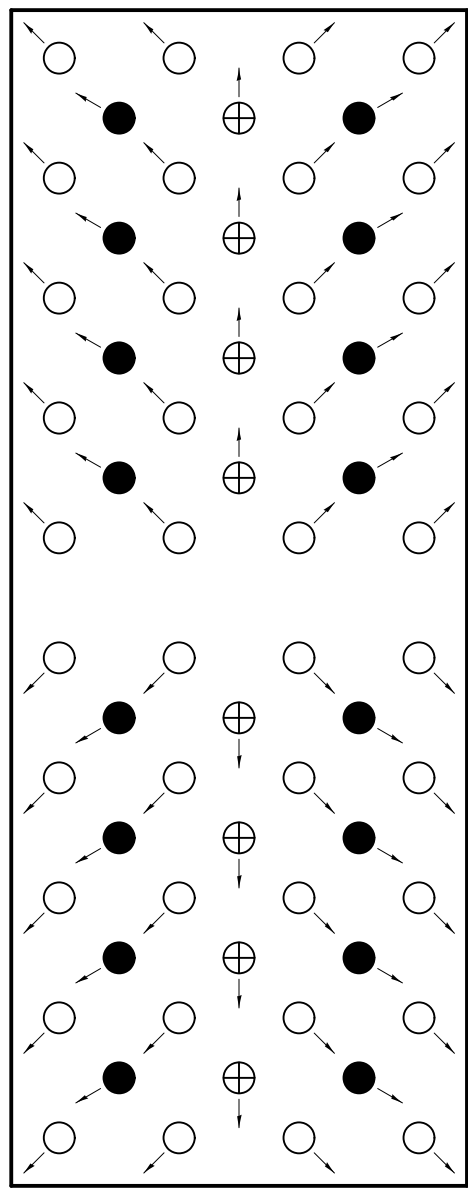
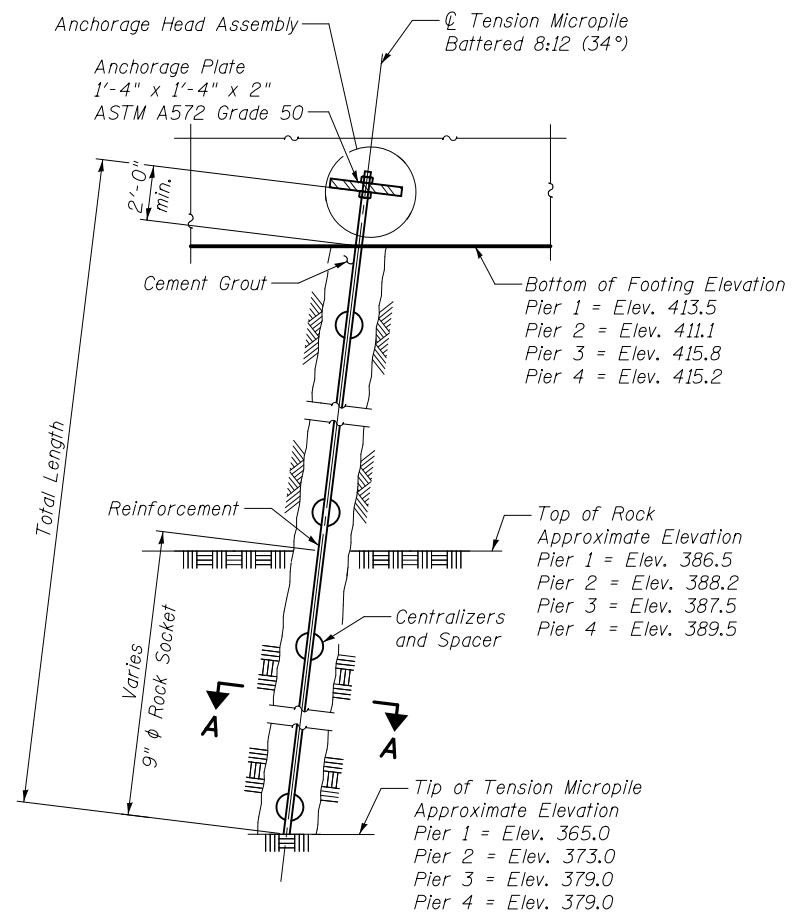


