Electrical Service Design Lab (EEE 4418)
Report on Project

Submission by-

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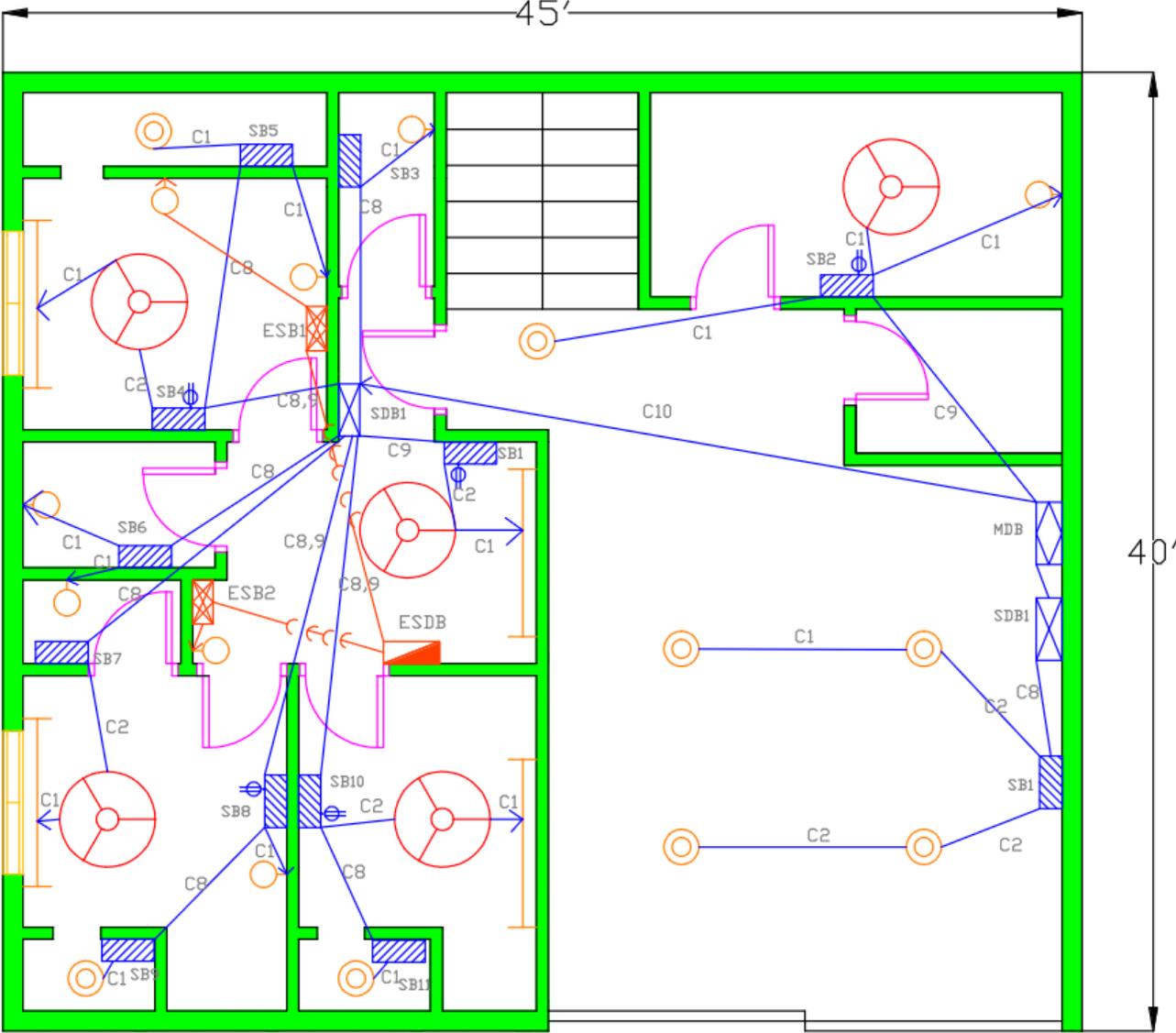200021356
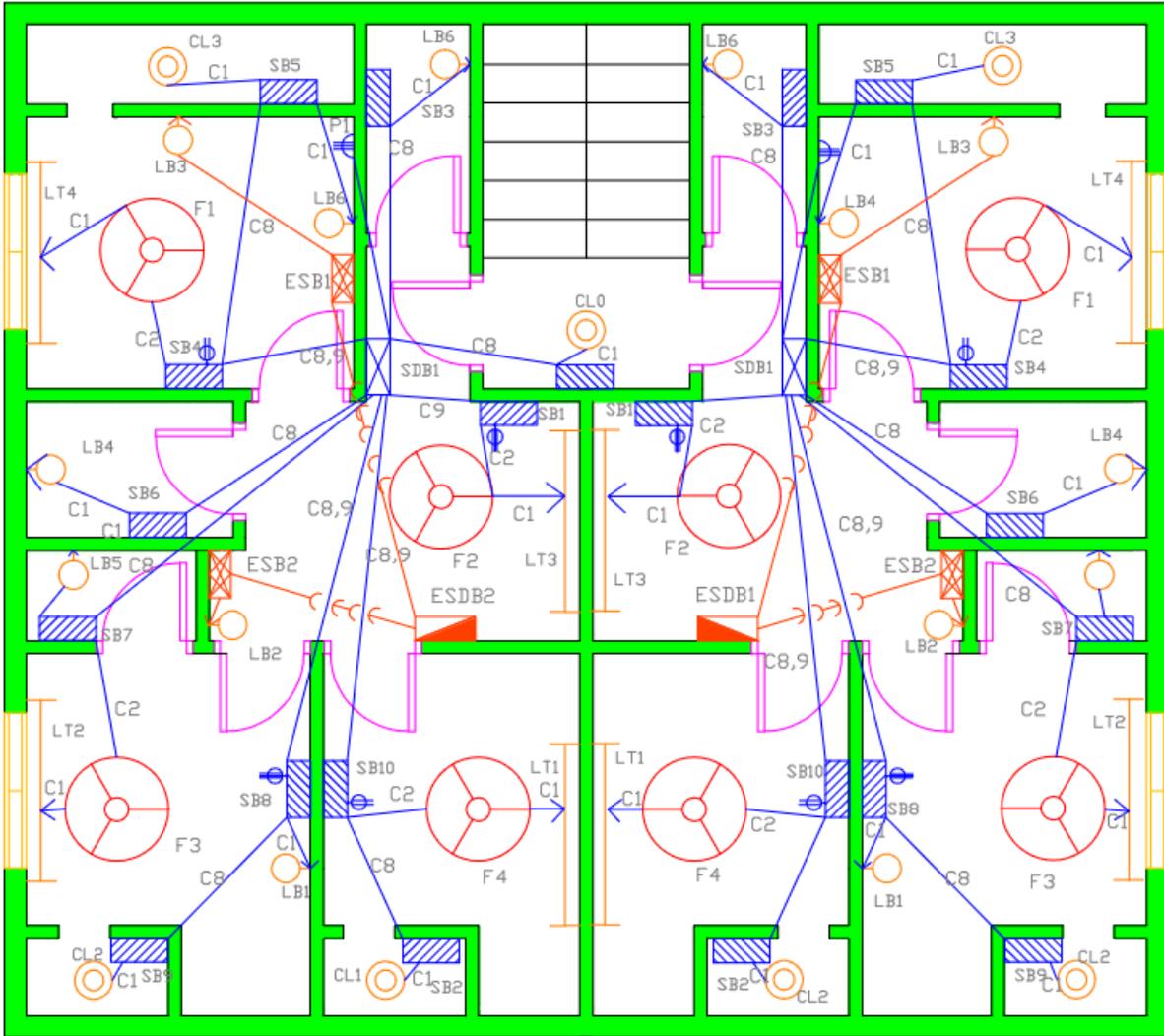**Tahmid Hasan Muttaky**
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