# CAPITOL HILLS MIXED-USE DEVELOPMENT



Architectural Technologies Diploma

### **DRAWING LIST**

- A001 COVER PAGE
- A101 CONSTRUCTION ASSEMBLIES & SCHEDULES
- A102 NBC CODE REVIEW
- A201 SITE PLAN
- A301 FOUNDATION & MAIN FLOOR PLAN
- A302 SECOND & THIRD FLOOR PLAN
- A303 ROOF PLAN
- A401 NORTH & SOUTH ELEVATIONS
- A402 EAST & WEST ELEVATIONS
- A501 SECTION 1 & 2
- A601 CONSTRUCTION DETAILS PT.1
- A602 CONSTRUCTION DETAILS PT 2
- A603 STAIR CONSTRUCTION DETAILS
- AP001 DESIGN DEVELOPMENT
- AP101 MAIN FLOOR DESIGN PLAN
- AP102 SECOND & THIRD FLOOR DESIGN PLAN
- AP201 NORTH DESIGN ELEVATION
- AP301 INTERIOR PERSPECTIVES
- AP302 EXTERIOR PERSPECTIVES



No.	Description	Date
110.	Description	Dute
	PRABH KEH	٩L
	4007.00 4\/5	. I. A /

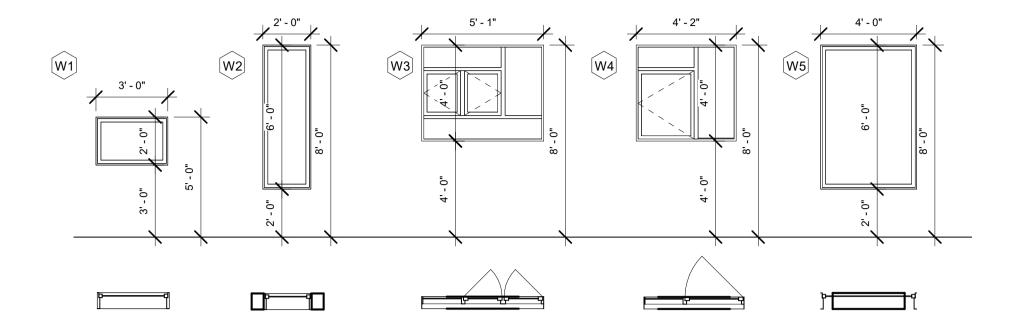
PRABH KEHAL 1837 20 AVE NW COVER PAGE

Project number	
Date	Issue Date
Drawn by	Pł
Checked by	Checke

A001

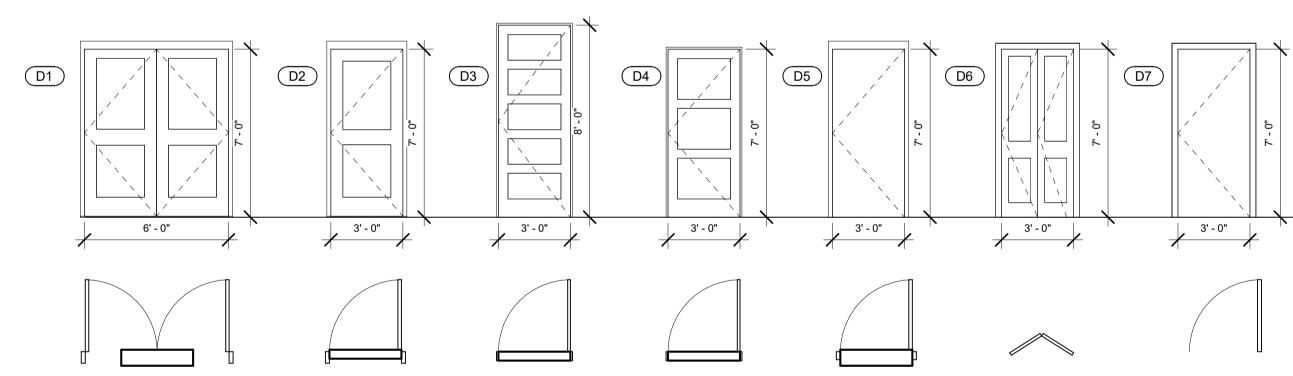
12" = 1'-0"

