

Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	455-031
Date:	5/15/2025	Sheet Number(s):	Sheet 1
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	30" SQUARE PRESTRESSED CONCRETE PILE - HIGH MOMENT CAPACITY

Summary of the changes:

Sheet 1: Changed pitch spacing for spiral ties and removed errant 11' dimension which was a CAD error.

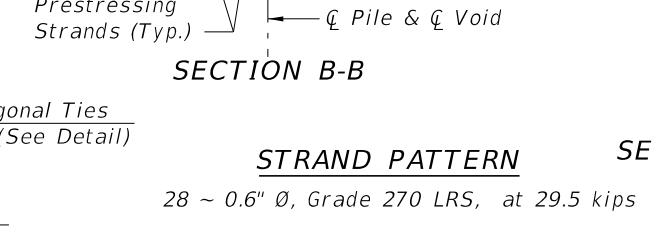
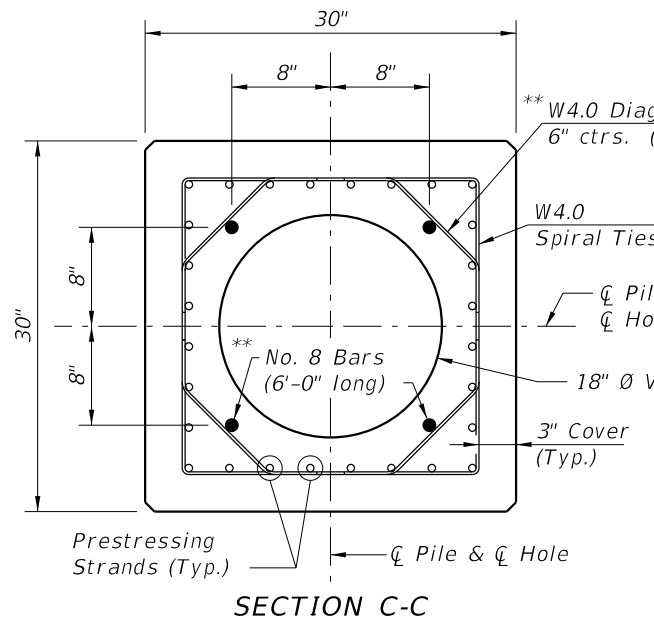
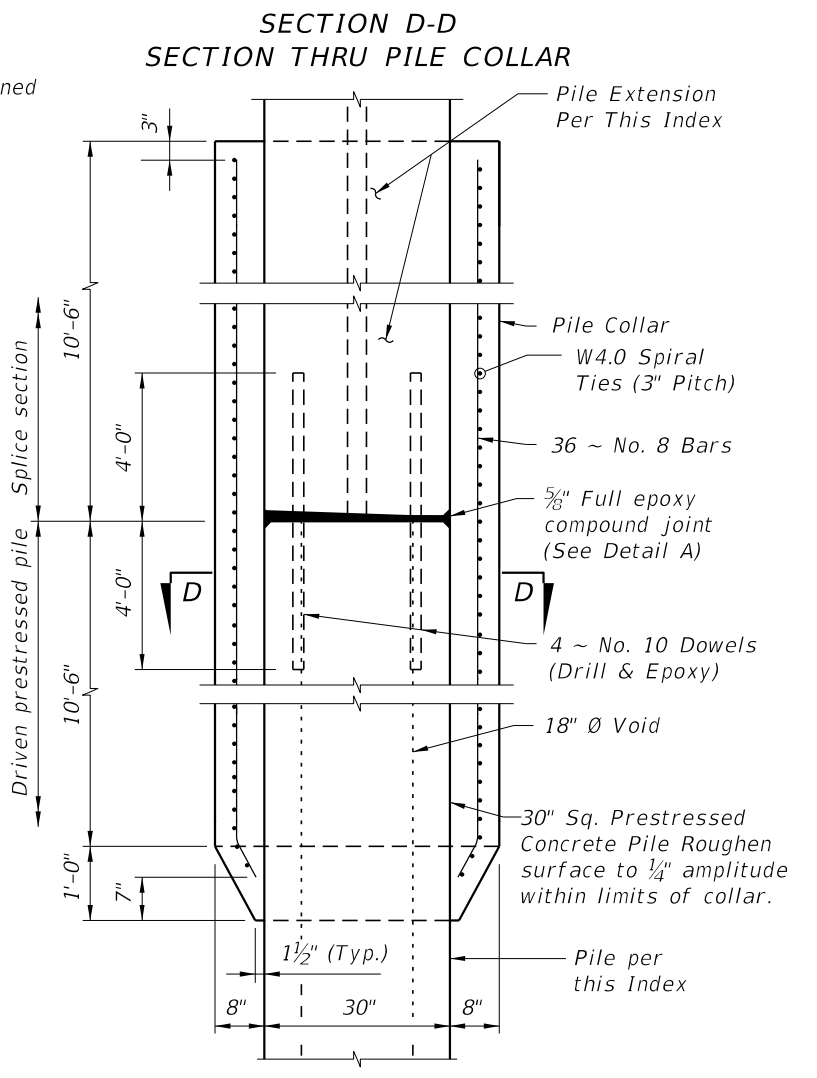
