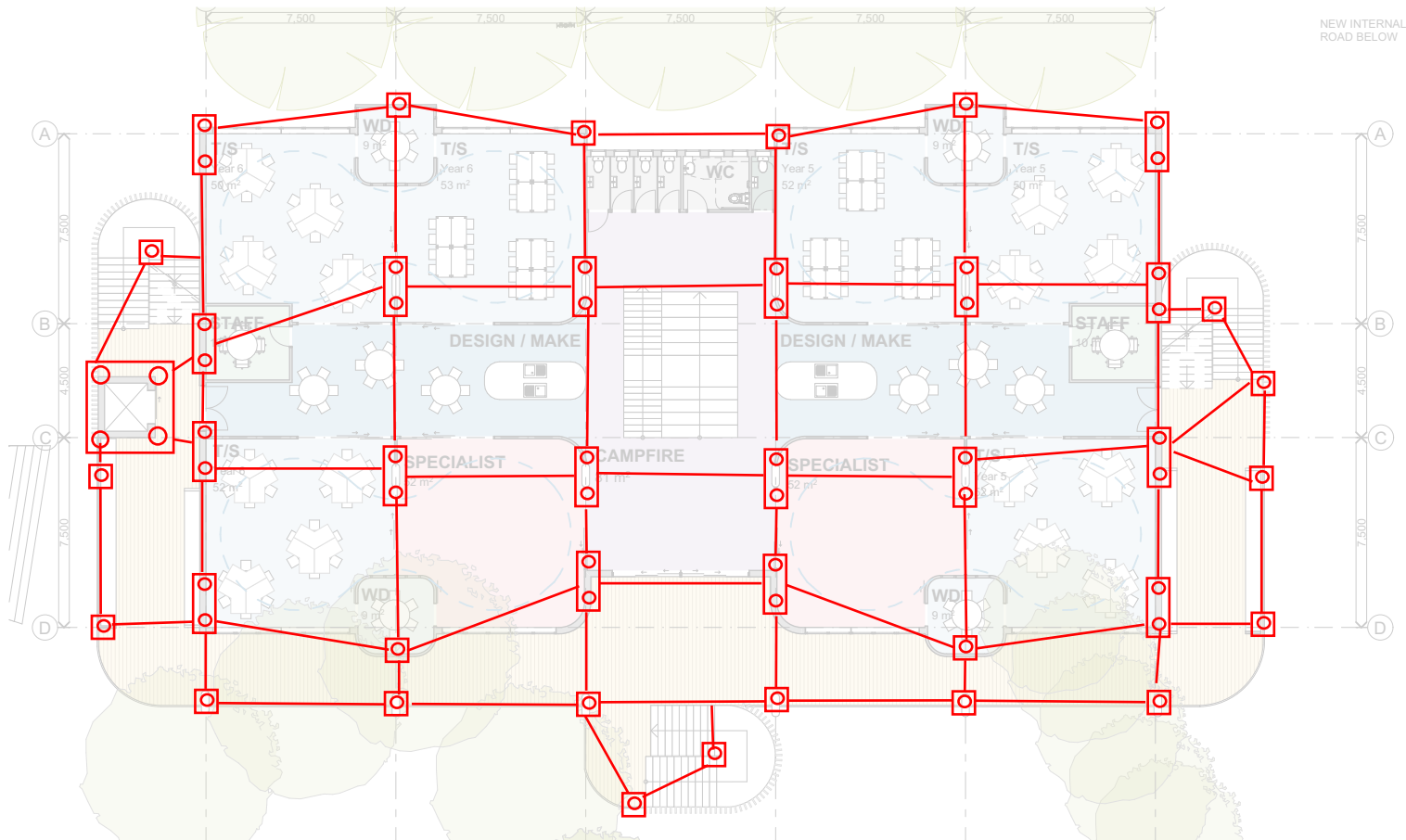




Unit	Material / Origin	Preliminary Pile Design Parameters						
		Su (kPa) (clay units)	UCS (MPa) (Rock units)	Ultimate End Bearing ⁽¹⁾ (MPa)	Serviceability End Bearing ⁽²⁾ (MPa)	Ultimate Shaft Adhesion ⁽⁴⁾ (kN/m²)	E _v (MPa)	E _h (MPa)
4a	Highly weathered to distinctly weathered material	NA	4	9	2	400	300	225

Foundation Design - Preliminary / Concept Only

Piles:
600 diam CFA Piles founded 3m into class 4a rock
Top of class 4a rock at approx 30m (TBC by geotech)
N32 Concrete
6 N24 bars and N12 ligS at 300 crs

Where the pile footings are founded in soft clays of less than 25Kpa we are required to tie together the footings with concrete tie beams for EQ compliance. Tie beams are shown above as a single line between footings - 400W x 300D (3 N16 T&B and N12 ties at 400 crs)

Pile Caps - 600D x 900 W x 2400L and 600D x 900 Sqr

Lift Base - 600 deep (N20@200 EW TB)

- Note:
- 1) Ignores impact of mine subsidence on the pile
 - 2) Allow for 4 x additional 2 piles - Nth / Sth Bracing walls not yet located on arch drawings
 - 3) Downdrag on piles has not been considered. Geotechnical engineer to advise

XXX	XXXXXX	%DESCRIPTION%	%	%
REV	DATE	DESCRIPTION	DRN	APP
TITLE				

Concept Arrangement
Piling

DOCUMENT STATUS			SHEET SIZE
DRAFT			A3
DRAWN	DESIGNED	APPROVED	SCALE NTS
DOCUMENT No.			REVISION
16194-XX-ZZ-SK-S 0002			P01