STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION

THE ANALYSIS AND DESIGN OF MULTIPLE COLUMN PIERS

E757ØM

SHEET 1 OF _

I.D.

PROG. (1–4)	PROG. NO. (5–8)	REMARKS . PROJECT NUMBER . COUNTY . NAME . DATE . ETC. (9–80)
* B Ø 3		

DESIGN DATA

CN	DESIGN OPTION: CAP	DESIGN OPTION: COLUMN	DESIGN OPTION: FOOTING	S OR L	CANTILEVER	NO. COLUMN	NO. LIVE LOAD CASE	DEG.	MIN.	SEC.	f'c MPa (21)	fc MPa (8.3)	N (9)	fy MPa (400)	fs MPa (165)	Ec MPa × 10^3 (21.76)	Es MPa × 10^3 (200)	εc (.0030)	Z × 10^3 (30)	MIN. SIZE (35)	STR. SIZE (15)	MAX. T.B. (6)	MAX. B.B. (6)	MIN. SIZE (35)	MIN. BARS (0)	TOP CLEAR mm (50)	MIN. STR SP. mm (100)	CAP D. INCR. mm (75)	BOTT. CLEAR mm (60)
0 1																													

CN	MIN Ps % (1.00)	MIN Ps % (8.00)	MIN SPAC mm (57)	CLEAR mm (65)	R	K_L (2.00)	$Ø_c$ (S-0.35) (L-0.75)	$Ø_F$ (S-0.35) (L-0.90)	C_M	$β_{D1}$ (1.00)	$β_{D2}$	IMPACT %	SOIL WEIGHT kN/m³ (15.6)	ALLOWABLE SOIL PRESS. kN/m²	MIN. PL. SP. m (.75)	MAX. PL. SP. m (1.5)	EDGE DISTANCE m (.381)	PILE DEPTH m (.228)	CLEAR mm (75)	PILE CAPACITY kN	PILE UPLIFT kN	P
0 2																						

CANTILEVER AND CAP DATA

CN	I	L m	A m	D_E m	B_C m	B_E m	D_H m	L_H m	X_{B1} m	X_{B2} m	X_{B3} m	X_{B4} m	X_{B5} m	X_{B6} m	X_{B7} m	X_{B8} m
1 1																
1 2																
1 3																
1 4																
1 5																
1 6																

COLUMN DATA

CN	P_0	I	T	S	H_T m	A m	D_T m	B_T m	D_B m	B_B m	D_L m	FLEX	REINFORCEMENT LOWER LIMIT / ACTUAL TOP ND	NB	SIZE	BOTTOM ND	NB	SIZE	STEEL UPPER LIMIT / ACTUAL TOP ND	NB	SIZE	BOTTOM ND	NB	SIZE	SLOPE	E_P MPa × 10^4	A_P mm² × 10^3
2 1																											
2 2																											
2 3																											
2 4																											
2 5																											

FOOTING DATA

CN	S OR P	B m	D m	T m	ΔB m	ΔD m	ΔT m	$R_{B/D}$	$R_{D/B}$	SOIL HT m	NP	S	B_P m	D_P m	SETTLE
3 1															
3 2															
3 3															
3 4															
3 5															