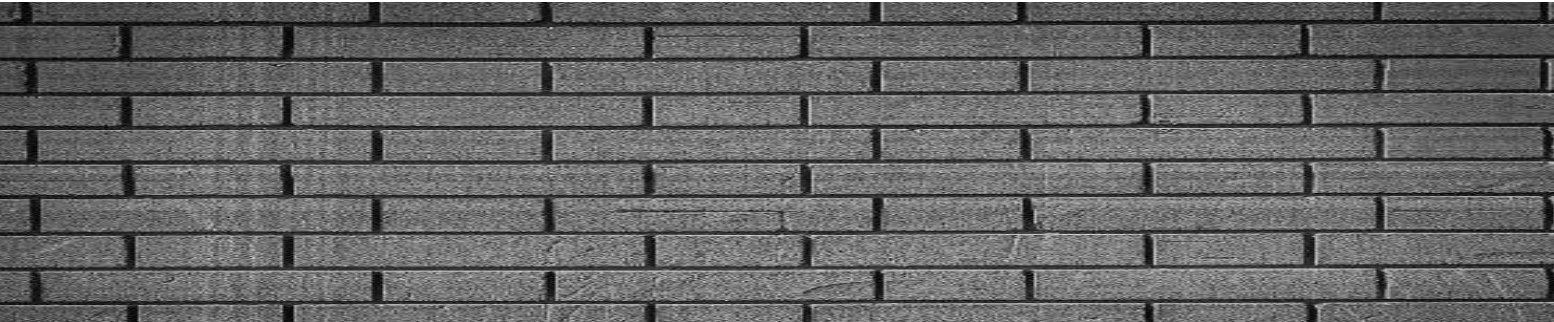


# Building Construction



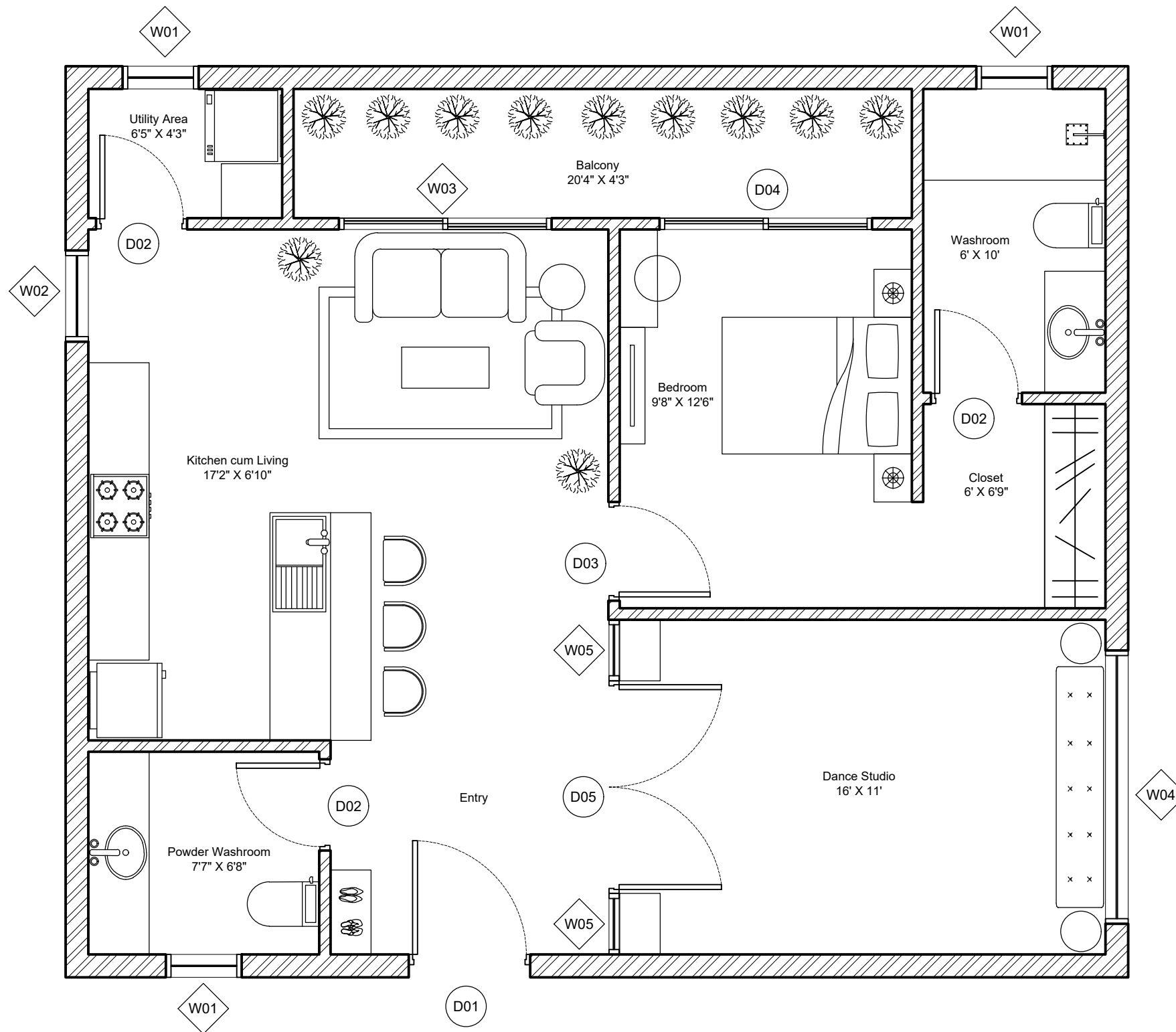
NITIKA BAJAJ



Academy of Applied Arts

60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:



Title:

## Door and Window Marking

Sheet No.:

# A02

Date:

01/04/2023

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



Academy of Applied Arts

60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:

Title:

**Door & Window  
Schedule**

Sheet No.:

**A03**

Date:

