

**MICROPILE DETAILS**

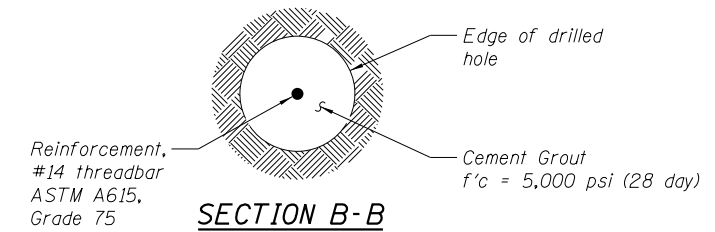
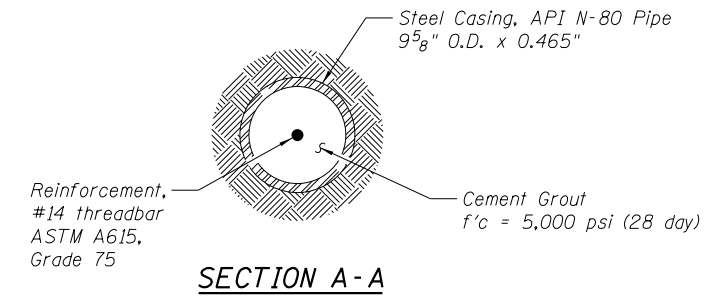
(Straight Piles Shown, Battered Pile Similar)

**MICROPILE  
DESIGN STRESSES**

$F_y = 80,000 \text{ psi (Casing)}$   
 $f'_c = 5,000 \text{ psi (Grout)}$

**NOTES**

- Casing splices shall be capable of developing at least 50% of the full moment capacity of the casing.



**MICROPILE SCHEDULE**

		Pier 1	Pier 2 (Straight)	Pier 2 (Battered)
No. Production Piles	each	42	36	14
Factored Compressive Load	kips	170	162	167
Factored Tensile Load	kips	--	--	--
* Service Compressive Load	kips	126	118	122
* Service Tensile Load	kips	--	--	--
Estimated Tip Elevation of Steel Casing	ft	696.40	696.94	697.21
Minimum Length of Steel Casing	ft	10	10	10
Estimated Bond Length	ft	60	60	60
Estimated Rock Socket Depth	ft	--	--	--
Estimated Total Length of Micropiles	ft	70	70	70

\*Use as the "Design Load" in the Proof Test Loading Schedule in the Micropiles special provision.



USER NAME =	DESIGNED - KMP	REVISED
	CHECKED - AMK	REVISED
PLOT SCALE =	DRAWN - KMP	REVISED
PLOT DATE = 03/19/2014	CHECKED - AMK	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MICROPILE DETAILS  
STRUCTURE NO. 022-0512**

SHEET NO. S-41 OF S-53 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	652-A	DuPAGE	383	204
CONTRACT NO. 60R06				
ILLINOIS FED. AID PROJECT				