Floor Plans
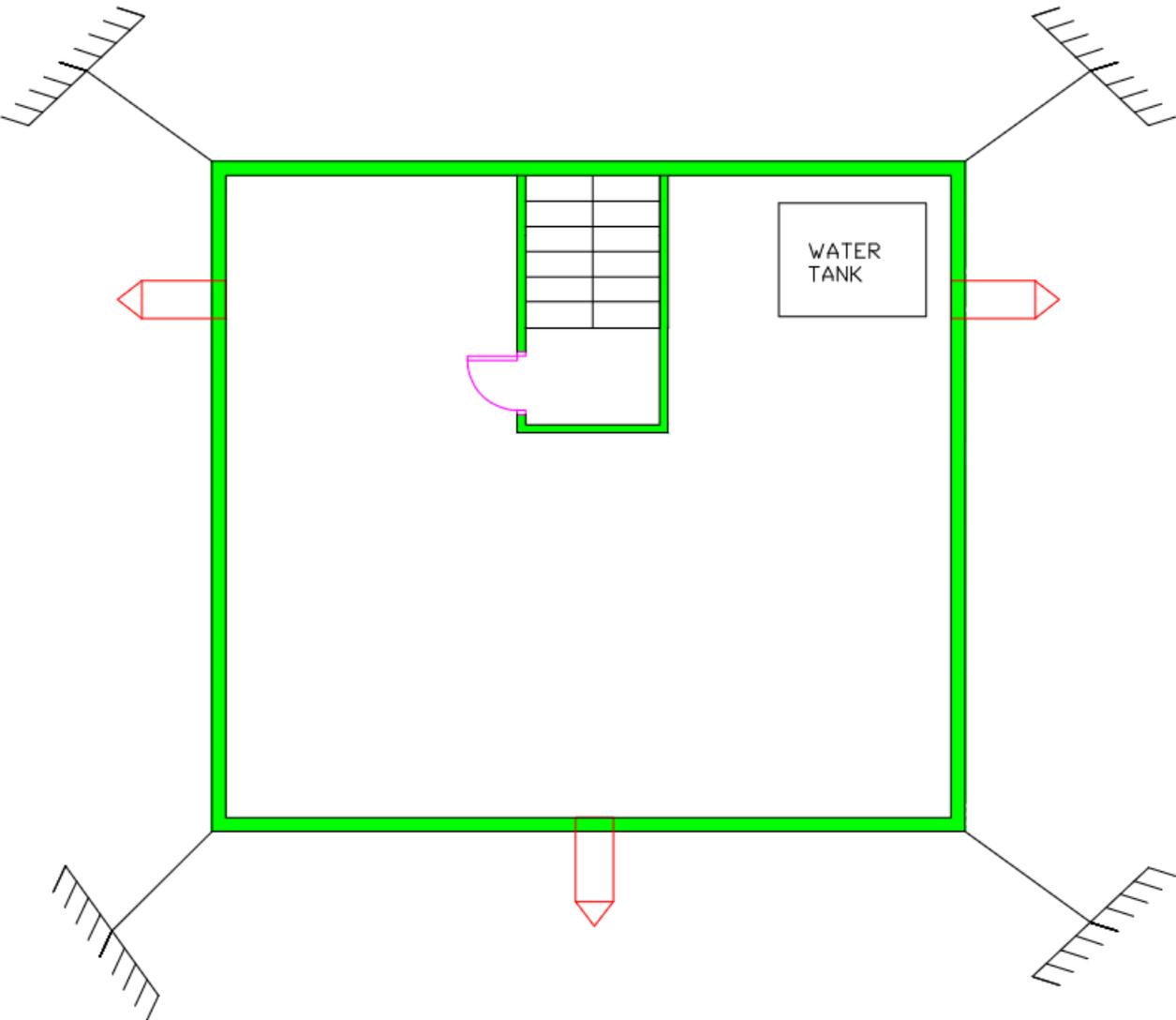## (With Fittings and Fixtures and Conduit Layouts and Legends)