**01/04/2023**

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts

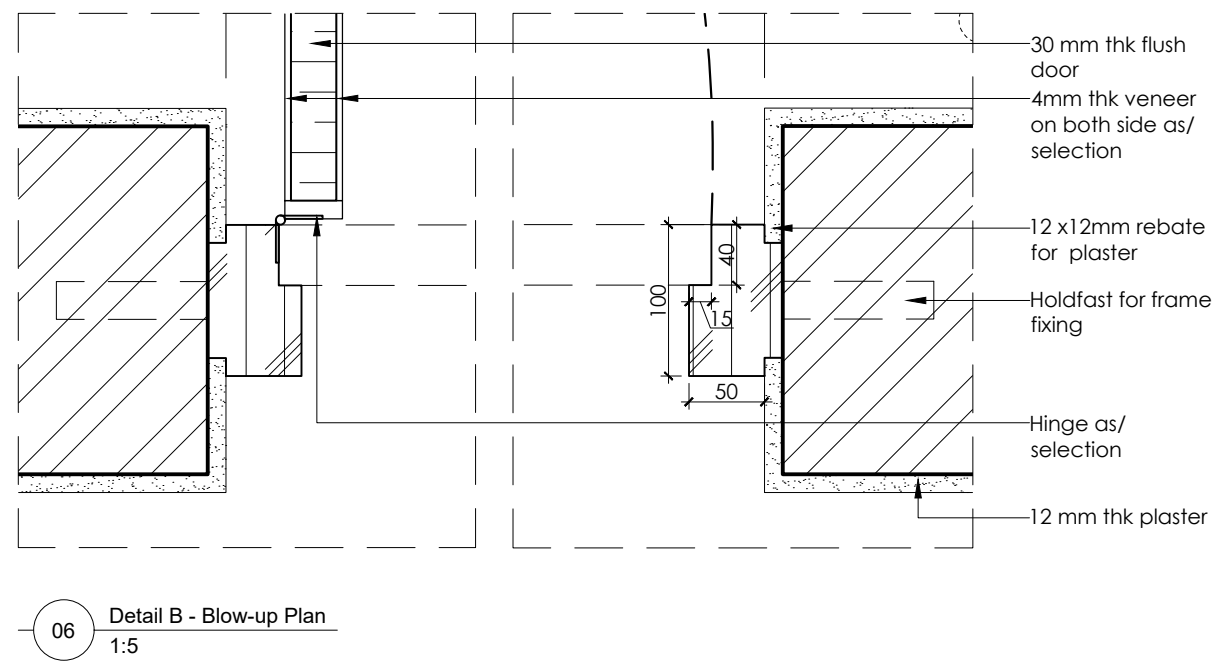
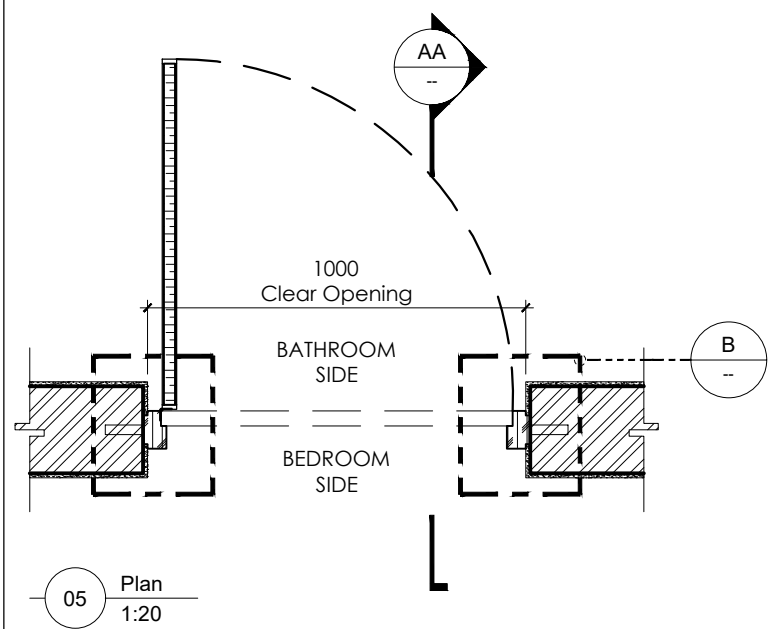
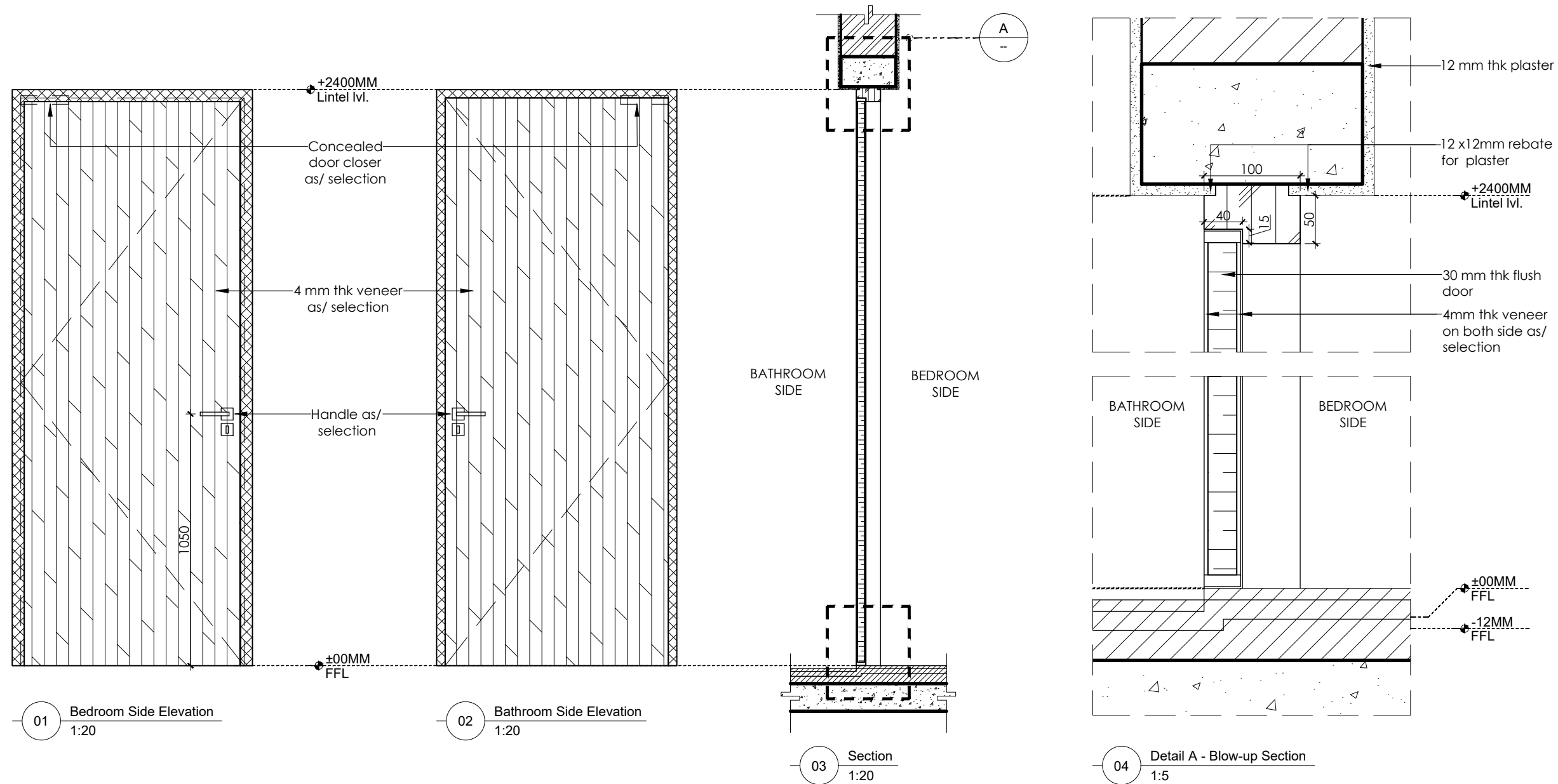
Door and Window Schedule										
Sl. No.	Code No.	Width	Sill (FFL)	Lintel (FFL)	Height	Area	Quantity	Areas	Shutter / Panel	Frame
		feet inches	feet inches	feet inches	feet inches	sq. ft				
Doors										
1	D01	4	0	8	8	32	1	Main Entry Door	Hinged - Veneer	Wooden Frame
2	D02	3	0	8	8	24	3	Powder Washroom, Washroom, Utility Area	Hinged - Veneer	Wooden Frame
3	D03	3.3	0	8	8	26.4	1	Bedroom	Hinged - Veneer	Wooden Frame
4	D04	7	0	8	8	56	1	Bedroom + Balcony	UPVC Sliding - 2 Panel Glass	UPVC
5	D05	7	0	8	8	56	1	Studio	Sashed - Double Door	Aluminium
Windows										
1	W01	2.6	5	8	3	7.8	3	Powder Washroom, Washroom, Utility Area	UPVC Fixed + Top Hung	UPVC
2	W02	3	1	8	7	21	1	Kitchen	UPVC Fixed Glass	UPVC
4	W03	7	1	8	7	49	1	Living + Balcony	UPVC Sliding - 2 Panel Glass	UPVC
5	W04	7	0.5	8	7.5	52.5	1	Studio	Fixed Glazed - 3 Track Arch	Aluminium
6	W05	2	0.5	8	7.5	15	2	Studio	Fixed Glazed	Aluminium



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Delhi - 110024

Remarks:



Title:

# Flush Door Detailed Drawing

Layout and Section

Sheet No.:

## A03

Date:

20/03/2023

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



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Remarks:

Title:

# Panel Door Detailed Drawing

Layout and Section

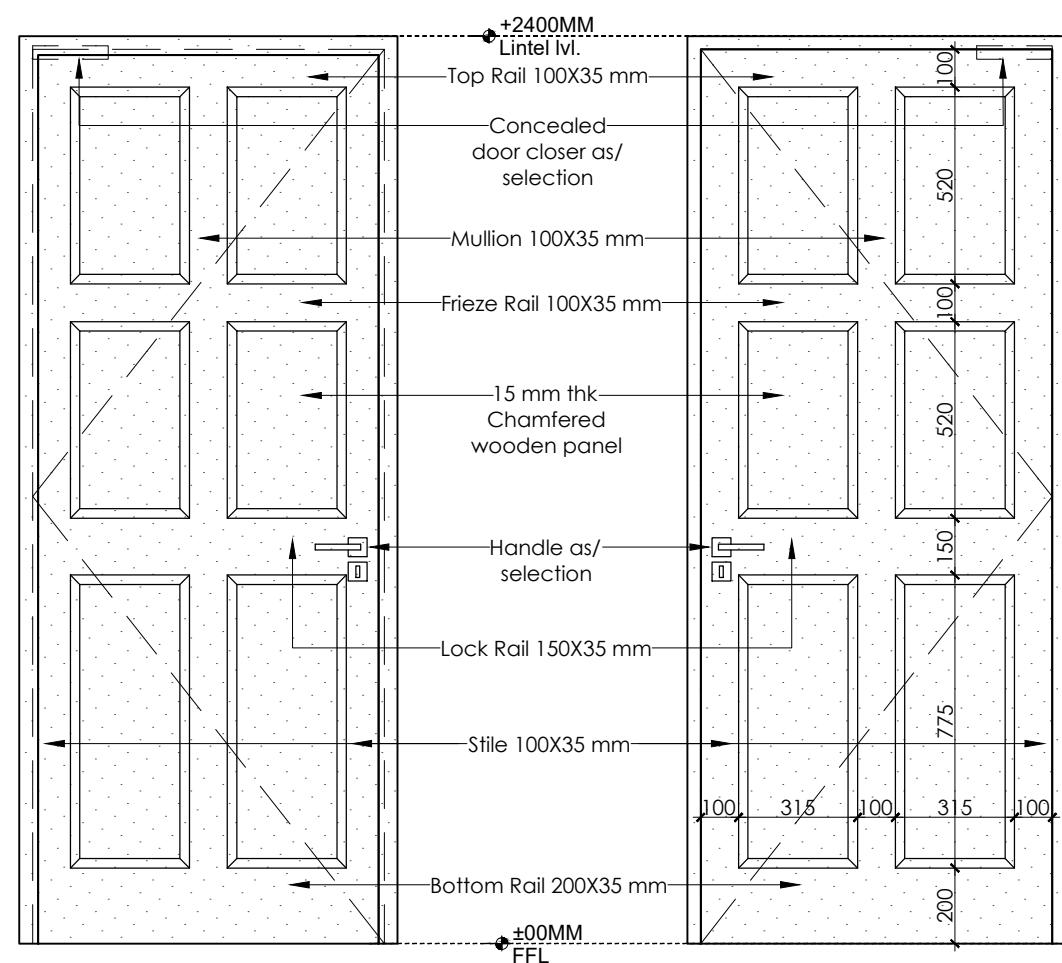
Sheet No.:

## A04

Date:

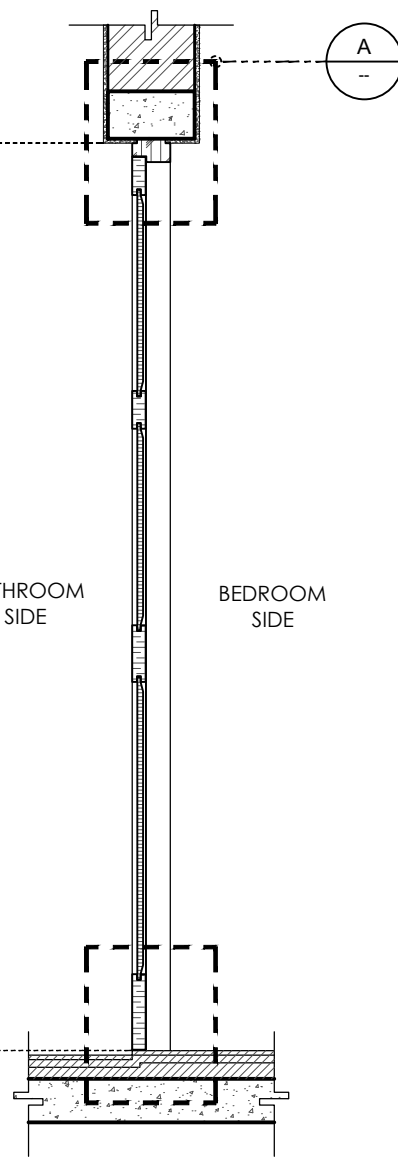
26/05/2023

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts

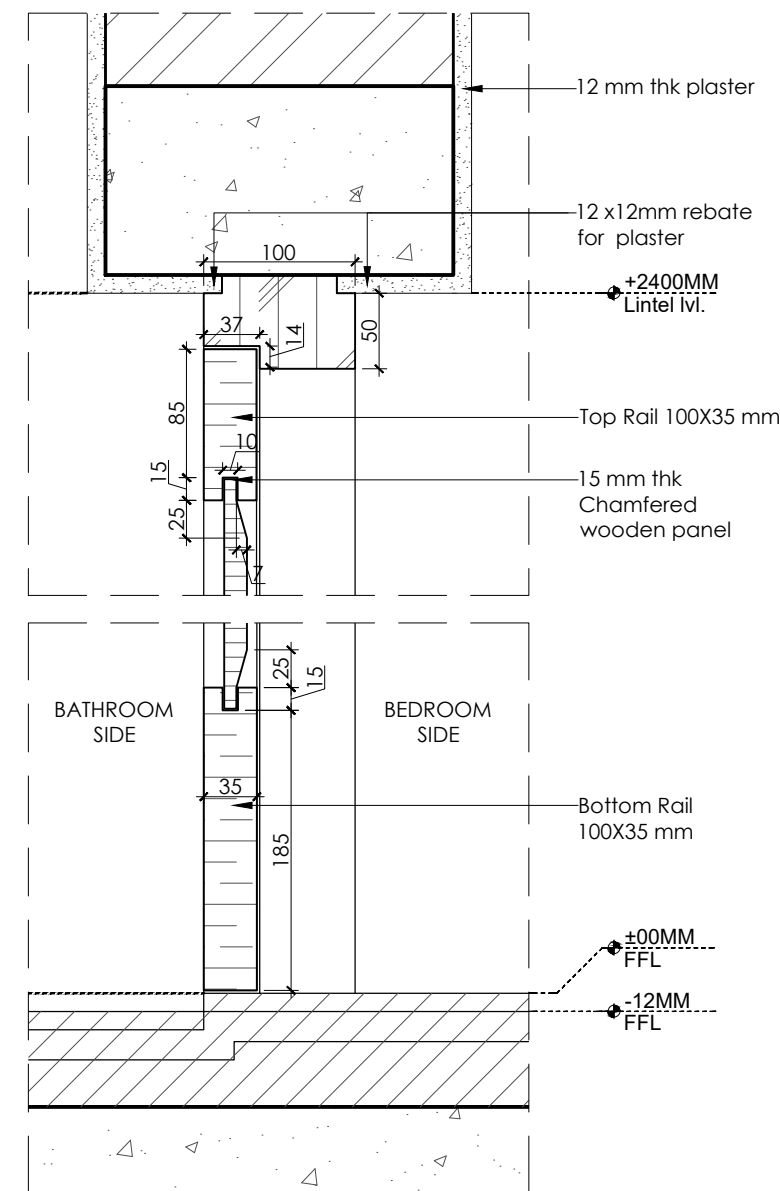


01 Bedroom Side Elevation  
1:20

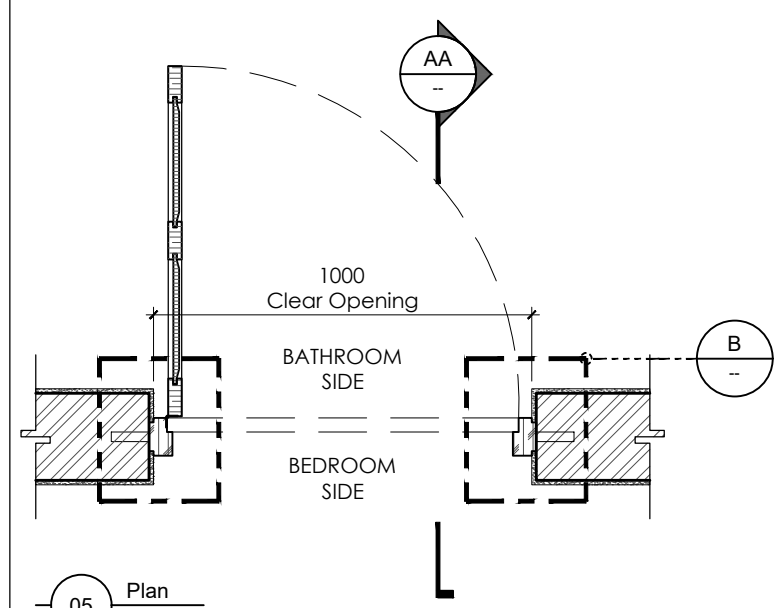
02 Bathroom Side Elevation  
1:20



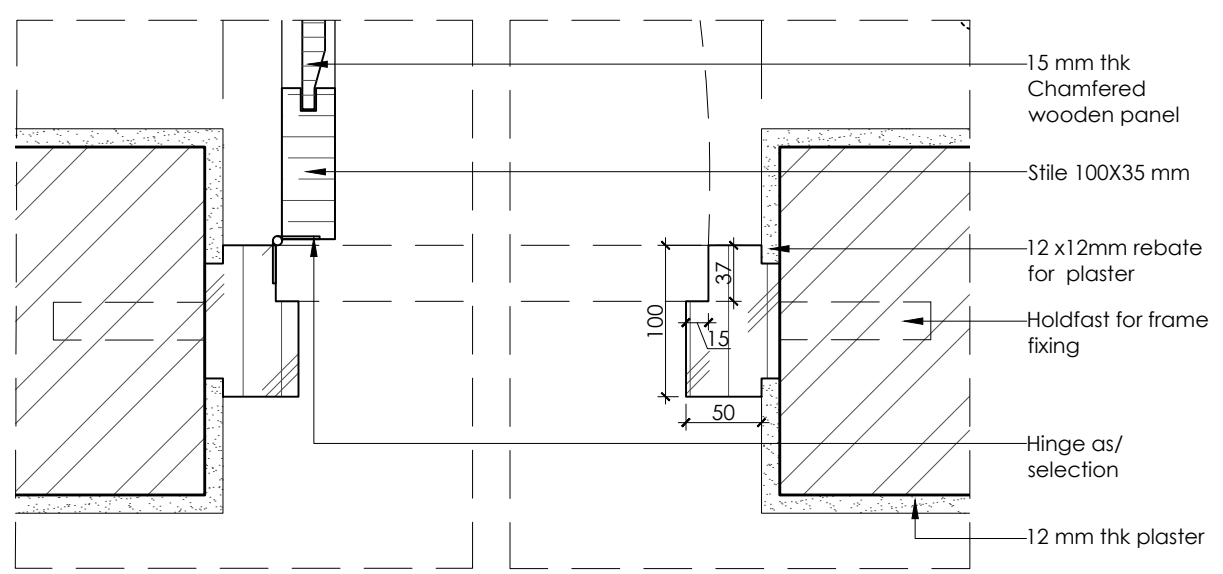
03 Section  
1:20



04 Detail A - Blow-up Section  
1:5



05 Plan  
1:20



06 Detail B - Blow-up Plan  
1:5



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Remarks:

Title:

Window  
Drawing

Layout and Elevation

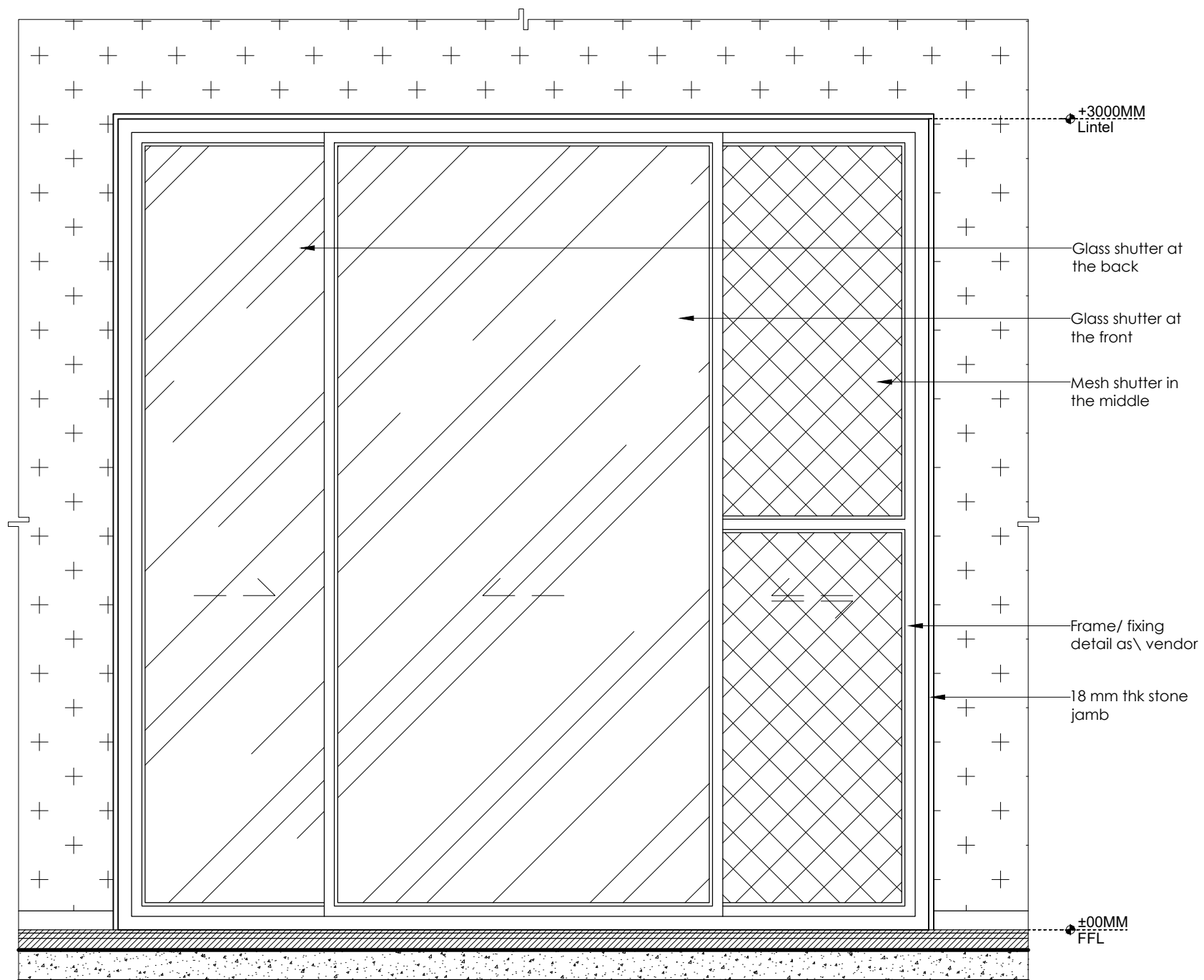
Sheet No.:

A05

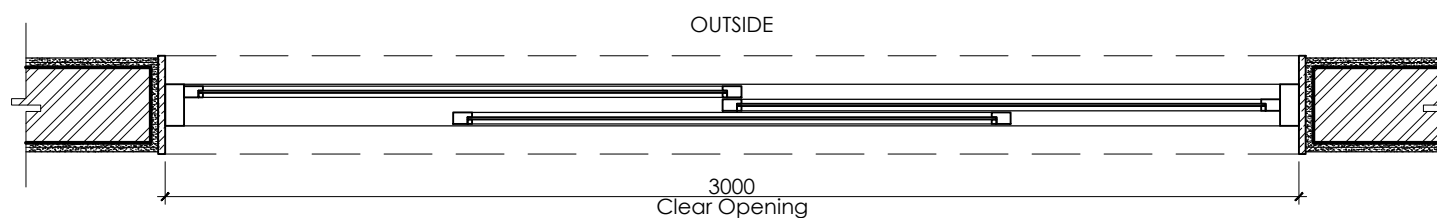
Date:

06/04/2023

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



01 Inside Elevation  
1:20



02 Plan  
1:20



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Remarks:

Title:

# Dog Legged Staircase

Layout and Section

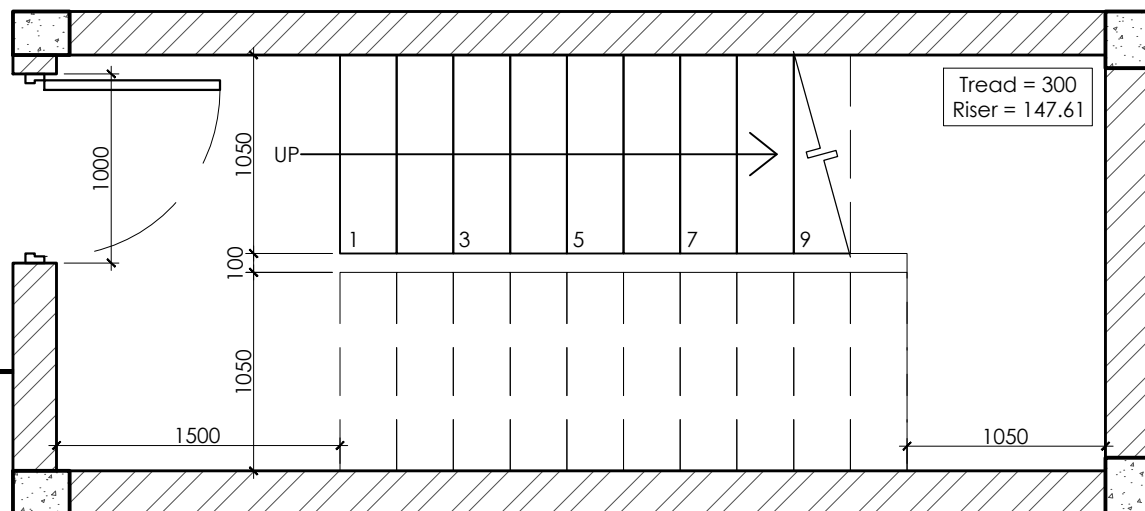
Sheet No.:

## A06

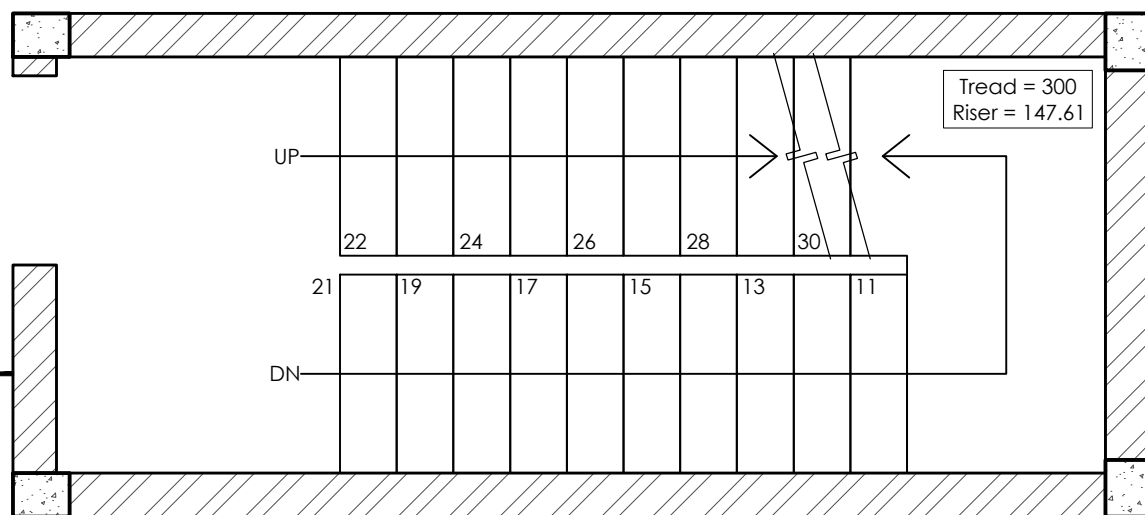
Date:

22/04/2023

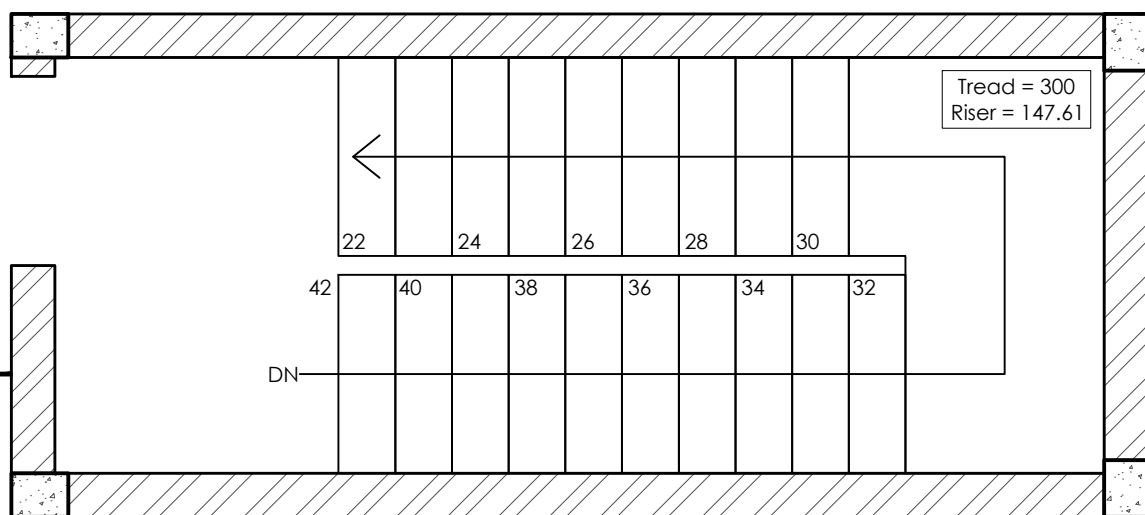
Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