#### WINDOW SCHEDULE



			Wind	low Schedule				
Window No.	Туре	Level	Quantity	Width	Head Height	Sill Height	Material	Manufacturer
		_	_					
W1	Fixed	MAIN FLOOR	2	3' - 0"	5' - 0"	3' - 0"		
W2	Fixed	SECOND FLOOR	4	2' - 0"	8' - 0"	2' - 0"		
W2	Fixed	THIRD FLOOR	4	2' - 0"	8' - 0"	2' - 0"		
W3	Window-Casement-Double- Sash-Variable	SECOND FLOOR	4	5' - 1"	8' - 0"	4' - 0"		
W3	Window-Casement-Double- Sash-Variable	THIRD FLOOR	4	5' - 1"	8' - 0"	4' - 0"		
W4	Window-Casement-Double- Sidelight	SECOND FLOOR	4	4' - 2"	8' - 0"	4' - 0"		
W4	Window-Casement-Double- Sidelight	THIRD FLOOR	4	4' - 2"	8' - 0"	4' - 0"		
W5	Fixed	SECOND FLOOR	2	4' - 0"	8' - 0"	2' - 0"		
W5	Fixed	THIRD FLOOR	2	4' - 0"	8' - 0"	2' - 0"		

#### DOOR SCHEDULE



		Door S	Schedule			
Door No.	Door Type	Level	Quantity	Width	Height	Materials
D1	Door-Exterior-Double-Two Lite	MAIN FLOOR	1	6' - 0"	7' - 0"	
D2	Door-Exterior-Single-Two Lite	MAIN FLOOR	4	3' - 0"	7' - 0"	
D2	Door-Exterior-Single-Two Lite	SECOND FLOOR		3' - 0"	7' - 0"	
D2	Door-Exterior-Single-Two Lite	THIRD FLOOR	2	3' - 0"	7' - 0"	
D3	Door-Interior-Single-5_Panel_Vert-Wood	SECOND FLOOR	2	3' - 0"	8' - 0"	
D3	Door-Interior-Single-5_Panel_Vert-Wood	THIRD FLOOR	2	3' - 0"	8' - 0"	
D4	Door-Interior-Single-3_Panel_Vert-Wood	SECOND FLOOR	6	3' - 0"	7' - 0"	
D4	Door-Interior-Single-3_Panel_Vert-Wood	THIRD FLOOR	6	3' - 0"	7' - 0"	
D5	Door-Passage-Single-Flush	MAIN FLOOR	4	3' - 0"	7' - 0"	
D6	Bifold-2 Panel	SECOND FLOOR	6	3' - 0"	7' - 0"	
D6	Bifold-2 Panel	THIRD FLOOR	6	3' - 0"	7' - 0"	
D7	Single-Flush	MAIN FLOOR	2	3' - 0"	7' - 0"	

#### CONSTRUCTION ASSEMBLIES WITH FRR AND STC AS PER 9.10 & 9.11

#### **EXTERIOR PARTITION ASSEMBLIES**

#### EXTERIOR CEMENT BOARD WALL ÃW1∙

**ASSEMBLY** FRR: 1h10min RSI: 5.32 15.9mm TYPE X GYPSUM BOARD RESILIENT METAL CHANNEL @ 400mm O.C. 6mil POLYETHYLENE VAPOUR RETARDER (AB & VB) 2x6 WOOD STUD @ 488mm O.C. 5-1/2" R24 MINERAL WOOL 5/8" PLYWOOD SHEATHING WEATHER MEMBRANE 2" SEMI RIGID MINERAL WOOL INSULATION 1" WOOD STRAPPING

14mm CEMENT BOARD PANEL SIDING

#### EXTERIOR CEMENT BOARD WALL ÃW2 **ASSEMBLY**

1" WOOD STRAPPING

FRR: 2h RSI: 5.47 2x 12.7mm TYPE X GYPSUM BOARD 15.9mm TYPE X GYPSUM BOARD RESILIENT METAL CHANNEL @ 400mm O.C. 6mil POLYETHYLENE VAPOUR RETARDER (AB & VB) 2x6 WOOD STUD @ 488mm O.C. 5-1/2" R24 MINERAL WOOL 5/8" PLYWOOD SHEATHING WEATHER MEMBRANE 2" SEMI RIGID MINERAL WOOL INSULATION

14mm CEMENT BOARD PANEL SIDING

#### EXTERIOR LIGHTWEIGHT STONE CLADDING WALL ASSEMBLY FRR: 2h RSI: 5.47 2x 12.7mm TYPE X GYPSUM BOARD

LIGHTWEIGHT STONE CLADDING

EXTERIOR LIGHTWEIGHT STONE

15.9mm TYPE X GYPSUM BOARD

2x6 WOÓD STUD @ 488mm O.C.

5-1/2" R24 MINERAL WOOL 5/8" PLYWOOD SHEATHING

WEATHER MEMBRANE

1" WOOD STRAPPING

1/8" METAL LATH

RESILIENT METAL CHANNEL @ 400mm O.C.

