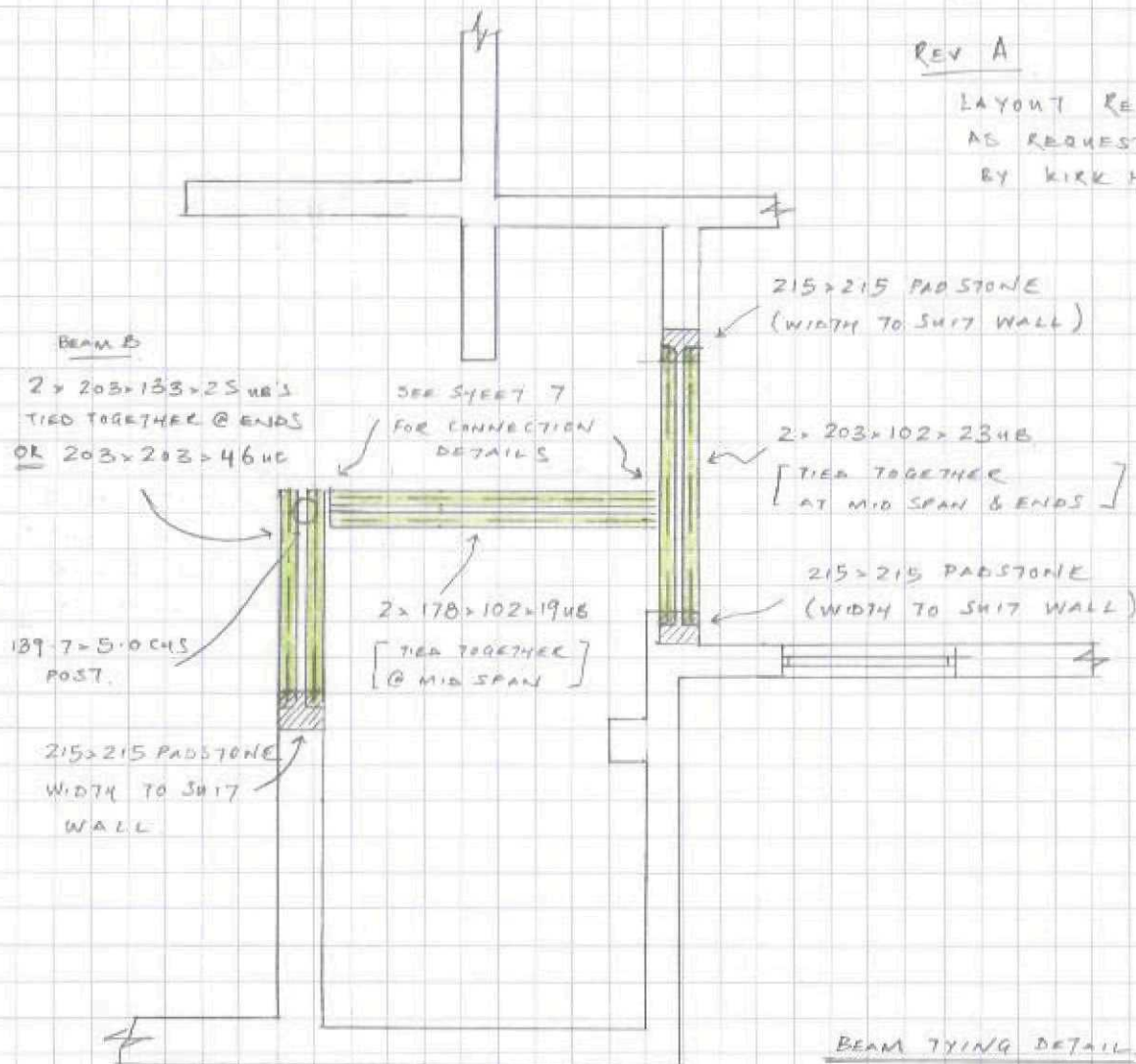


PROJECT: PART GROUND FLOOR PLAN SHOWING 1ST FLOOR SUPPORT BEAMS

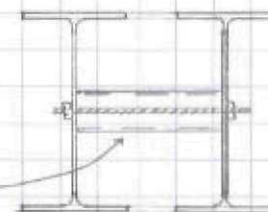
NOTE :- LAYOUT REVISED
AS DISCUSSED
ON SITE
J. KIRK / R. CHENG

REV A

LAYOUT REVISED
AS REQUESTED
BY KIRK HOMES



BEAM TYING DETAIL



SCAFFOLD TUBE
CUTTING WITH
16mm DIA THREADED
BAR, BOLTING
BEAMS TOGETHER

PROJECT:

REVISED BEAM B



$$M_v (\text{FACTORED}) = \frac{[(28.12 \times 1.4) + (10.39 \times 1.6)] \times 1.4^2}{8} = 13.72 \text{ kNm}$$

$$L_E = 1.4 \text{ m}$$

By INSPECTION, RE-USE PAIR OF 203 x 133 x 25 kg BEAM

FROM PREVIOUS SCHEME

OR PROVIDE NEW 203 x 203 x 46 kg

PROJECT:

BEAM SUPPORT POST

$$\text{FACTORED AXIAL LOAD} = [(34.59 + 19.68) \times 1.4] + [(7.38 + 7.27) \times 1.6]$$

$$= 99.42 \text{ kN}$$

$$\text{ECC MOMENT} = 0.1 \times 99.42 = 9.94 \text{ kNm}$$

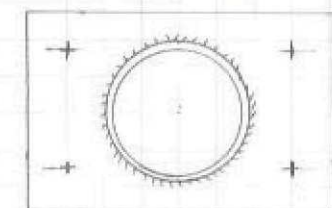
$$\text{LENGTH} = 3.0\text{m} \quad \therefore \text{TRY} \quad 139.7 > 5.0 \text{ CHS}$$

CHECK AXIAL LOAD & BENDING

$$\frac{99.42}{499} + \frac{9.94}{22.7} = 0.64 < 1.0$$

$\therefore 139.7 > 5.0 \text{ CHS}$ IS SATISFACTORY

BASEPLATE DETAIL TO CHS POST



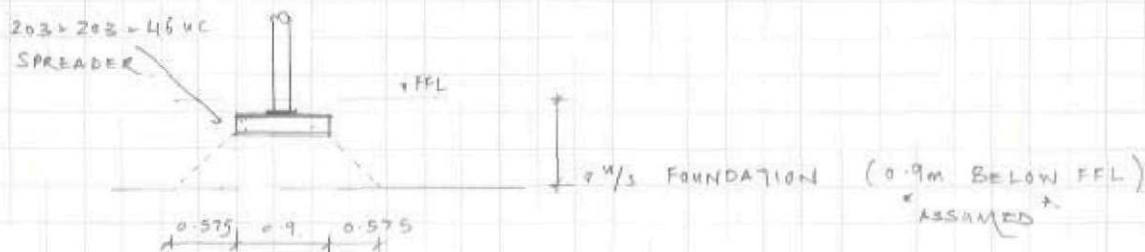
200 x 10 THICK PLATE
= 300 LONG
6mm F.W. TO CHS
4 M16 (B.B) BOLTS

PROJECT: COLUMN BASE DETAIL.

UNFACTORED COLUMN LOAD = 68.92 kN

ASSUME EXISTING WALL FOUNDATION IS 450mm WIDE

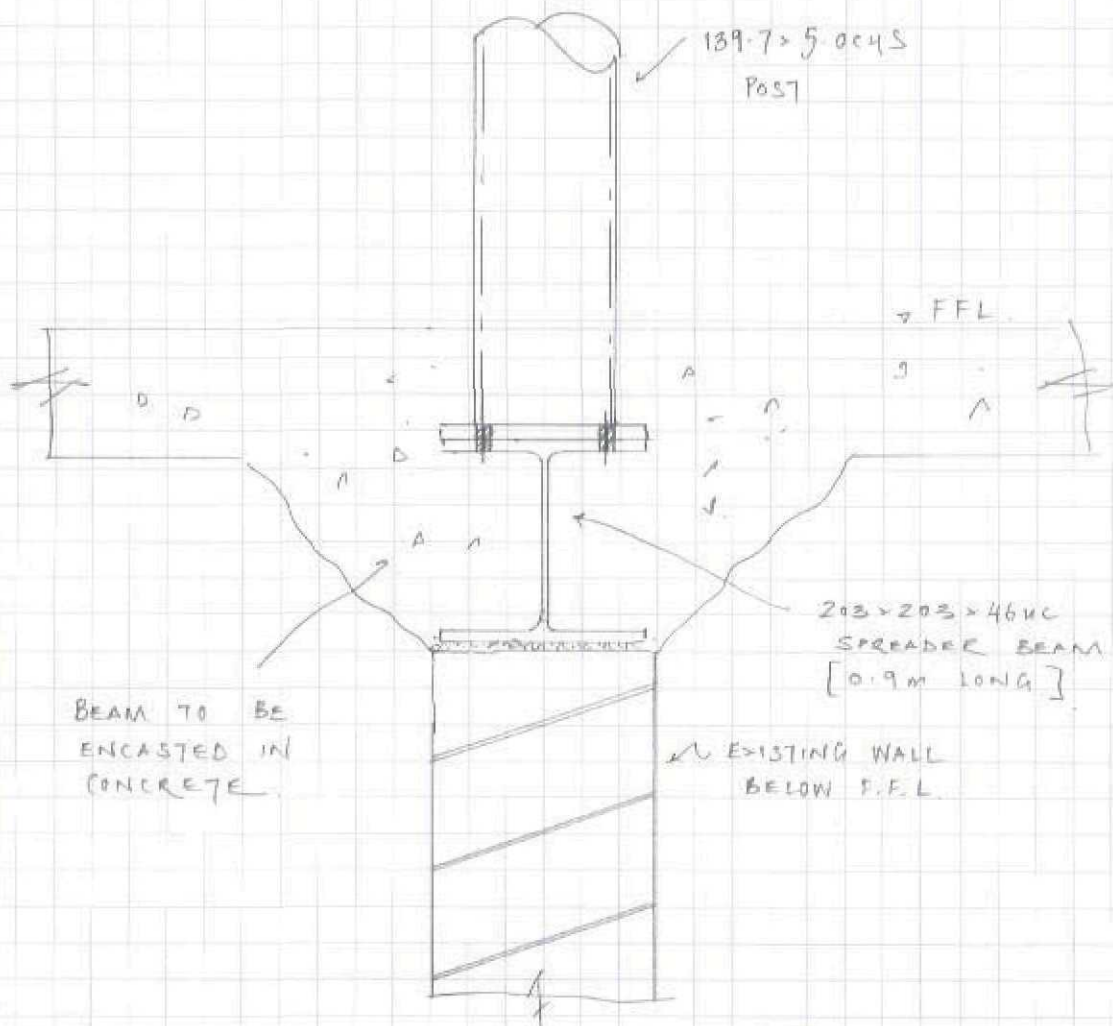
$$SBP = 80 \text{ kN/m}^2 \quad \therefore \text{LENGTH REQ'D} = \frac{68.92}{80 \times 0.45} = 1.91 \text{m}$$