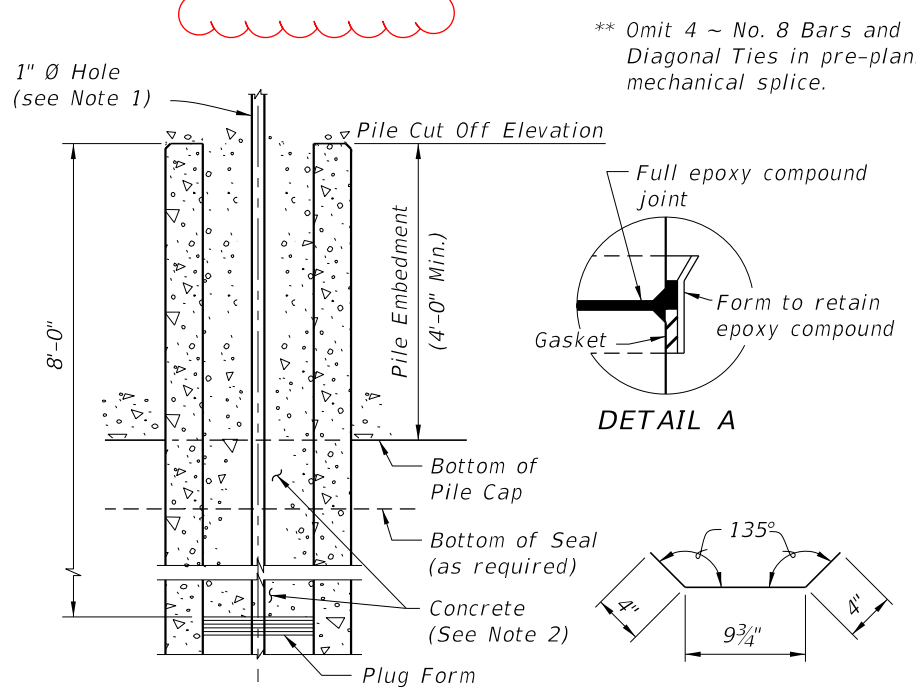
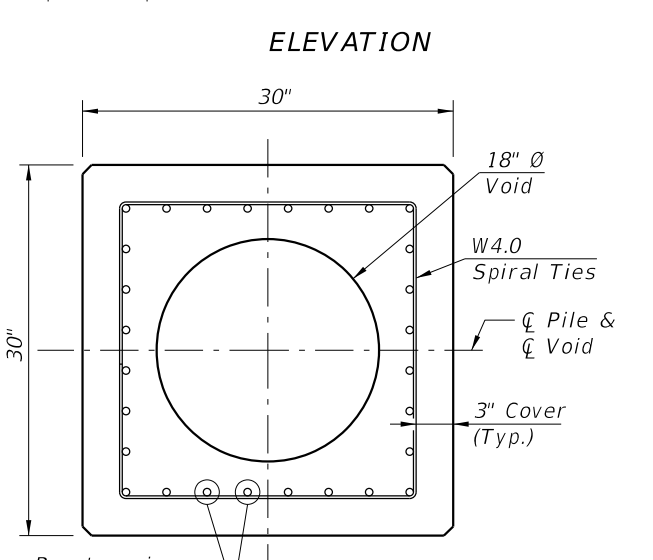
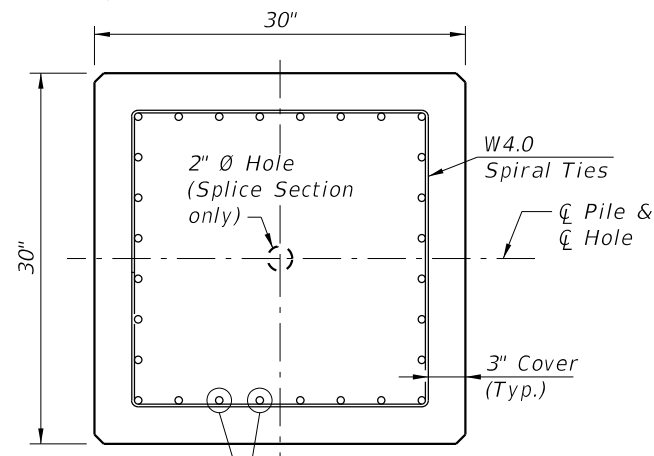
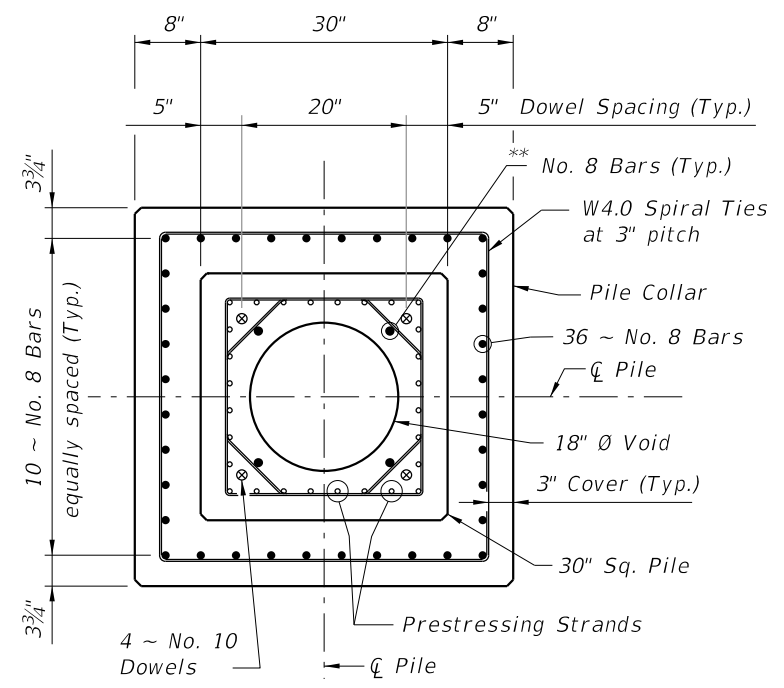
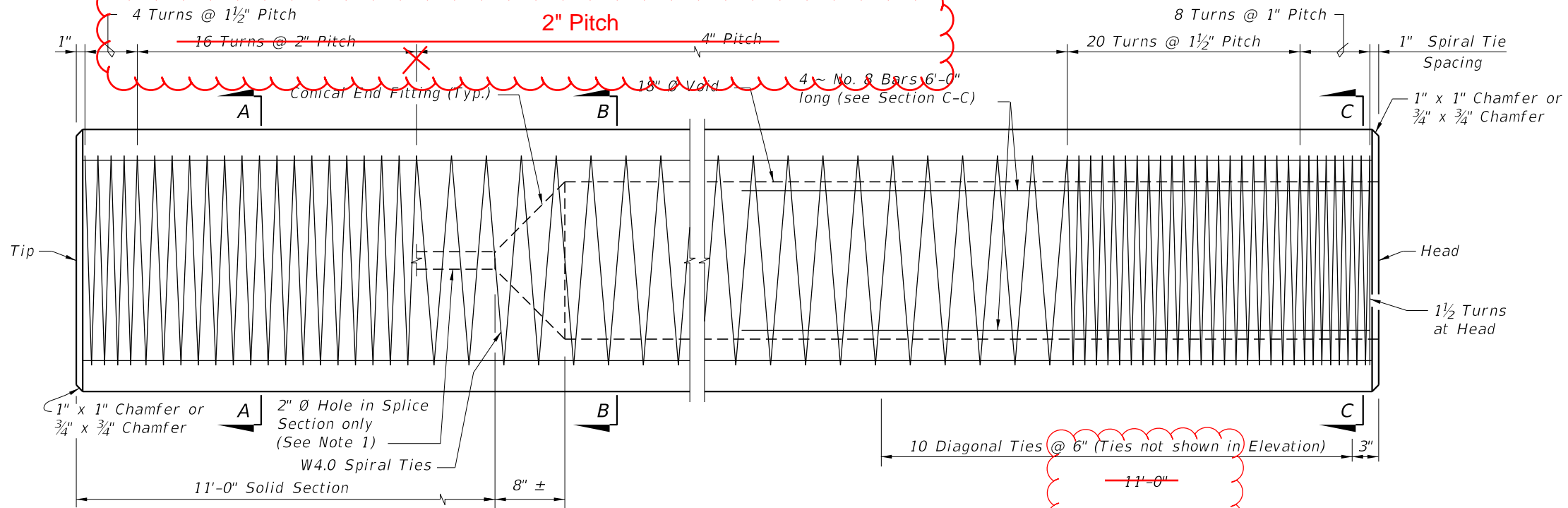
Commentary/Background:

Vertical cracking has been observed in hollow core prestressed concrete piles, including 30-in. voided square HMC and conventional piles, and 60-in. hollow cylindrical piles, during installation and service. To address cracks frequently occur within the 4" stirrup pitch zone, a reduction in stirrup pitch to 2" is proposed to help mitigate cracking in these areas.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

Implementation

["FY-Standard Plans (Next Release)"]



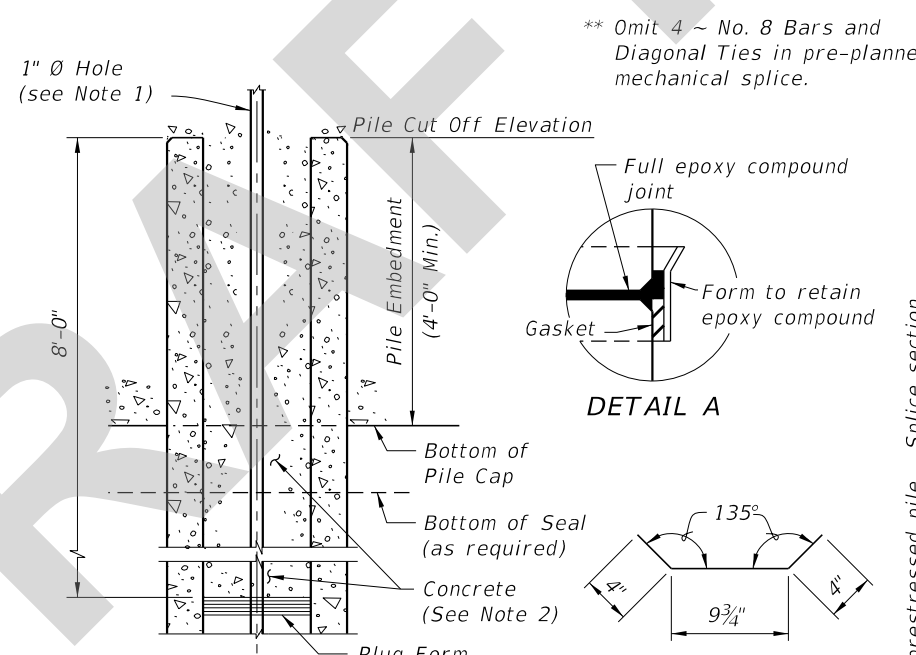
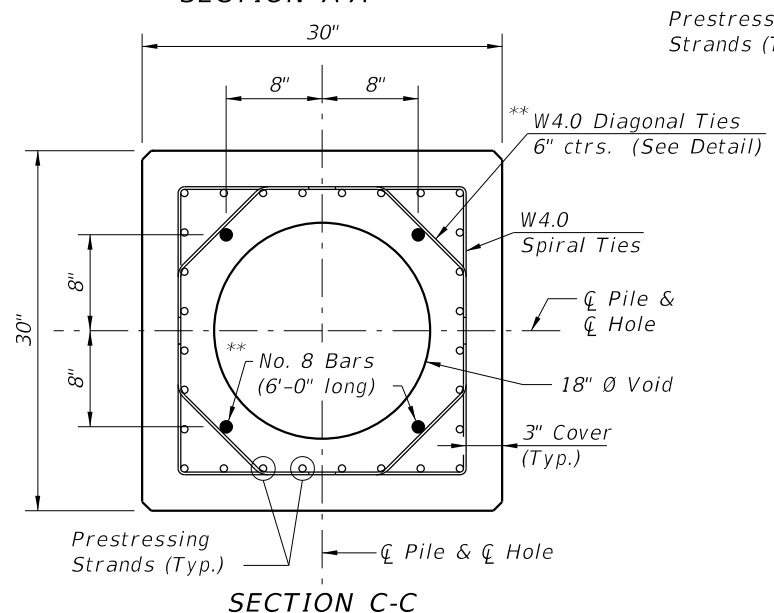
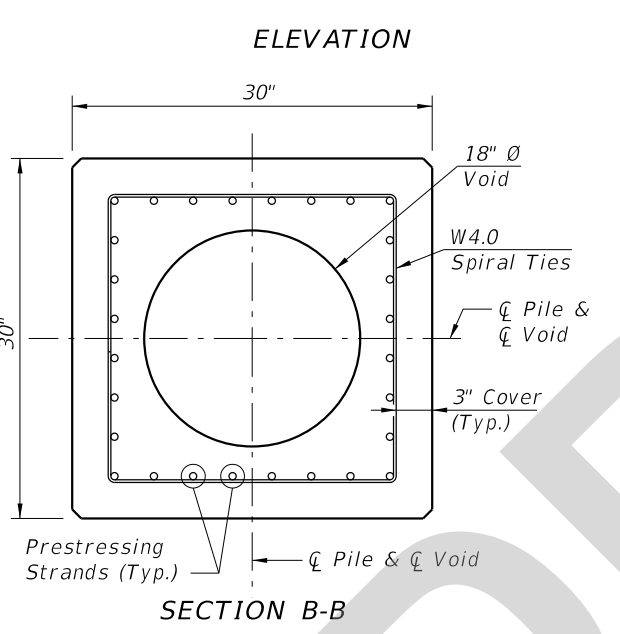
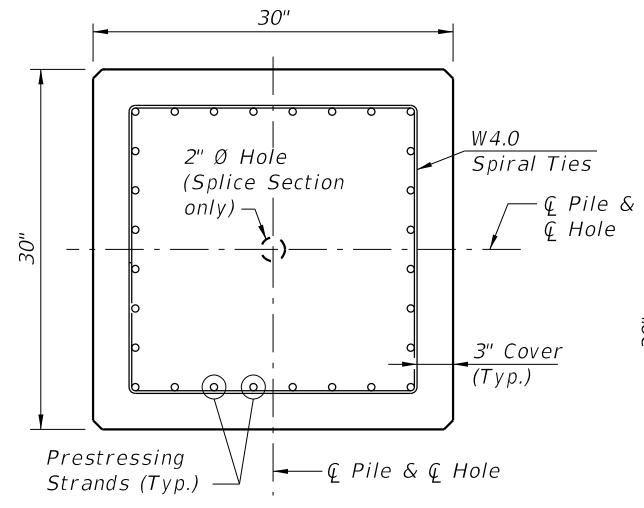
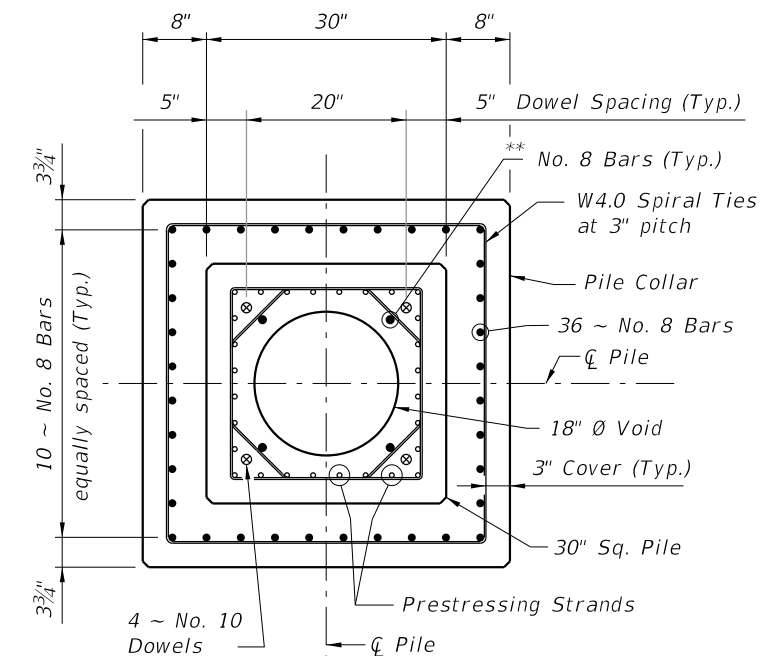
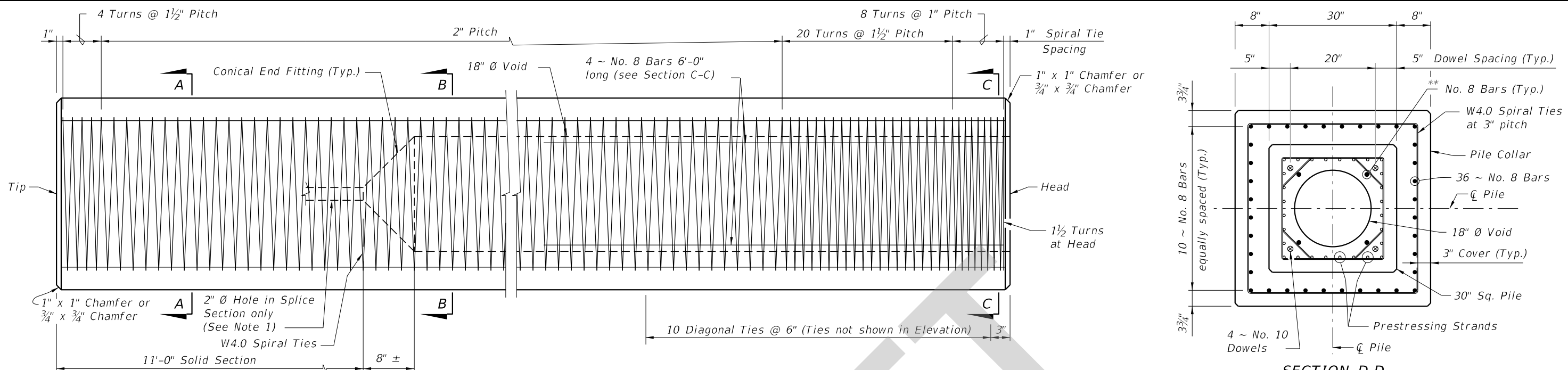
- NOTES:
- Venting shall be provided by the use of a 1" Ø PVC conduit through a substructure cap or column. Voids between segments of spliced piles shall be connected by 2" Ø hole(s).
 - After the pile is driven and cut to elevation, the top 8'-0" of the 18" Ø Void shall be filled with concrete. Prior to filling the top 8'-0" of the 18" Ø Void with concrete, strip the cardboard form material from the void. The concrete fill material shall be of the same type and strength as called for in the pile cap and paid for as substructure concrete.
 - Collar concrete shall reach a strength of 6,000 psi before pile driving is resumed.
 - Work this Index with Index 455-001 - Notes and Details for Square Prestressed Concrete Piles.

