205) or UNS S31803 strand meeting the requirements of Specification Section 933. Carbon FRP: Prestressing strand shall be CFRP Strand meeting the requirements of Specification Section 933.

**Pile Driving After Splicing:**
Pile splices shall reach a minimum strength of 5500 psi before driving is resumed.
1'-0" Ø Void, open top and bottom to allow through venting of sections

Roughen inside surface of 60" Ø Pile to 1/8" amplitude for Spliced Pile Section

Closed No. 4 CFRP Bars or 0.3" Ø CFRP Strand Ties @ 1'-0" ± (Typ.)

Full Epoxy Compound Joint around cylinder pile wall only (See Detail "A")

24 - No. 6 CFRP Bars

Clean inside surface of 60" Ø Pile with a high pressure water blast (3000 psi Min.) and apply bonding agent for Driven Prestressed Pile

Concrete Seal

FULL EPOXY COMPOUND
Joint around cylinder pile wall only (See Detail "A")

ALTERNATE STRAND PATTERNS
0.3" Ø, CFRP Single-Strand, at 39 kips
0.6" Ø, CFRP 7-Strand, at 40 kips

24 ~ No. 6 CFRP Bars

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

60" Ø, No. 3 Bars or 0.3" Ø CFRP Strand Spiral Ties

SECTION A-A

60" Ø, No. 4 Bars or 0.3" Ø CFRP Strand Spiral Ties

SECTION B-B

DETAIL "A"

CFRP POST-TENSIONED PILE DETAILS

60° PRESTRESSED CFRP & SS CONCRETE CYLINDER PILE

INDEX NO. 22660

SHEET NO. 2 of 3
**.Repository Unforeseen Field Splice Detail**

- **Concrete Seal**: 2'-0" x 3" Min. Cover.
- **Driven Prestressed Pile**: 10'-6".
- **Spliced Pile Section**: 10'-6".
- **Cast in Place Plug**: 1'-0" Ø Void, open top and bottom to allow through venting of sections.
- **Inside Surface of 60" Ø Pile**: Clean inside surface with a high pressure water blast (3000 psi Min.) and apply bonding agent for Driven Prestressed Pile.
- **Gasket**: Form to retain epoxy compound.
- **Temporary Blocking**: Form to retain epoxy compound.
- **Inside Pile Wall**: 0.6" Ø HSSS Strands @ Equal Spaces.
- **SS Post-Tensioned Pile Details**:
  - 24 ~ No. 10 SS Bars @ Equal Spaces.
  - 2" Min. Cover (Typ).
- **ALTERNATE STRAND PATTERNS**
  - 44 ~ 0.6" Ø HSSS Strand, at 36 kips.
  - 36 ~ 0.6" Ø HSSS Strand, at 36 kips.

**SECTION A-A**

- **SECTION B-B**

**DETAIL "A"**