

**SUMMARY OF MICROPILE INFORMATION/INSTALLATION**

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) #-# (e.g., "Bent 1, Piles 1-5")	Factored Resistance per Pile TONS	Minimum Reinf Casing Tip (Tip No Higher Than) Elevation FT	Minimim Reinforcing Casing Penetration Into Rock per Pile Lin FT	Scour Critical Elevation FT	No Reinforcing Casing Joints Between Elevations FT - FT	Galvanizing Exposed Reinforcing Casing Required? YES
End Bent No.1 , Piles 1-6	165	3385.0	10.0	3395		No
End Bent No.2 , Piles 1-6	165	3372.0	10.0	3382	3398-3378	No

**FOUNDATION RECOMMENDATION NOTES ON PLANS**

- 1) For Micropiles, see Micropiles Provision.
- 2) Design bond length for micropiles at End Bent Nos. 1 and 2 for a factored resistance of 165 tons per pile.
- 3) Install reinforcing casings for micropiles at End Bent No. 1 to a tip elevation no higher than 3385 ft and with a penetration of at least 10 ft into rock.
- 4) Install reinforcing casings for micropiles at End Bent No. 2 to a tip elevation no higher than 3372 ft and with a penetration of at least 10 ft into rock.
- 5) Do not locate reinforcing casing joints between elevation 3398 ft and 3378 ft for micropiles at End Bent No. 2.
- 6) One Verification Test is required for micropiles installed at each End Bent.
- 7) Load test micropiles based on a factored design load of 165 tons.
- 8) Use reinforcing casings with yield strengths of at least 80 ksi and a minimum wall thickness of 0.5 in for micropiles at End Bent Nos. 1 and 2.

**SUMMARY OF MICROPILE TESTING**

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) #-# (e.g., "Bent 1, Piles 1-5")	Demonstration Micropile(s) Required? YES	Load Testing			
		Proof Load Test(s) Required? YES	Verification Load Test(s) Required? YES	Factored Design Load (FDL) TONS	Permissible Total Vertical Movement at Top of Pile INCHES
End Bent No.1 , Piles 1-6			1	165	
End Bent No.2 , Piles 1-6			1	165	
<b>TOTAL QTY:</b>			2		

**NOTE:**

1. The Micropile Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer (Shiping Yang #031361) on 10-04-2021.

PROJECT NO. BR-0029

MACON COUNTY

STATION: 15+52.07 -L-

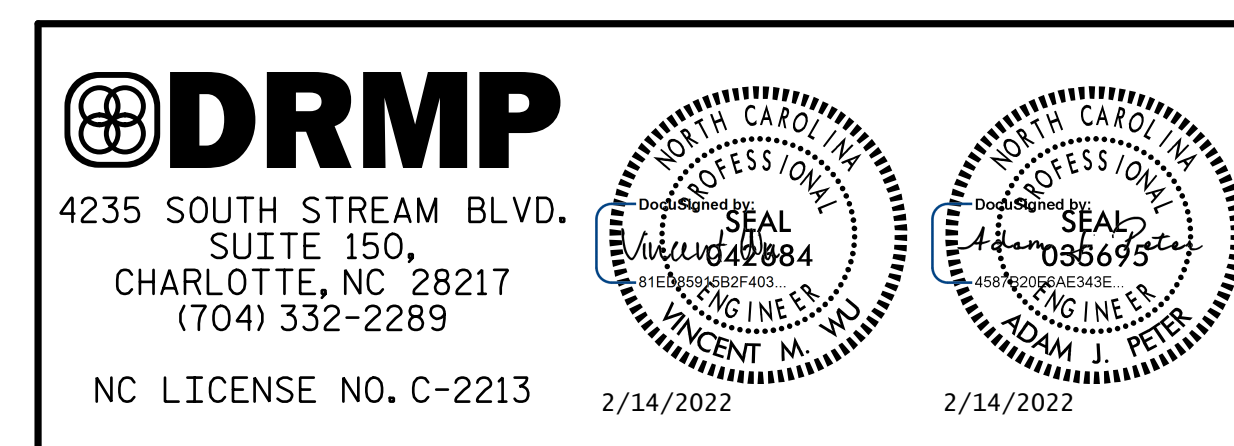
SHEET 3 OF 4

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

GENERAL DRAWING  
FOUNDATION TABLES

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S-03
2			4			TOTAL SHEETS 33



**DRMP**  
4235 SOUTH STREAM BLVD.  
SUITE 150,  
CHARLOTTE, NC 28217  
(704) 332-2289  
NC LICENSE NO. C-2213

2/14/2022  
2/14/2022

DRAWN BY : \_\_\_\_\_ DATE : \_\_\_\_\_  
CHECKED BY : \_\_\_\_\_ DATE : \_\_\_\_\_  
DESIGN ENGINEER OF RECORD: VINCENT M. WU DATE : 10-2021

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**