2" SEMI RIGID MINERAL WOOL INSULATION

6mil POLYETHYLENE VAPOUR RETARDER

**CLADDING WALL ASSEMBLY** 

FRR: 1h10min RSI: 5.32

(AB & VB)

15.9mm TYPE X GYPSUM BOARD RESILIENT METAL CHANNEL @ 400mm O.C. 6mil POLYETHYLENE VAPOUR RETARDER (AB & VB) 2x6 WOOD STUD @ 488mm O.C. 5-1/2" R24 MINERAL WOOL 5/8" PLYWOOD SHEATHING WEATHER MEMBRANE 2" SEMI RIGID MINERAL WOOL INSULATION 1" WOOD STRAPPING 1/8" METAL LATH LIGHTWEIGHT STONE CLADDING



## **SSAIT** School of Construction

Architectural Technologies Diploma

#### INTERIOR PARTITION ASSEMBLIES

> INTERIOR PARTITION 1/2" GYPSUM BOARD 2x4 WOOD STUD @ 24" O.C. 1/2" GYPSUM BOARD



INTERIOR SHAFT PARTITION 1/2" GYPSUM BOARD 2x4 Wood Stud @ 24" O.C.

#### P2 FIRE RATED INTERIOR PARTITION FRR: 1h STC: 54 (W4b) 2x 15.9mm TYPE X GYPSUM BOARD

RESILIENT METAL CHANNEL @ 400mm O.C. 2x4 WOOD STUD @ 600mm O.C. 15.9mm TYPE X GYPSUM BOARD

#### **ROOF ASSEMBLIES**

NON-VENTED FLAT ROOF FRR:50min RSI:6.54

**MONOTRUSS ROOF** 

FRR:50min RSI: 4.61 ASPHALT SHINGLES

LOOSE BALLAST FILTER FABRIC FIBRE BOARD 2" SEMI-RIGID MINERAL WOOL INSULATION 100mm POLYISOCYANURATE INSULATION BUILT-UP ROOFING (WATER PROOFING MEMEBRANE) OSB SHEATHING W/ INTEGRATED WATER

RESISITANT BARRIER (VB & AB) SLOPED CROSS PURLINS 11-7/8" WOOD I-JOIST @ 400mm O.C. RESILIENT METAL CHANNEL @ 400mm O.C. 15.9mm TYPE X GYPSUM BOARD

WEATHER MEMBRANE PLYWOOD SHEATHING MONOTRUSS PRE-FABRICATED W/ METAL PLATE @ 600mm O.C. R40 DRY CELLULOSE BLOWN-IN INSULATION 6 MIL POLYETHELYNE VAPOUR RETARDER (AB & VB) RESILIENT METAL CHANNEL @ 400mm

15.9mm Type X Gypsym Board



#### **FLOOR ASSEMBLIES**

MAIN FLOOR FIRE SEPARATION FRR: 1h STC: 52 (f9c)

5/8" PLYWOOD SHEATHING WOOD I-JOIST @ 19.2" O.C. BLOWN-IN DRY CELLULOSE RESILIENT METAL CHANNEL @ 400mm O.C, 15.9mm TYPE X GYPSUM BOARD

12.7mm TYPE X GYPSUM BOARD

SECOND & THIRD FLOOR FIRE **SEPARATION** 

FRR: 2h5min STC: 52 5/8" PLYWOOD SHEATHING WOOD I-JOIST @ 19.2" O.C. **BLOWN-IN DRY CELLULOSE** RESILIENT METAL CHANNEL @ 400mm O.C. 3x 15.9mm TYPE X GYPSUM BOARD

