

PRESTRESSED CONCRETE PILE NOTES:

DESIGN SPECIFICATIONS:

GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY THE CONTRACT DOCUMENTS.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) "LRFD BRIDGE DESIGN SPECIFICATIONS" 5TH EDITION, 2010.

DESIGN PARAMETERS:

SQUARE PRESTRESSED CONCRETE SECTION: DESIGNED FOR 1,000 PSI UNIFORM COMPRESSION AFTER PRESTRESS LOSSES WITHOUT LOADS.

PICK-UP, STORAGE, AND TRANSPORTATION: 0.0 PSI TENSION USING A FACTOR OF 1.5 TIMES PILE SELF WEIGHT.

TOTAL LOSSES: 20% OF INITIAL PRETENSION FORCE.

SPIRAL TIES:

EACH WRAP OF SPIRALS SHALL BE TIED TO AT LEAST TWO CORNER STRANDS. ONE TURN REQUIRED FOR SPIRAL SPLICES.

CONCRETE:

CONCRETE FOR ALL PILES SHALL BE CLASS AAA.

PRESTRESSED CONCRETE PILES FOR THIS PROJECT UTILIZE HIGH PERFORMANCE CONCRETE. SPECIAL REQUIREMENTS ARE REQUIRED AS DETAILED IN SPECIAL PROVISIONS SECTIONS 500 AND 865.

THE PILE CYLINDER STRENGTH SHALL BE 6,500 PSI MINIMUM AT 28 DAYS AND 4,000 PSI MINIMUM AT TIME OF TRANSFER OF THE PRESTRESSING FORCE.

SPLICE BONDING MATERIAL:

THE MATERIAL TO FILL DOWEL HOLES SHALL BE A TYPE VIII EPOXY COMPOUND. THE MATERIAL TO FORM THE JOINT BETWEEN PILE SECTIONS SHALL BE A TYPE III EPOXY COMPOUND. EPOXY COMPOUNDS SHALL BE IN ACCORDANCE WITH SECTION 886 OF THE GEORGIA STANDARD SPECIFICATIONS AND SHALL BE CONTAINED ON THE QUALIFIED PRODUCTS LIST (QPL-15). 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. IF PILES ARE NOT SPLICED, DOWEL HOLES SHALL BE FILLED WITH EPOXY MORTAR.

PICK-UP POINTS:

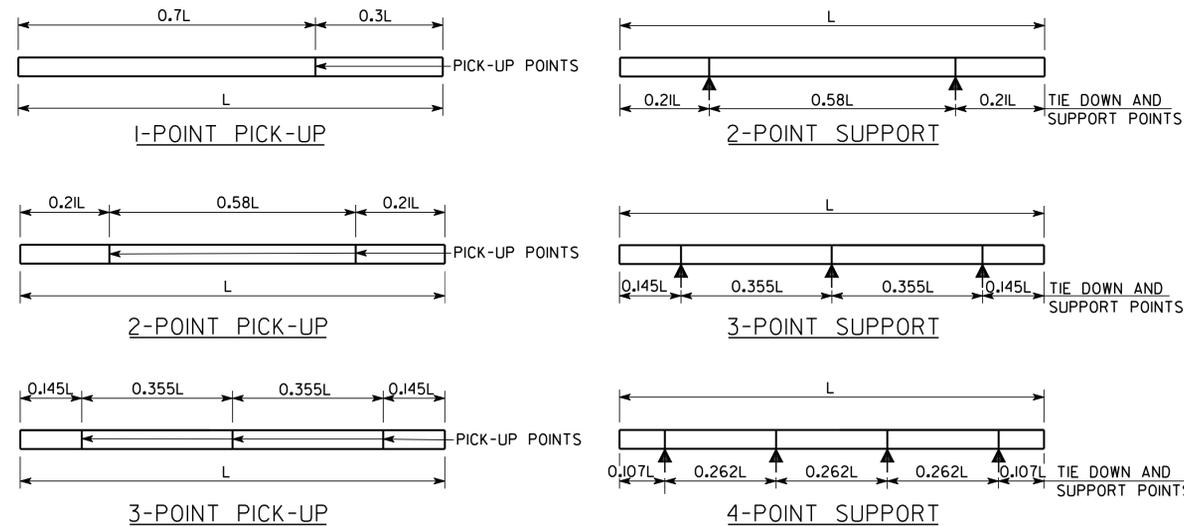
PILES SHALL BE MARKED AT THE PICK-UP POINTS TO INDICATE PROPER POINTS FOR ATTACHING HANDLING LINES.

REINFORCING STEEL:

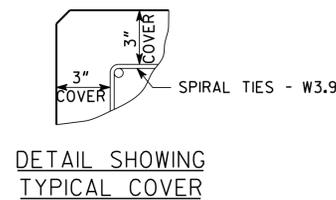
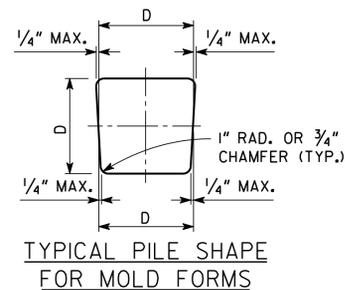
ALL REINFORCING STEEL SHALL BE GRADE 60, EXCEPT THAT SPIRAL TIES SHALL BE MANUFACTURED FROM COLD-DRAWN STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A82.

PRESTRESSING STEEL:

PRESTRESSING STEEL SHALL BE SEVEN-WIRE STRAND, GRADE 270 LOW-RELAXATION STRANDS (LRS).



	D = SQUARE PILE SIZE (INCHES)			REQUIRED STORAGE AND TRANSPORTATION DETAIL	PICK-UP DETAIL
	16	18	20		
MAXIMUM PILE LENGTH (FEET)	55	59	62	2, 3, OR 4 POINT	1 POINT
	79	85	89	2, 3, OR 4 POINT	2 POINT
	114	121	128	3 OR 4 POINT	3 POINT



PSC PILE - SPECIAL DESIGN

THE LPA GROUP
 THE LPA GROUP INCORPORATED
 TRANSPORTATION CONSULTANTS
 3995 ENGINEERING DRIVE
 NORCROSS, GEORGIA 30092
 (770) 455-5118

GEORGIA
DEPARTMENT OF TRANSPORTATION
 ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

NOTES AND DETAILS FOR SQUARE
 PRESTRESSED CONCRETE PILES
 CHATHAM COUNTY CSMSL-0008-00(690)

NO SCALE JULY 2013



DRAWING NO. 37-01

PSC PILE SHEET 1 OF 5

DATE	REVISIONS	BY	DATE

DESIGNED JCR	CHECKED ANZ/AWB	REVIEWED DLC/WMD
DRAWN JCR	DESIGN GROUP SKG	APPROVED BFR