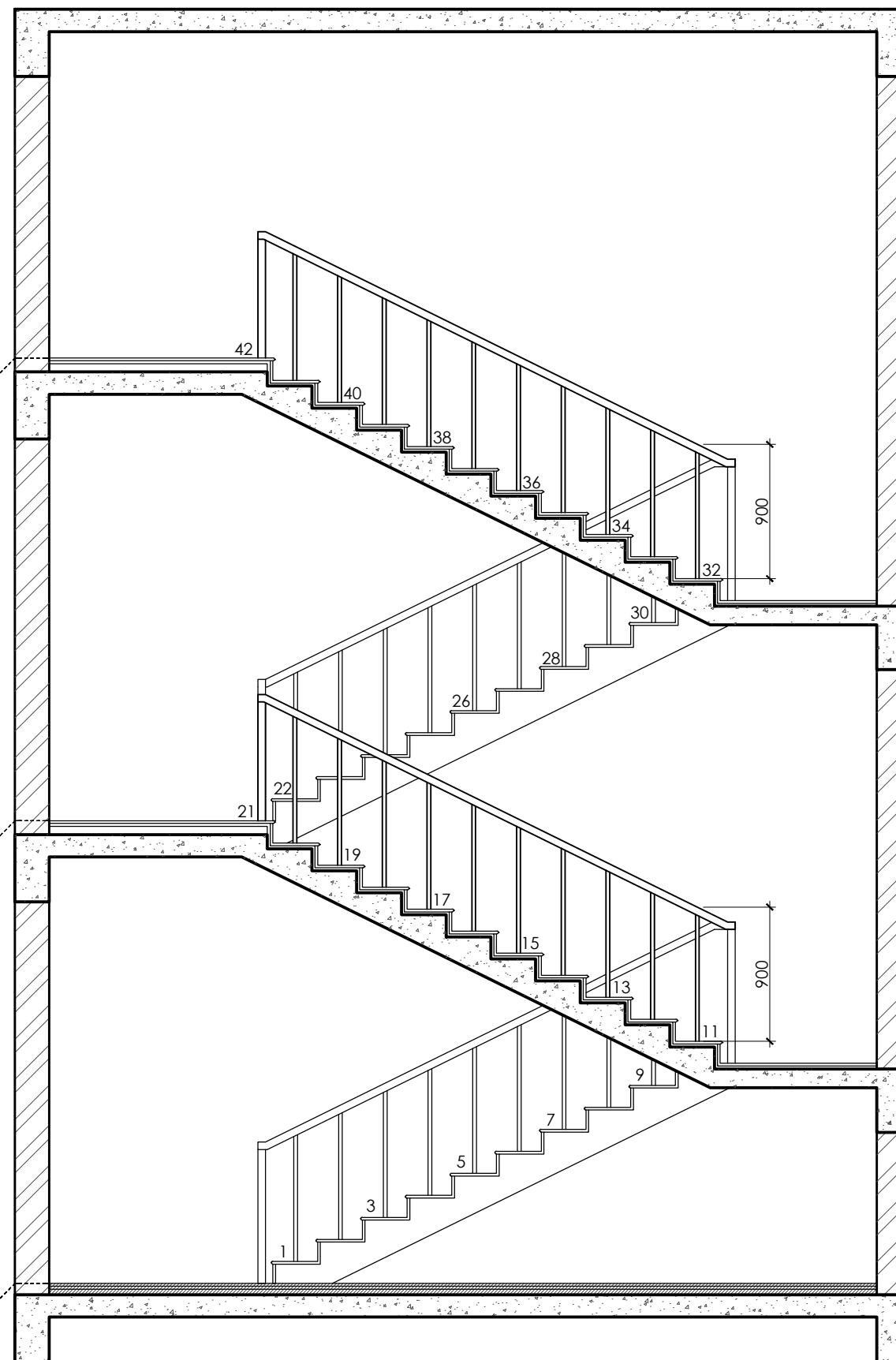
01 GF Plan  
1:40



02 FF Plan  
1:40



03 Mumpty Plan  
1:40



04 Section AA  
1:40

## RISER

Calculating the height of the Riser :

Total clear distance between two floors = 3100 MM

Intended size of the Riser = 150 MM

Number of Risers =  $\frac{\text{Total clear distance between two floors}}{\text{Intended size of the Riser}}$

$$= 3100 / 150$$

$$= 20.6$$

Total number of Risers ( rounding off ) = 21 Risers

( 10 Risers for the first flight and 11 Risers for the second flight )

Fixed height of the Riser =  $\frac{\text{Total clear distance between two floors}}{\text{Total number of Risers}}$

$$= 3100 / 21$$

$$= 147.61$$

Total height of the Riser = 147.61 MM

## TREAD

Calculating the width of the Tread :

Formula :  $2R + T$  ( Where : R = Rise height , T = Tread or Going of a step )

'2R + T' should be in the range of 590 to 650

Calculating Tread width for the range 590 :

$$= 2R + T = 590$$

$$= ( 2 * 147.61 ) + T = 590$$

$$= T = 590 - 295.62$$

$$= T = 294.38 \text{ MM}$$

Calculating Tread width for the range 650 :

$$= 2R + T = 650$$

$$= ( 2 * 147.61 ) + T = 650$$

$$= T = 650 - 295.62$$

$$= T = 354.38 \text{ MM}$$

( Tread width should be in the range of 294.38 MM to 354.38 MM )

Total width of the Tread = 300 MM

## PITCH

Calculating the angle of the Pitch :

Slope of the Pitch =  $\frac{\text{Riser height of a step}}{\text{Tread width of a step}}$

Calculating Pitch Angle for : Riser = 147.61 and Tread = 300

$\tan\theta = \text{Perpendicular} / \text{Base}$

$$\tan\theta = 147.61 / 300$$

$$\tan\theta = 0.492$$

$$\theta = \tan^{-1} ( 0.492 )$$

$$\theta = 26^\circ$$

Calculating Pitch Angle for : Riser = 147.61 and Tread = 325

$\tan\theta = \text{Perpendicular} / \text{Base}$

$$\tan\theta = 147.61 / 325$$

$$\tan\theta = 0.454$$

$$\theta = \tan^{-1} ( 0.454 )$$

$$\theta = 24^\circ$$

Calculating Pitch Angle for : Riser = 147.61 and Tread = 350

$\tan\theta = \text{Perpendicular} / \text{Base}$

$$\tan\theta = 147.61 / 350$$

$$\tan\theta = 0.421$$

$$\theta = \tan^{-1} ( 0.421 )$$

$$\theta = 23^\circ$$



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Delhi - 110024

Remarks:

Title:

**Dog Legged  
Staircase**

**Riser, Tread, Pitch  
Calculation Sheet**

Sheet No.:

**A07**

Date:

**22/04/2023**

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



## RISER CALCULATION



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60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Calculating the height of the Riser :

Total clear distance between two floors = 3000 MM

Intended size of the Riser = 170 MM

Number of Risers =  $\frac{\text{Total clear distance between two floors}}{\text{Intended size of the Riser}}$

$$= 3000 / 170$$

$$= 17.6$$

Total number of Risers ( Rounding off ) = 17 Risers

Fixed height of the Riser =  $\frac{\text{Total clear distance between two floors}}{\text{Total number of Risers}}$

$$= 3000 / 17$$

$$= 176.47$$

Total height of the Riser = 176.47 MM

Remarks:

Title:

**Spiral Staircase**

**Riser  
Calculation Sheet**

Sheet No.:

**A09**

Date:

**29/04/2023**

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts

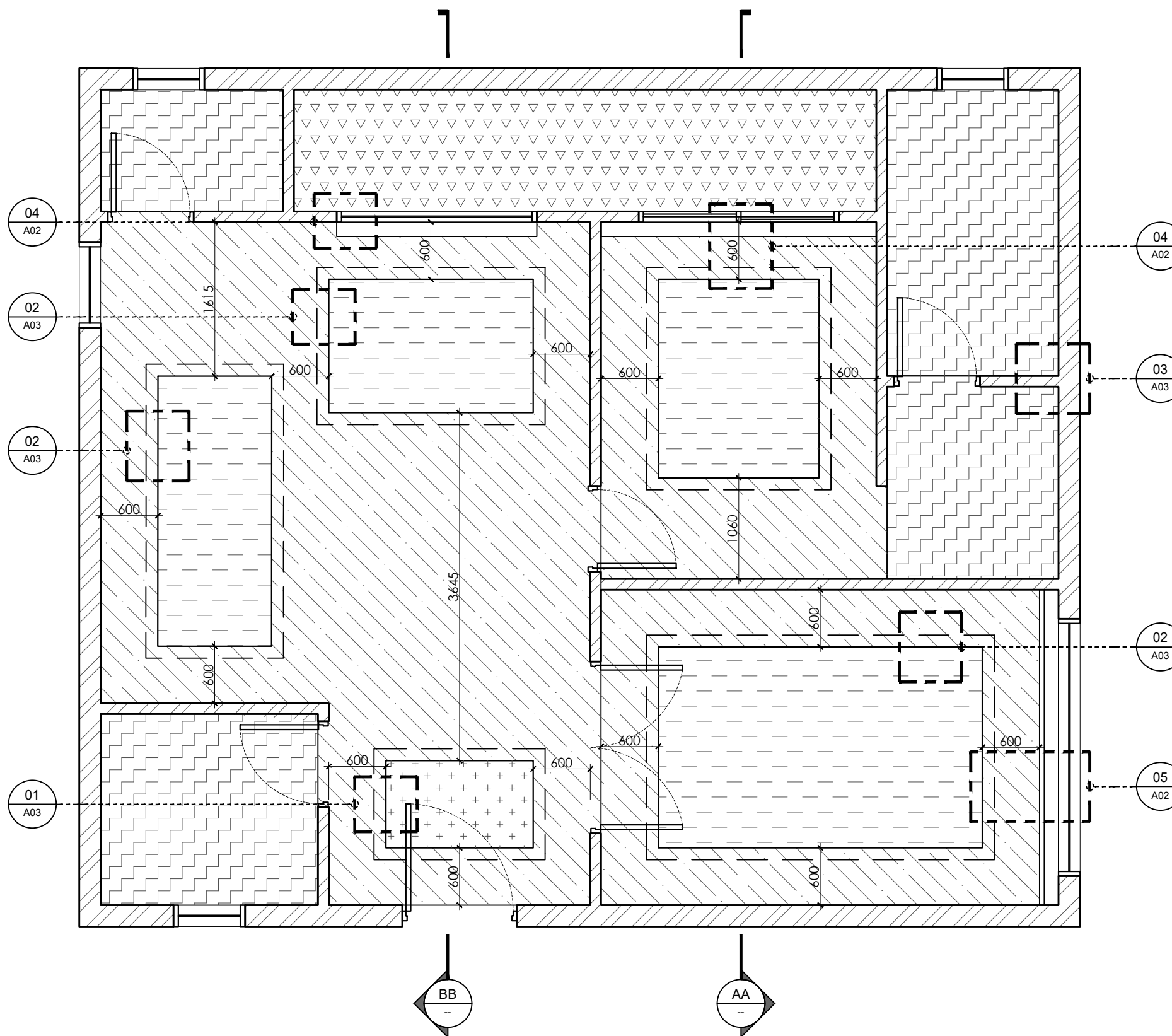


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Remarks:

DISCRIPTION	HATCH	BASE	FRAMING	HEIGHT
PAINT		GYPSUM BOARD MR GRADE	GI	BOTTOM @ +2550MM FFL
PAINT		GYPSUM BOARD	GI	BOTTOM @ +2550MM FFL
PAINT		GYPSUM BOARD	GI	BOTTOM @ +2550MM FFL
PAINT		GYPSUM BOARD	GI	BOTTOM @ +2700MM FFL
PAINT		BOTTOM OF SLAB		



Title:

False Ceiling  
Drawing

Layout

Sheet No.:

C01

Date:

10/05/2023

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts

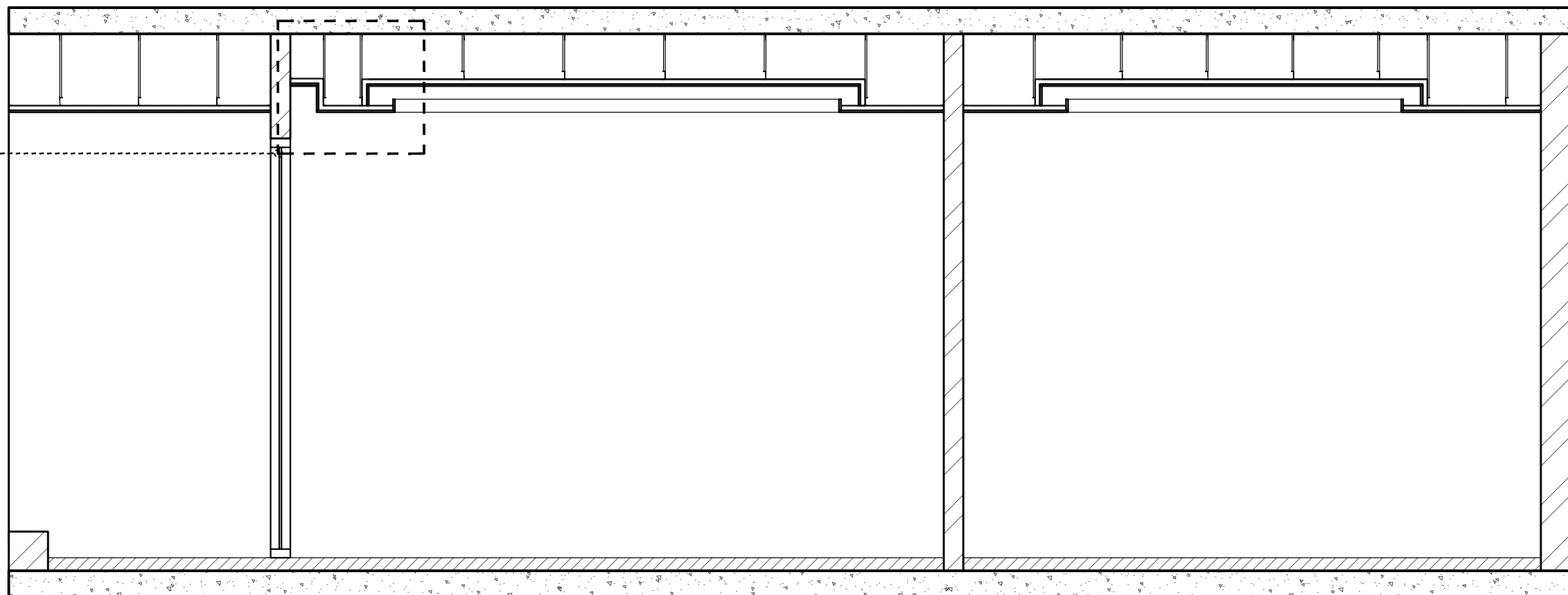


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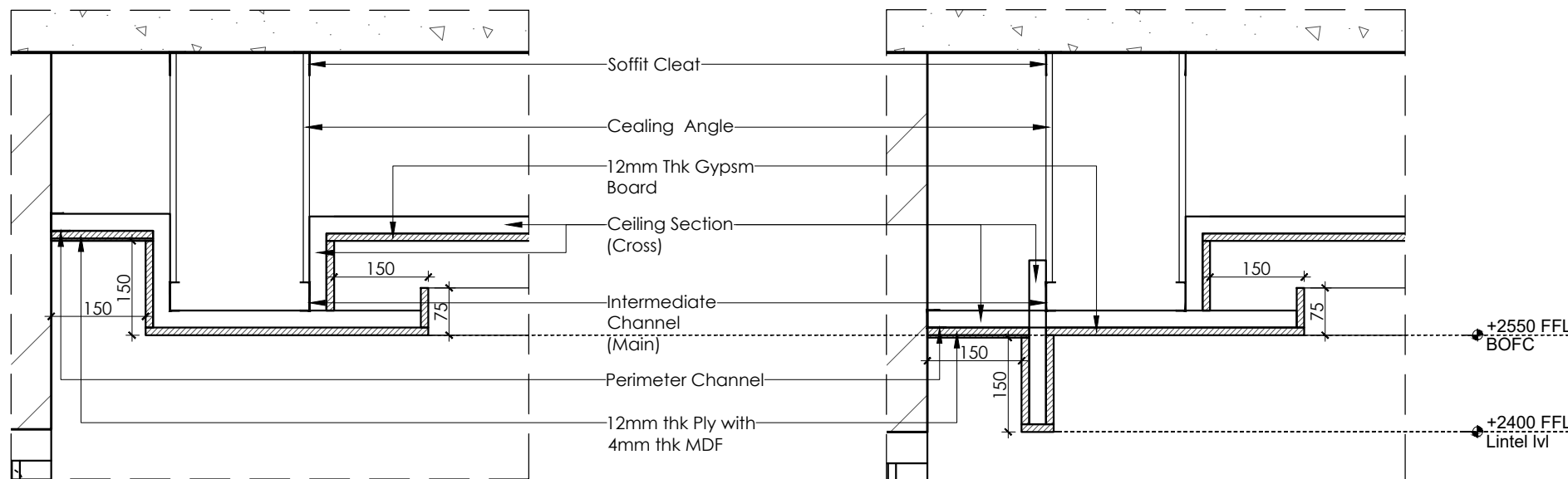
60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:

01  
A03



AA Section AA  
1:30



01 Detail 4 - Inset Pelmet with Cove  
1:10

02 Detail 5 - Visible Pelmet with Cove  
1:10

Title:

# False Ceiling Drawing

Section AA' and BB'

Sheet No.:

## C02

Date:

10/05/2023

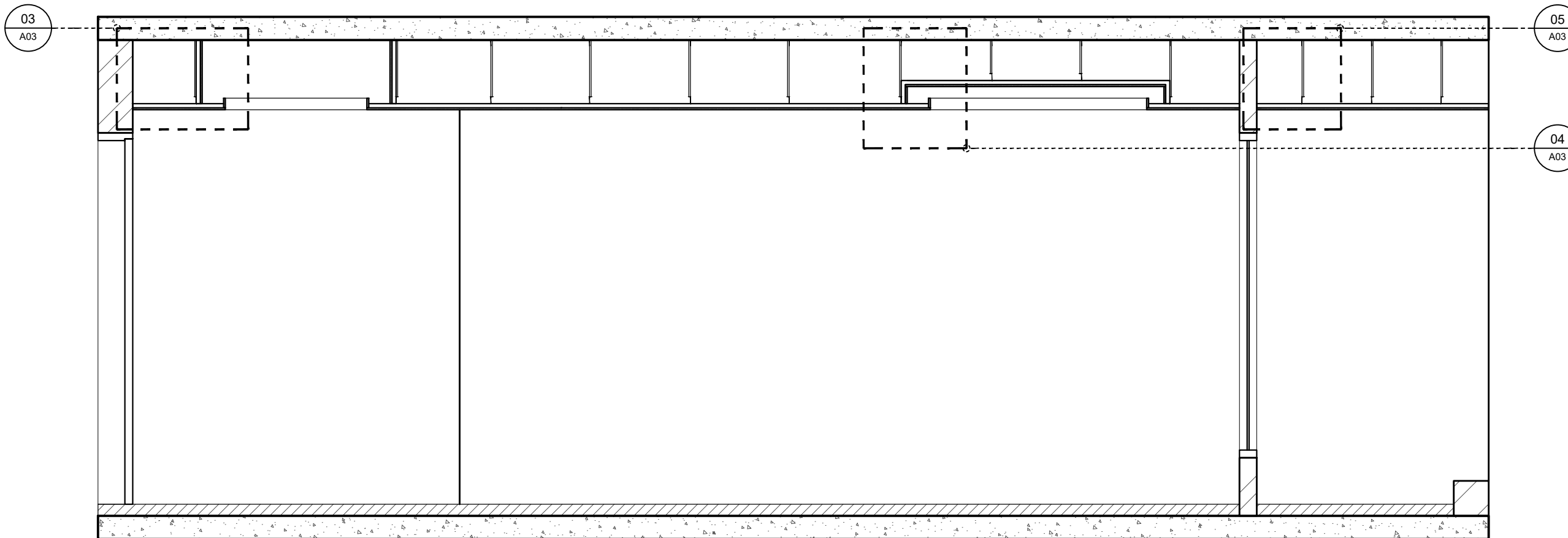
Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