PRABH KEHAL

1837 20 AVE NW

CONSTRUCTION ASSEMBLIES &

	Project numbSCHFDUIFS	1
	Date Issue D	ate

Drawn by

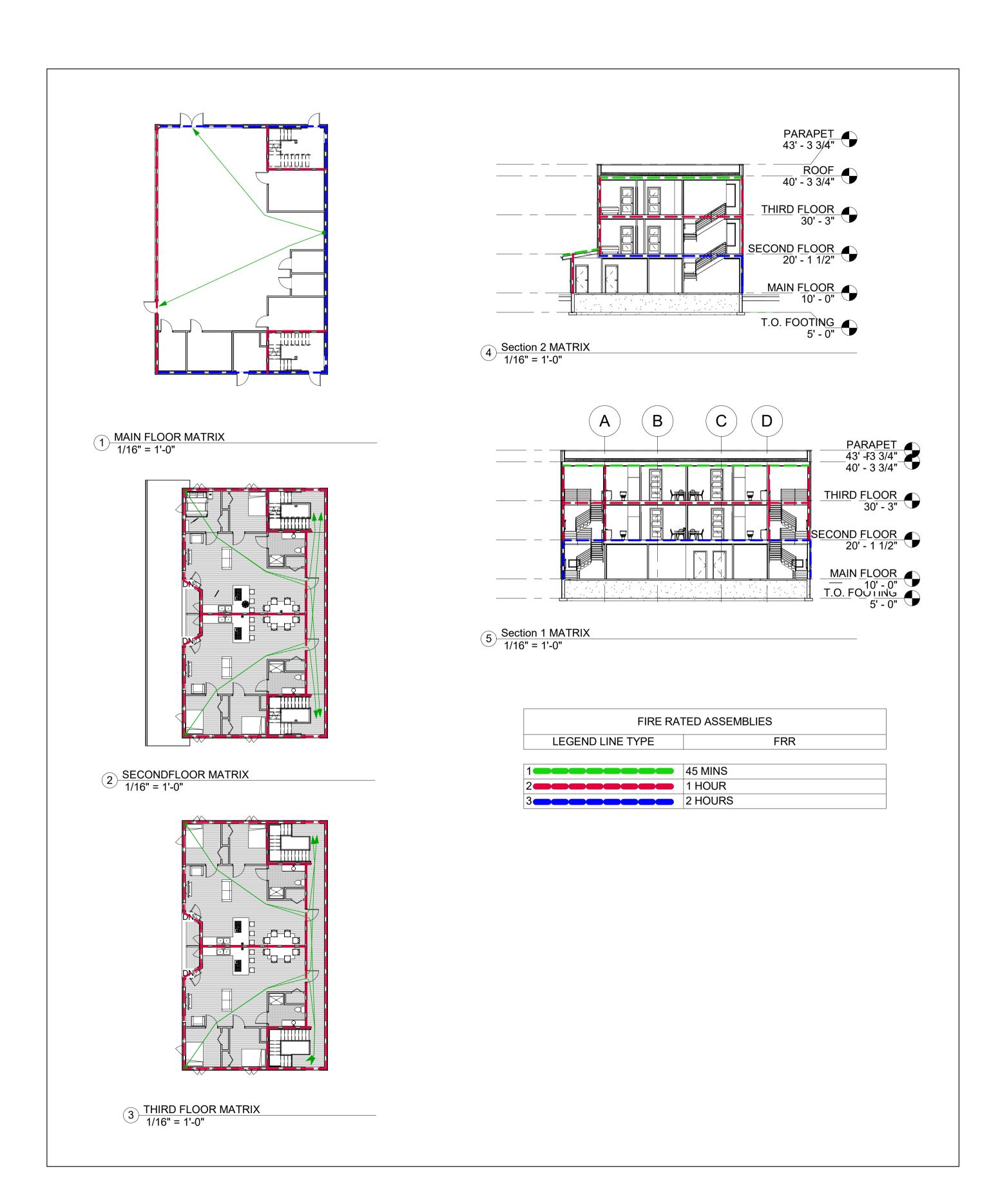
Scale

Checked by

A101

As indicated

**Author** Checker



ltem		National Building Code Data Matrix Parts 3 & 9							HOU K	eference (NBC	- 2013 ME)	
1	Project [	Descripti	on:			New	☐ Par	t 11		Part 3		☐ Part 9
			_			Addition						2.1.3.1
				Change	of Use	Alteration						9.10.1.3
2	Major O	ccupanc	y(s) GROUI	P E & GROUI					3.1	1.2.1.(1)		9.10.2
3	Building		<sup>2</sup> ) Exis	ting	N/A Nev		1000	196.77		1.3.2		1.1.3.2
4	Gross A			ting	N/A New	696.85	Total	96.85	1.1	1.3.2		1.1.3.2
5	Number			ve grade		Below	grade	0	3.2	2.1.1 & 1	1.3.2	2.1.3.1
6	Height o	f Buildin	g (m)		10.15 m							2.1.3.1
7	Number	of Stree	ts/Access	Routes	2					2.2.10 &		
8	Building	Classific	cation		NIA				3.2	2.2.208	3	9.10.4
9	Sprinkler	r System	Proposed	1		entire bu	ilding					9.10.8.2
						D basemer	nt only			2.2.208	3	
						🔲 in lieu of				2.1.5		
						not requi	red		3.2	2.2.17		
10	Standpip	e requir	ed			Yes 🔽			3.2	2.9		
11	Fire Alar	m requir	red			🗆 Yes 🗹	No		3.2	2.4		9.10.17.2
12	Water Sc	ervice/S	upply is Ad	dequate		🗹 Yes 🔲	No					
13	High Bui	lding				□ Yes 🗹	No		3.2	2.6		
14	Permitte	d Const	ruction	☑ Cor	nbustible	☐ Non-com	bustible		3.2	2.2.208	3	9.10.6
	Actual C	onstruct	ion	☑ cor	nbustible	☐ Non-com	bustible					
15	Mezzani	ne(s) Ar	ea m²			N/A			3.2	2.1.1.(3)-	(8)	9.10.4.1
16	Occupar	nt load b	ased on	☐ m²/	person	design o	f building		3.1	1.1.6		9.9.1.3
	Baseme	nt:		Occup	ancy	Loa	d	persons				
	1 <sup>st</sup> Floor			Occup	ancy	Loa	d	persons				
	2 <sup>nd</sup> Floor			Occup	ancy	Loa	d	persons				
	3 <sup>rd</sup> Floor	l		Occup	ancy	Loa	d	persons				
17	Barrier-fr	ree Desi	gn [	✓ Yes	□ No (Exp	lain)			3.8	3		9.5.2
18	Hazardo	us Subs	tances	☐ Yes	☑ No				3.3	3.1.2.(1)	& 3.3.1.19(1)	9.10.1.3
19	Requi	red	Horiz	contal As	semblies	Lis	sted Design	No.	3.2	2.2.208	3 & 3.2.1.4	9.10.8
	Fire	9		FRR (H	ours)	or D	escription (	SG-2)				9.10.9
	Resista	Resistance Floors 1-2 Hours										
	Ratir	Rating Roof75 Hours										
	(FRE	₹)	Mezzanin	е	_ Hours							
		ſ	FR	R of Sup	porting		ed Design N					
		L		Memb	ers	De	scription (S	(G-2)				
			Walls	1-2	_ Hours							
			Roof		_ Hours							
			Mezzanin	e	_ Hours							
20	Spatial S	Separatio	on – Const	truction (	of Exterior Wa	alls			3.2	2.3		9.10.14
	Wall	Area o		L/H	Permitted	Proposed	FRR	Listed		Comb	Comb. Constr.	Non-comb
		EBF	(m)	or	Max. % of	% of	(Hours)	Design o		Const	Nonc.	Constr.
	Months	(m <sup>2</sup> )	12m	H/L	Openings 100%	Openings 16.5%	1-2h	Description	υΠ		Cladding	
	North	141.02sqm	_	13.4/10.5								
	South	141.02sqm	16m	13.4/10.5	100%	16.5%	1-2h					1
	East	204.43sqm	2m	19.5/10.5	2%	2%	1-2h					
	West	204.43agm	12m	19.5/10.5	4.40.00.00	37.6%	1h	-				-