$$0.575 + 0.9 + 0.575 = 2.05 \text{m} \quad \therefore \text{OK WITH } 0.9 \text{m LONG SPREADER}$$

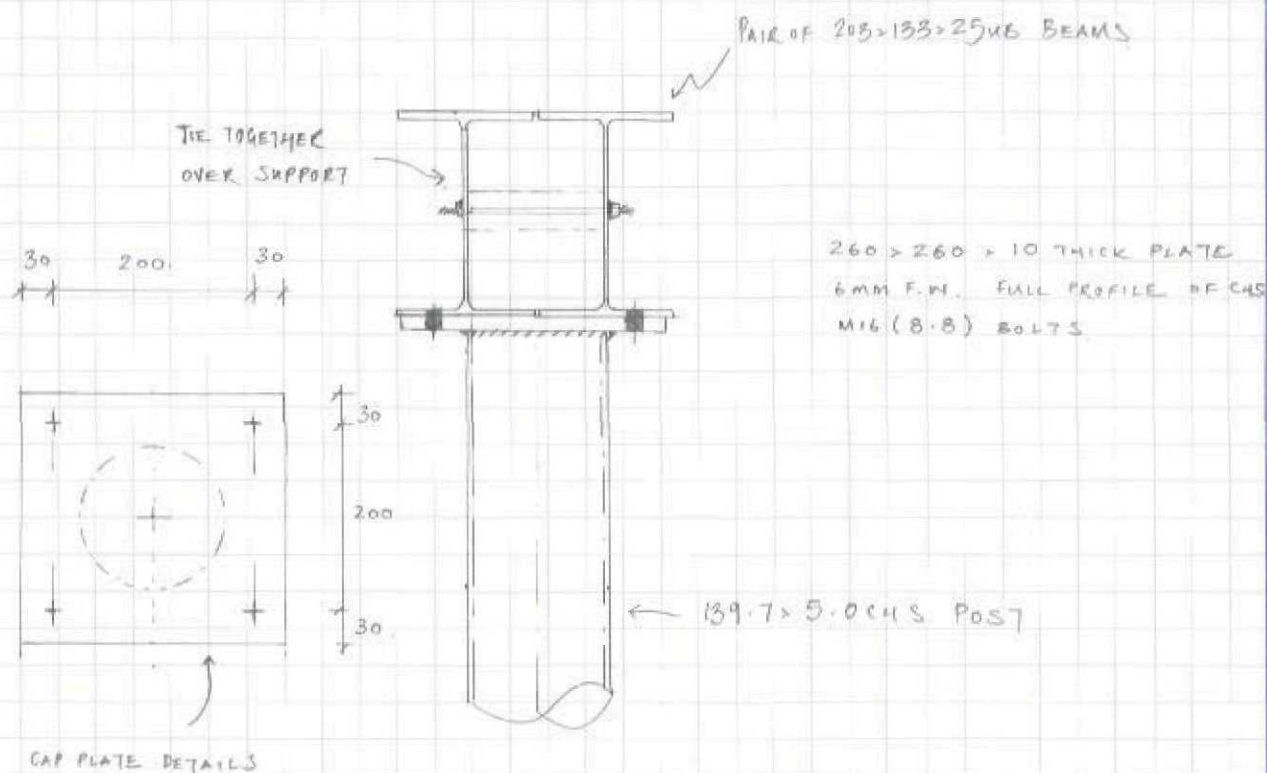
PROJECT:

COLUMN BASE DETAIL



PROJECT: CONNECTION DETAIL, POST - SUPPORT BEAM.

OPTION WITH PAIR OF BEAMS



OPTION WITH SINGLE BEAM