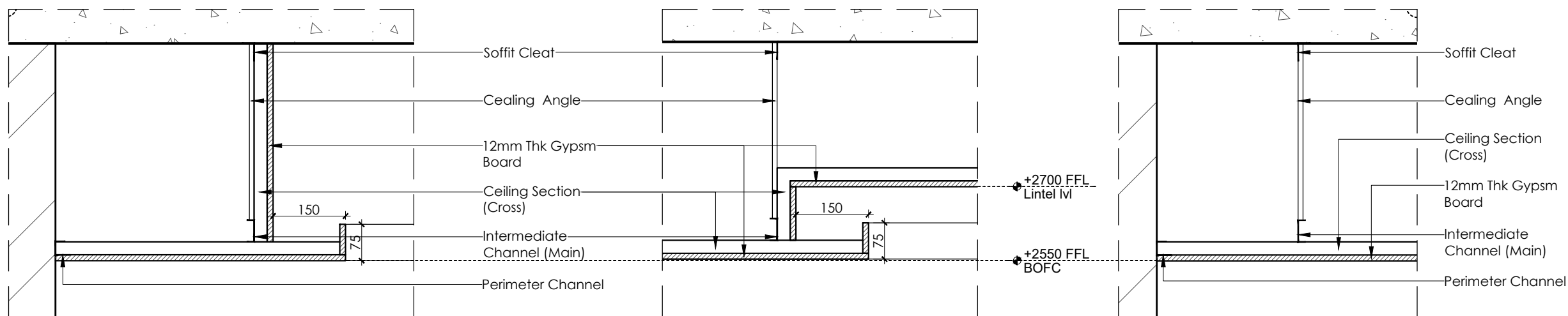
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60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:



BB Section BB  
1:30



03 Detail 1 - Cove to Slab  
1:10

04 Detail 2 - Cove to False Ceiling  
1:10

05 Detail 3 - Flat False Ceiling  
1:10

Title:

# False Ceiling Drawing

Section AA' and BB'

Sheet No.:

## C03

Date:

10/05/2023

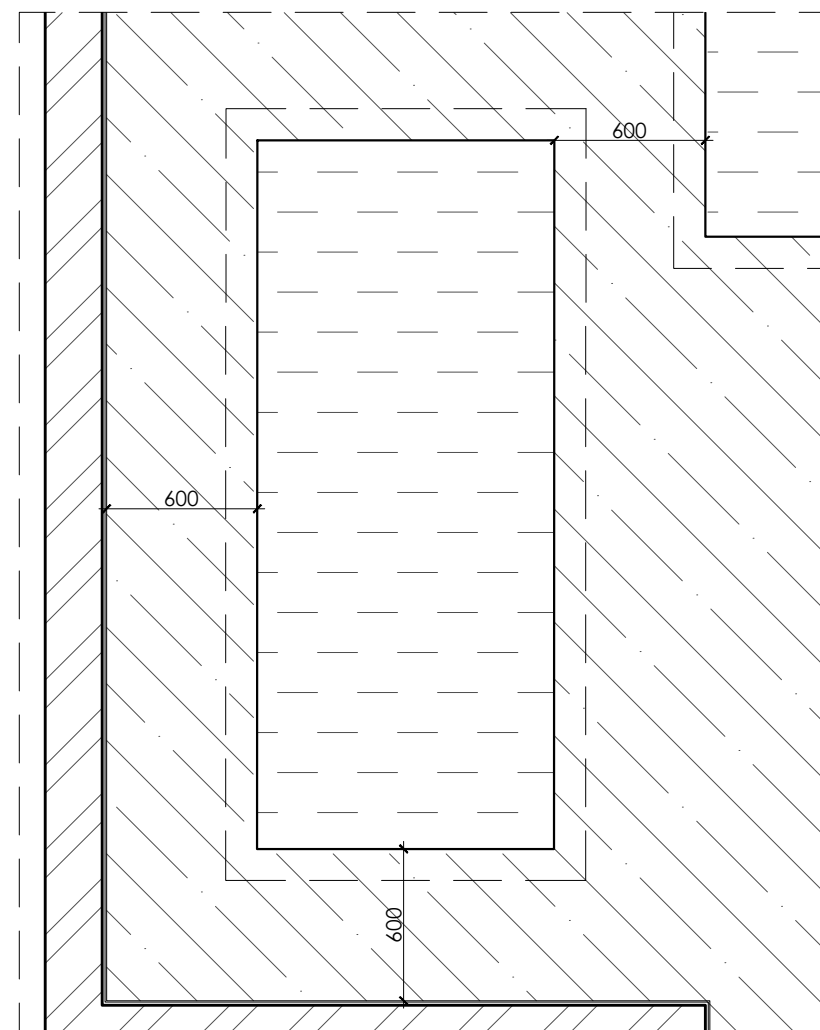
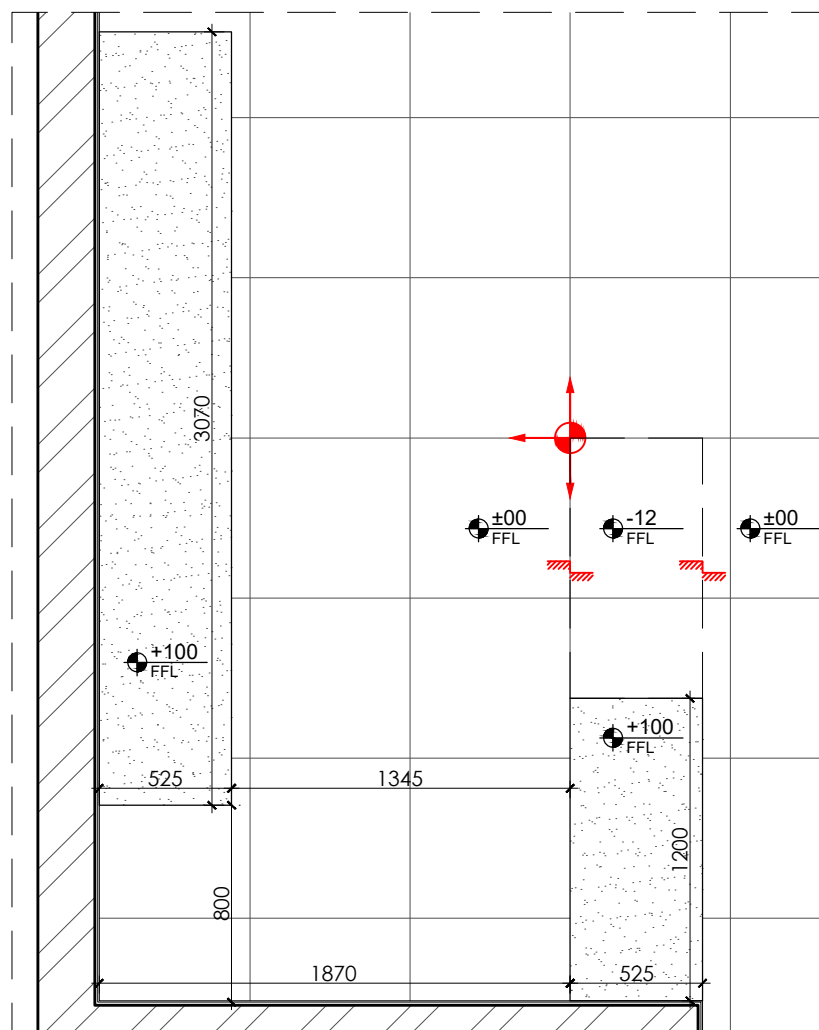
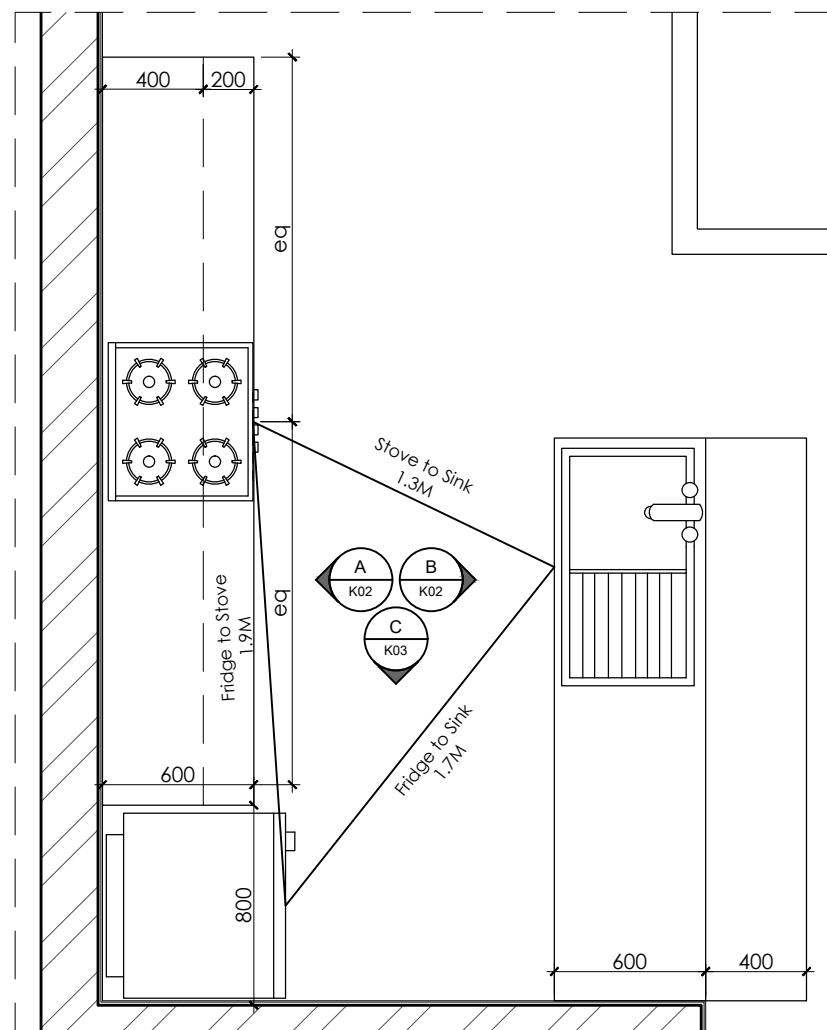
Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



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60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:



01 Interior Layout  
1:30

02 Flooring Layout  
1:30

03 False Ceiling Layout  
1:30

CODE	HATCH	DESCRIPTION
TL-01		ROYAL STONEX BROWN VITRIFIED TILE 600 x 600 MM
		PCC BASE

DISCRIPTION	HATCH	BASE	FRAMING	HEIGHT
PAINT		GYPSUM BOARD	GI	BOTTOM @ +2550MM FFL
PAINT		GYPSUM BOARD	GI	BOTTOM @ +2700MM FFL

04 Flooring Legend  
1:20

05 False Ceiling Legend  
1:20

Title:

**Kitchen Drawing**  
**Layout and Legend**

Sheet No.:

**K01**

Date:

**22/06/2023**

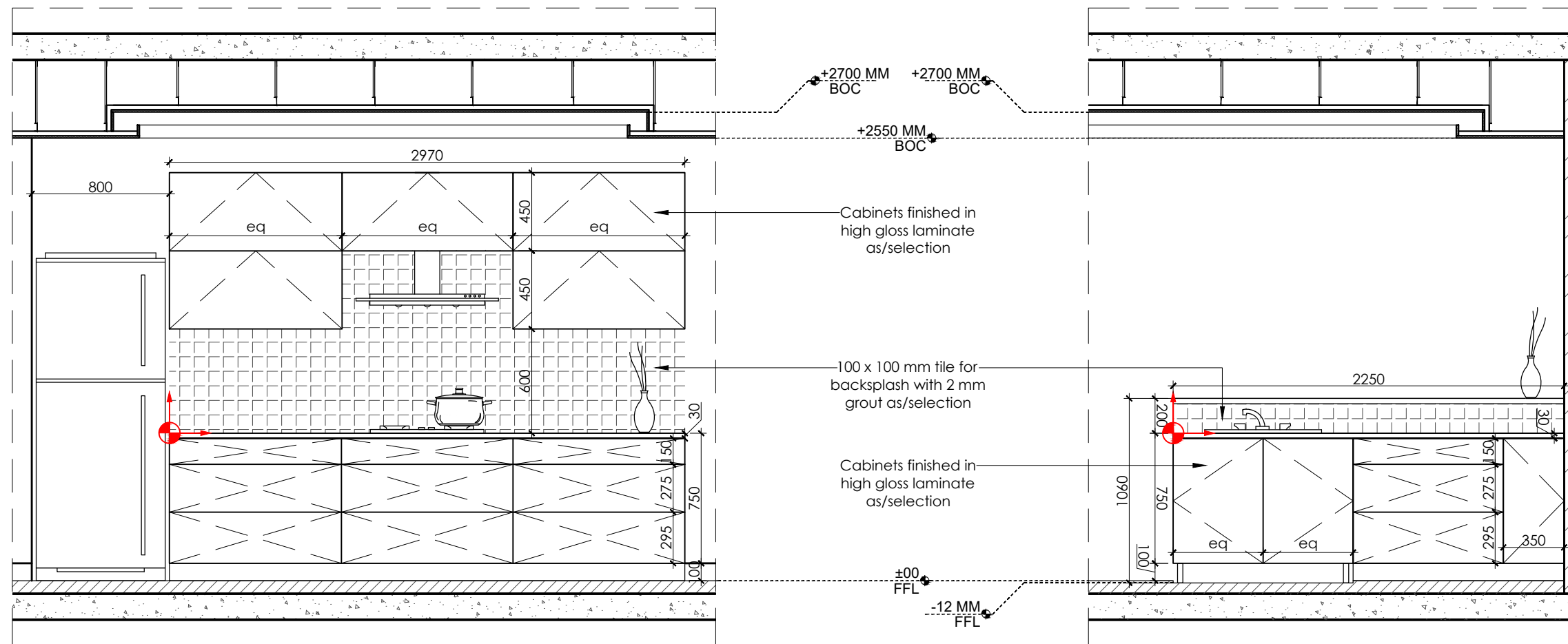
Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



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60 Ring Road, Lajpat Nagar III  
Delhi - 110024

Remarks:



01 Elevation A  
1:30

01 Elevation B  
1:30

Title:

Kitchen Drawing

Section A and B

Sheet No.:

K02

Date:

22/06/2023

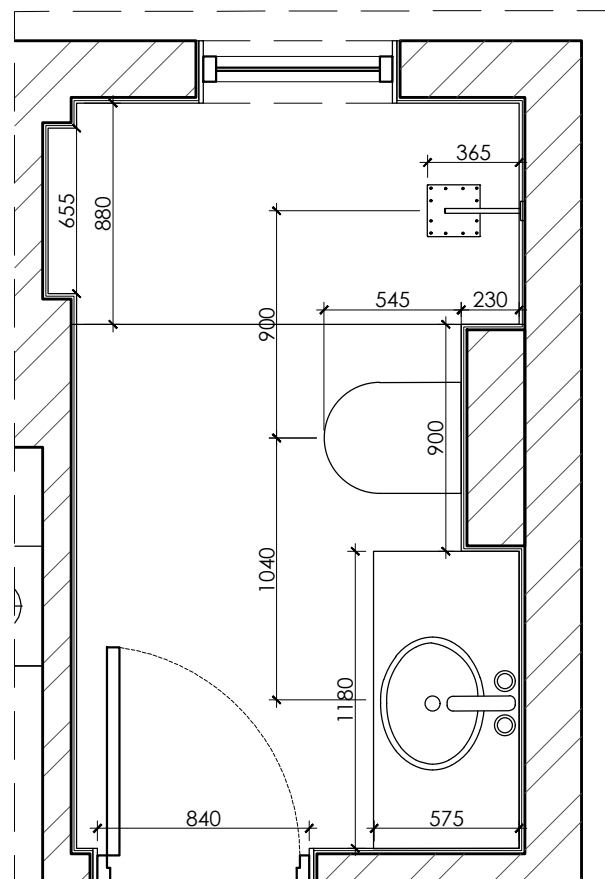
Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts



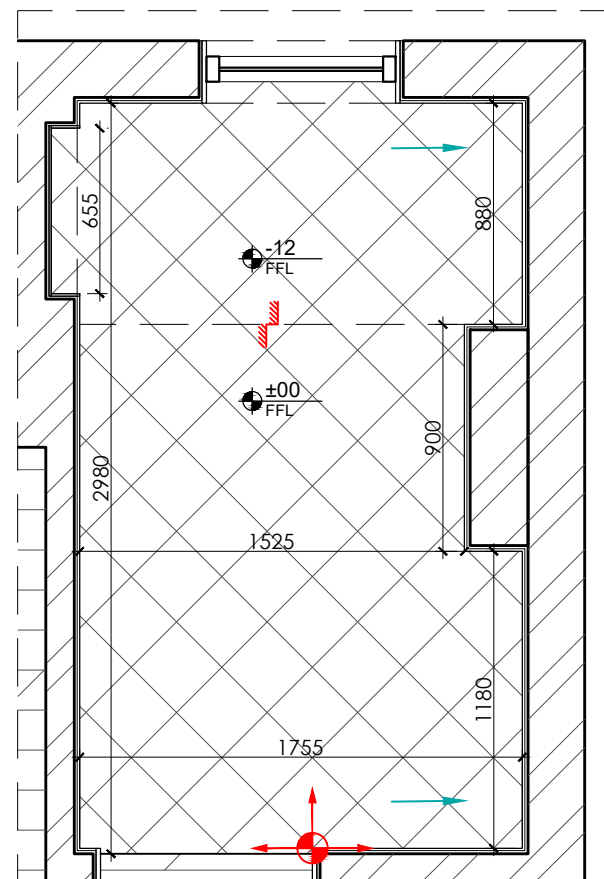
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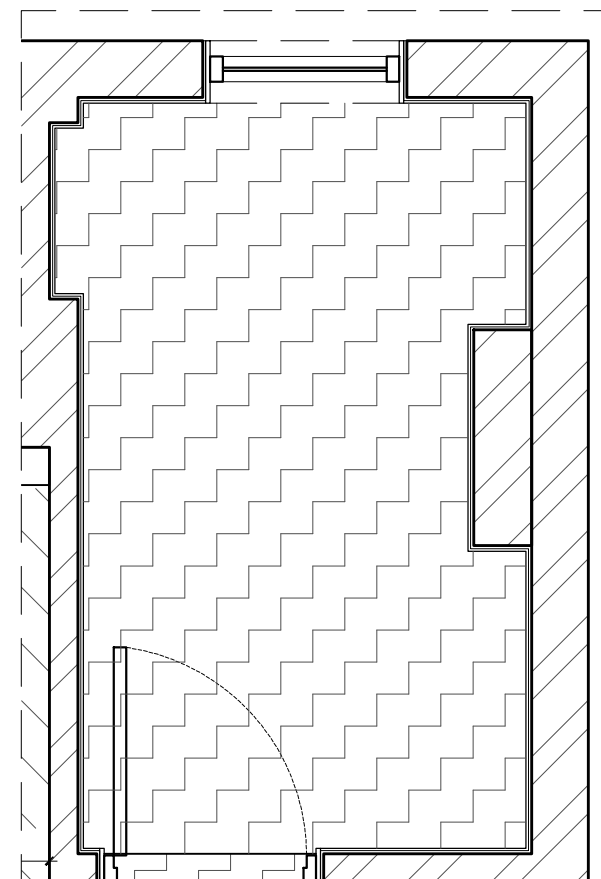
Remarks:



01 Interior Layout  
1:30



02 Flooring Layout  
1:30



03 False Ceiling Layout  
1:30

CODE	HATCH	DESCRIPTION
TL-01		KAJARIA ONICE BIANCA CERAMIC TILE 600 x 600 MM

04 Flooring Legend  
1:20

DISCRIPTION	HATCH	BASE	FRAMING	HEIGHT
PAINT		GYPSUM BOARD MR GRADE	GI	BOTTOM @ +2550MM FFL

05 False Ceiling Legend  
1:20

Title:

**Washroom**  
**Layout and Legend**

Sheet No.:

**W01**

Date:

**30/06/2023**

Name : Nitika Bajaj  
Batch : 12 PROID  
Module : Building Construction  
College : Academy of Applied Arts