No.	Description	Date

PRABH KEHAL

1837 20 AVE NW

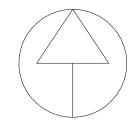
NATIONAL BUILDING

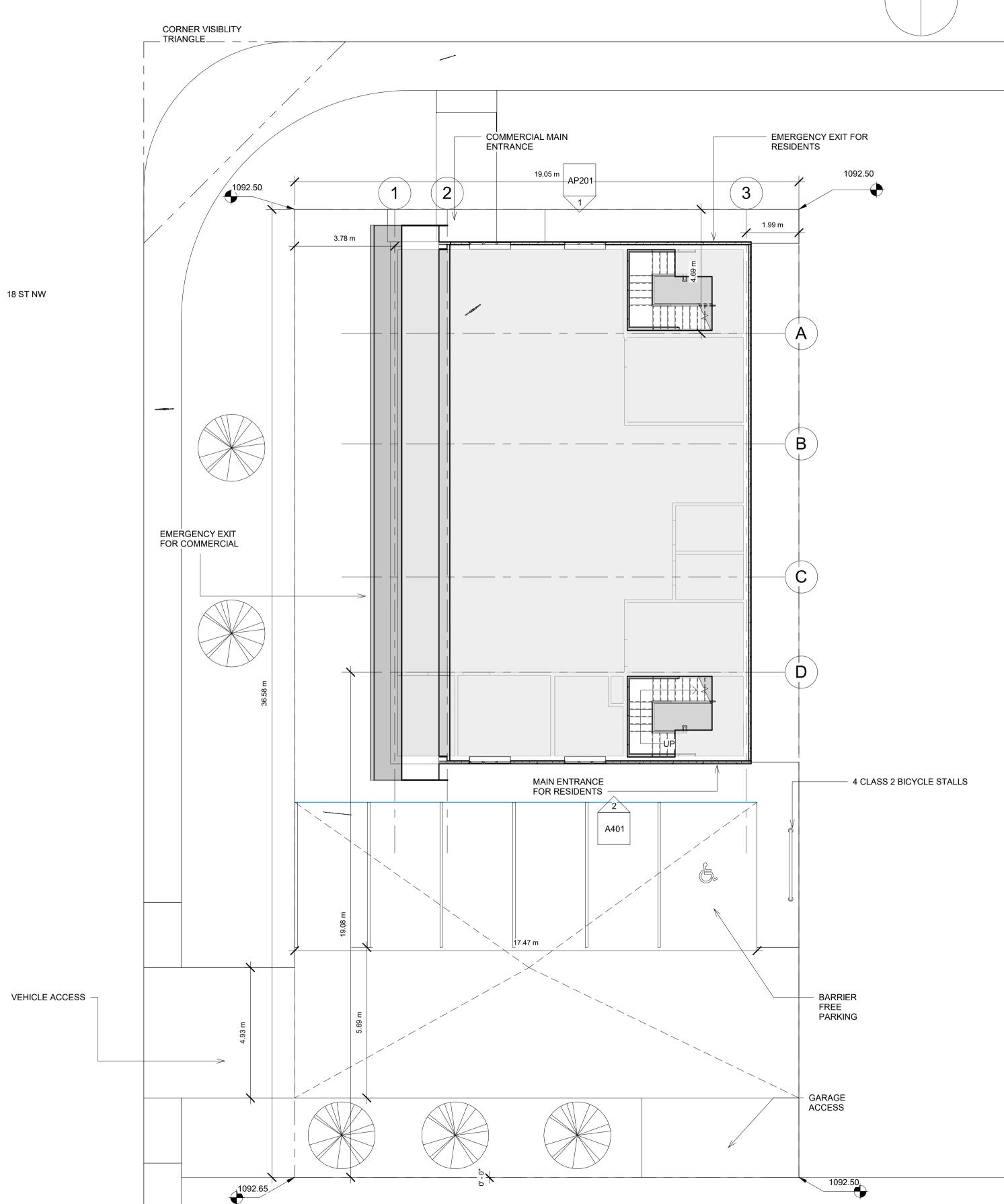
Project number 1
Date Issue Date
Drawn by Author
Checked by Checker