Ground Plan

Floor 2-3 Plan

Roof Plan with Air Terminals

WATER
TANK

SDB Connection Diagram

SDB · SDB · SDB · SDB · SDB · SDB · SDB

CKT1 · CKT2 · CKT3 · CKT4 · CKT5 · CKT6 · CKT7

2 x 1.5 rm BYM + 1.5 BYA Ecc

2 x 1.5 rm BYM + 1.5 BYA Ecc

SB1 · SB10 · SB2 · SB3 · SB4 · SB5 · SB6 · SB7 · SB8 · SB9

2 x 1.5 rm BYM

LT3 · F2 · LT1 · F4 · CL2 · LB6 · LT4 · F1 · LB4 · CL3 · LB6 · LB5 · F3 · LT2 · LB1 · CL2

ESDB Connection Diagram

ESDB   ESDB

CKT1'   CKT2'   2 x 1.5 rm BYM +
                                          1.5 BYA Ecc

| ESB1 | | ESB2 |

                                          2 x 1.5 rm BYM

LB2   LB3
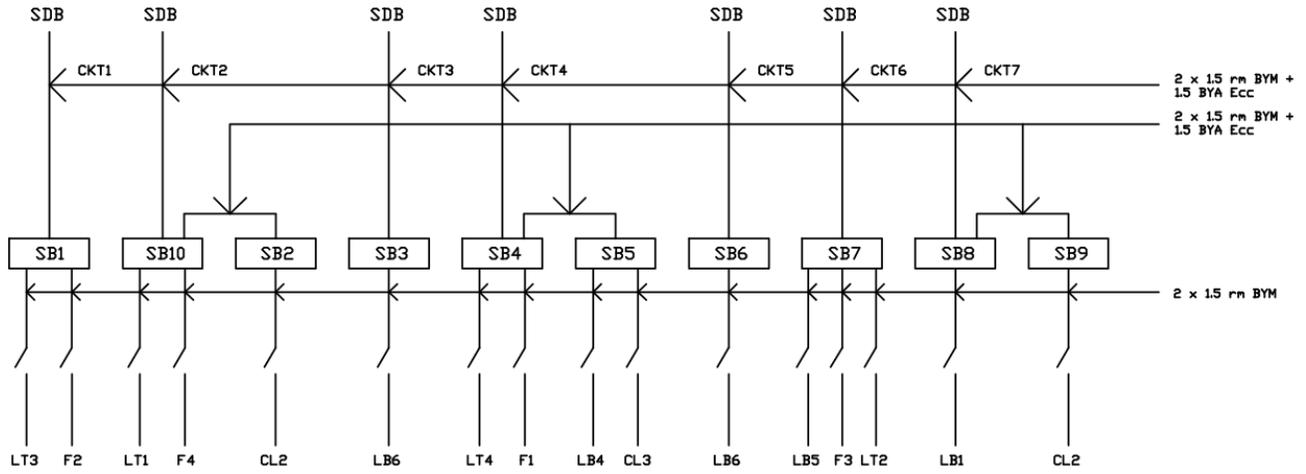
MDB Connection Diagram

MDB

SDB

5A

CKT1   CKT2   CKT3   CKT4   CKT5   CKT6   CKT7   P1
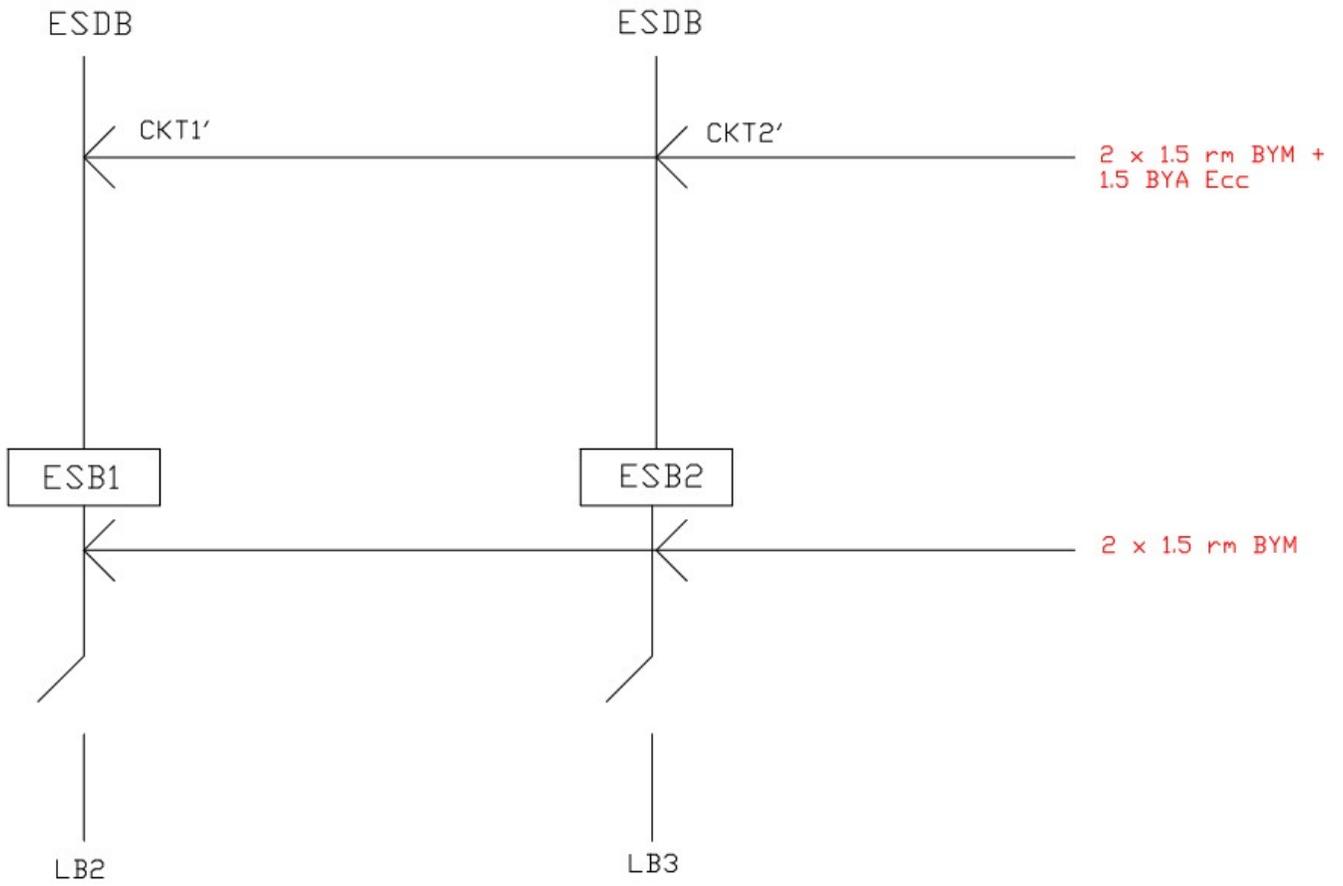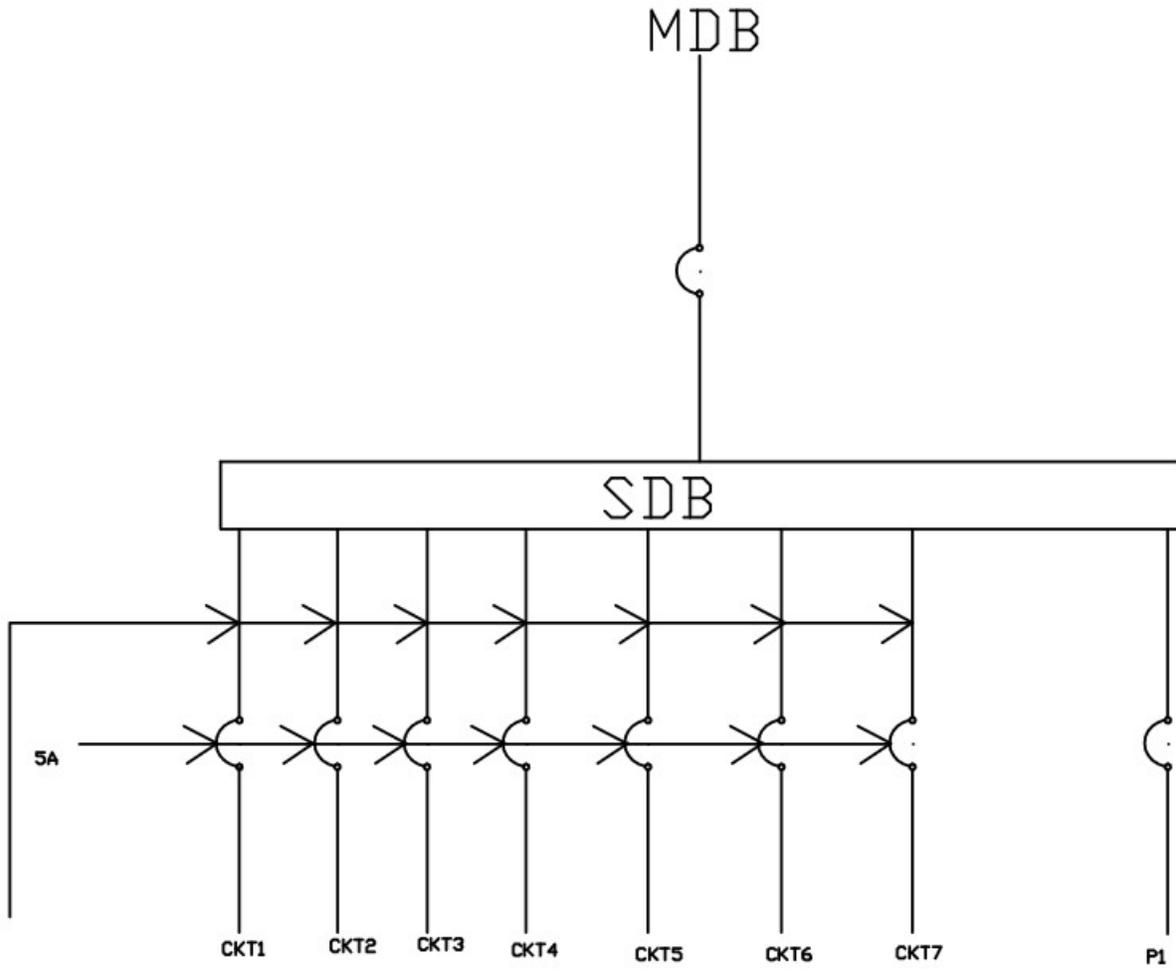
Calculations

No of Lights = $\dfrac{E \times A}{n \times F \times UF \times LLF}$ = 0.09290304 x A (A in m^2) = 0.0105 x A (A in sq ft)

No of Fans = 0.01 x A (A in sq ft)

Dining Room:
Area = 9' - 3" x 12' – 11" = 119.5 sq ft
No of Lights = 1.25 (1 Light Bulb, 1 Tube Light)
No of Fans = 1.2 ≈ 1

Bedroom A:
Area = 10' - 6" x 12' – 11" = 135.6 sq ft
No of Lights = 1.42 (1 Light Bulb, 1 Tube Light)
No of Fans = 1.35 ≈ 1

Bedroom B:
Area = 11' x 10' – 10" = 120 sq ft
No of Lights = 1.25 (1 Light Bulb, 1 Tube Light)
No of Fans = 1.2 ≈ 1

Drawing Room:
Area = 11' x 9' - 6" = 105 sq ft
No of Lights = 1.08 (1 Light Bulb, 1 Tube Light)
No of Fans = 1.05 ≈ 1

Veranda:
Area = 12' x 3' – 1" = 37
No of Lights = 0.37 (1 Light Bulb)