DETAIL OF PILE COLLAR FOR HIGH MOMENT CAPACITY 30" SQUARE PRESTRESSED PILE - PILE SPLICE DETAIL-

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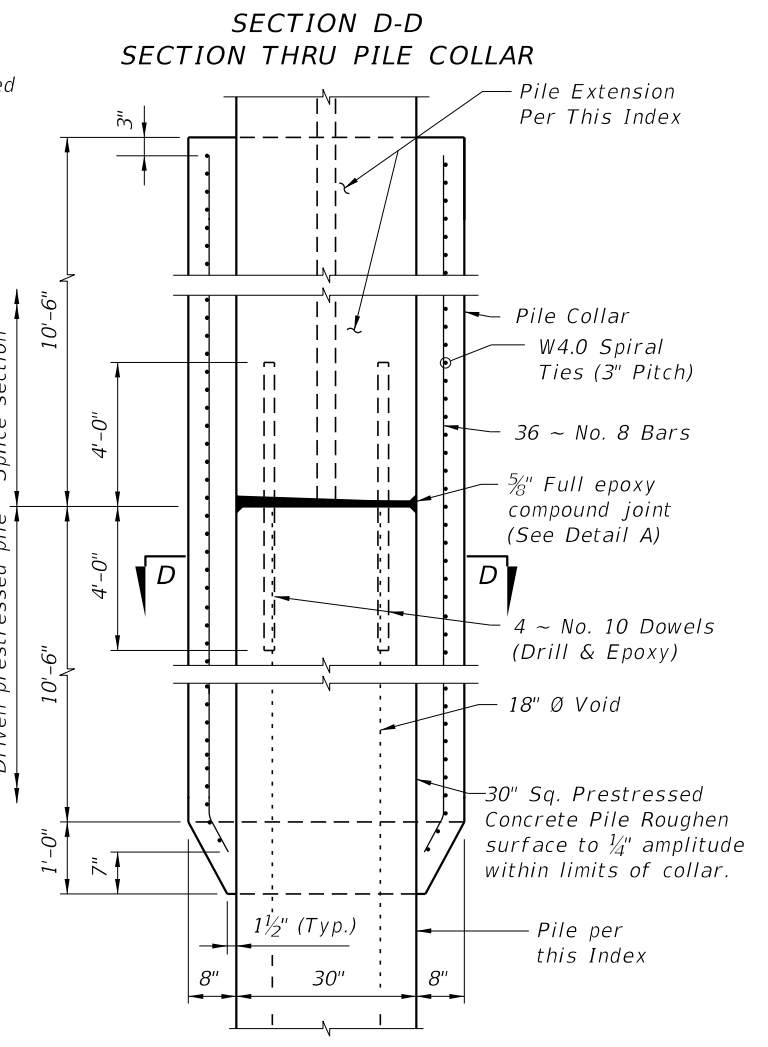
LAST REVISION 11/01/23 11/01/25	REVISION	DESCRIPTION:	2026-27	FY 2025-26 STANDARD PLANS	30" SQUARE PRESTRESSED CONCRETE PILE - HIGH MOMENT CAPACITY	INDEX 455-031	SHEET 1 of 1
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STRAND PATTERN
 28 ~ 0.6" Ø, Grade 270 LRS, at 29.5 kips

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DETAIL OF PILE COLLAR FOR HIGH MOMENT CAPACITY 30" SQUARE PRESTRESSED PILE - PILE SPLICE DETAIL-

5/19/2025 7:39:07 AM

LAST REVISION	REVISION	DESCRIPTION:	 FY 2026-27 STANDARD PLANS	30" SQUARE PRESTRESSED CONCRETE PILE - HIGH MOMENT CAPACITY	INDEX	SHEET
05/01/25					455-031	1 of 1