A102

Scale

1/16" = 1'-0"





#### Land Use Bylaws

SITE LEGAL DESCRIPTION: PLAN 2864AF; BLOCK 29; 21,22 & HALF OF WEST LOT 23

MUNICIPAL ADDRESS: 1837 20 AVE NW CALGARY, ALBERTA

LAND USE DISTRICT: CN-1

PARCEL AREA: 696.85 sqm

PARCEL COVERAGE/ FLOOR TO AREA RATIO: 696.77sqm (99%)

BUILDING FACADE: 13.41m / 84%

**BUILDING HEIGHT:** 10.15 m

NORTH SETBACK AREA: 1.19 m

SOUTH SETBACK AREA: 3.0 m

EAST SETBACK AREA: 1.77 m

WEST SETBACK AREA: 3.0 m

VEHICLE ACCESS: STREET WEST OF SITE

MOTOR VEHICLE PARKING STALLS: 5 PARKING STALLS & 1 BARRIER

FREE STALL

BICYCLE PARKING STALLS: 4 CLASS 2 BICYCLE STALLS



Architectural Technologies Diploma

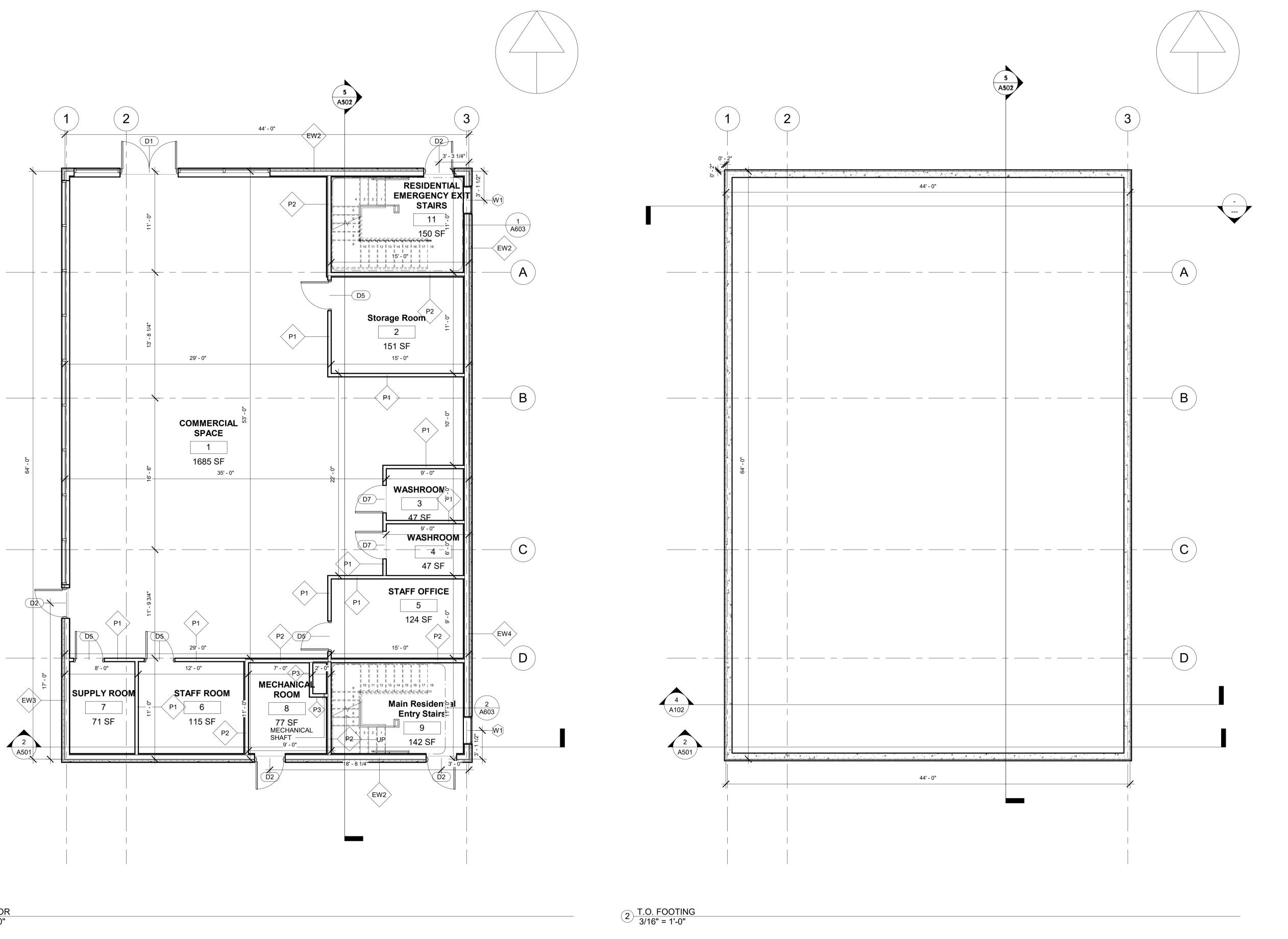
Date

PRABH KEHAL 1837 20 AVE NW SITE PLAN

ect number	
9	Issue D
wn by	
cked by	Chec

A201

Scale





No. Description Date

1837 20 AVE NW

FOUNDATION & MAIN FLOOR PLAN

Project number

Date

Drawn by

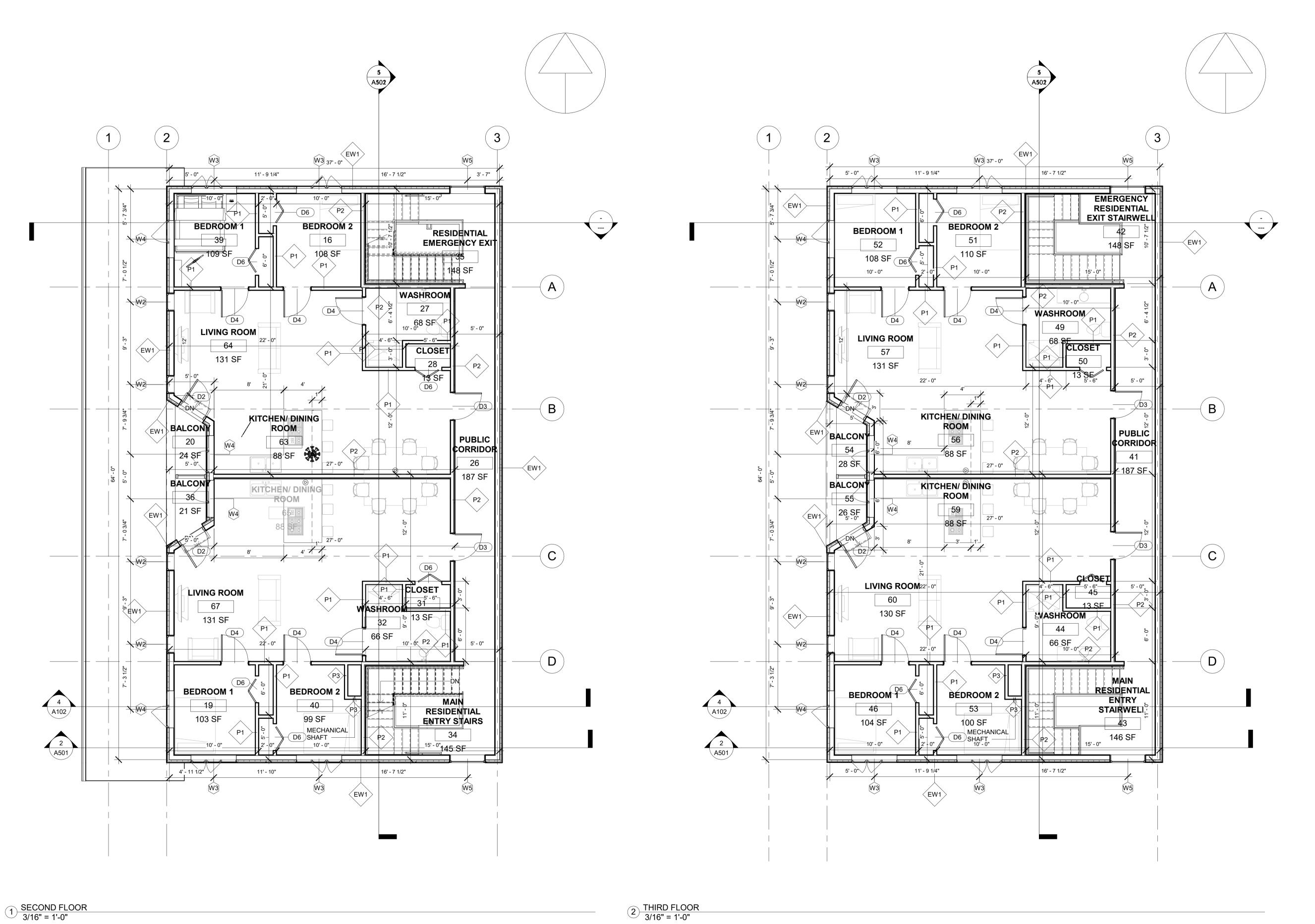
Checked by

Scale

A301

3/16" = 1'-0"