○ Micropile  
⊕ Tension Micropile

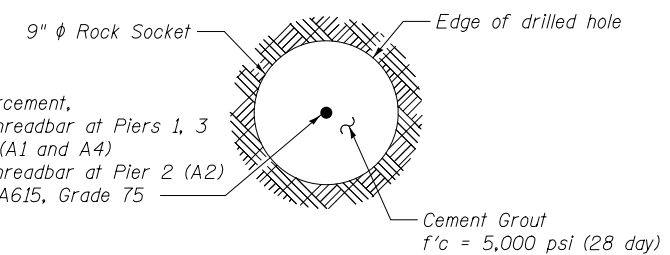


○ Micropile Battered at 2:12 Transversely and 2:12 Longitudinally  
⊕ Tension Micropile Battered at 8:12 Transversely  
● Tension Micropile Battered at 2:12 Transversely and 5.5:12 Longitudinally

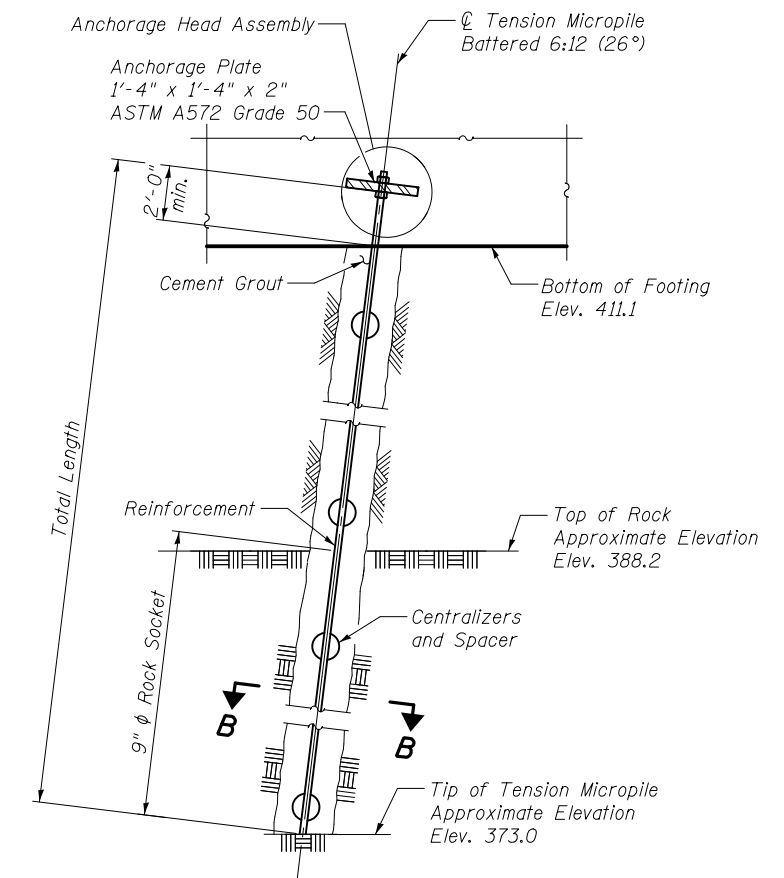


**TENSION MICROPILE DETAIL - A1, A2 AND A4**

508k maximum tension design load at Pier 1 (A1)  
304k maximum tension design load at Pier 2 (A2)  
476k maximum tension design load at Piers 3 and 4 (A4)

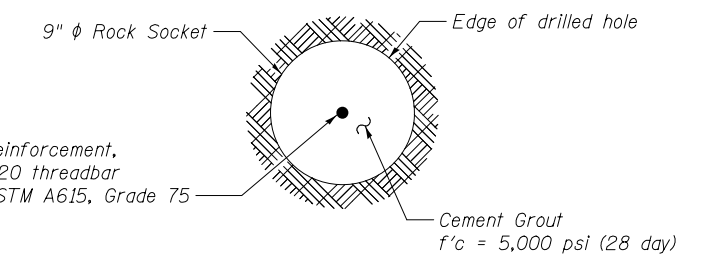


**SECTION A-A**



**TENSION MICROPILE DETAIL - A3**

315k maximum tension design load



**SECTION B-B**



USER NAME =	DESIGNED - ACK	REVISED
	CHECKED - MJP	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 2/1/2013	CHECKED - ACK	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MICROPILE DETAILS - 3  
STRUCTURE NO. 014-0033

SHEET NO. 49 OF 61 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	1-1BR-2	CLINTON	159	118
CONTRACT NO. 76479				

ILLINOIS FED. AID PROJECT