Issue Date





PRABH KEHAL 1837 20 AVE NW

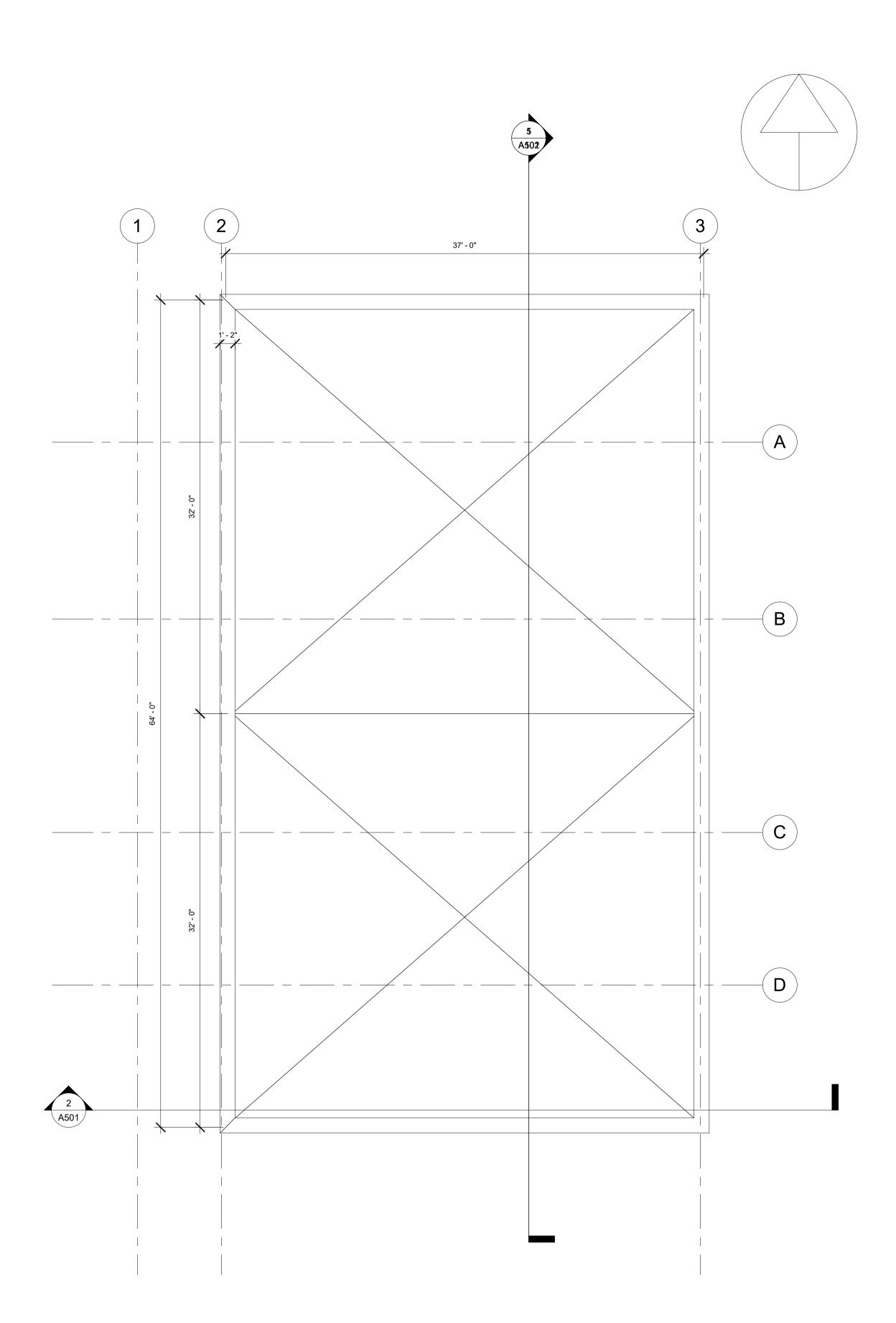
SECOND & THIRD FLOOR PLAN

Project number Drawn by Checked by

Scale

A302

Issue Date





PRABH KEHAL 1837 20 AVE NW **ROOF PLAN** 

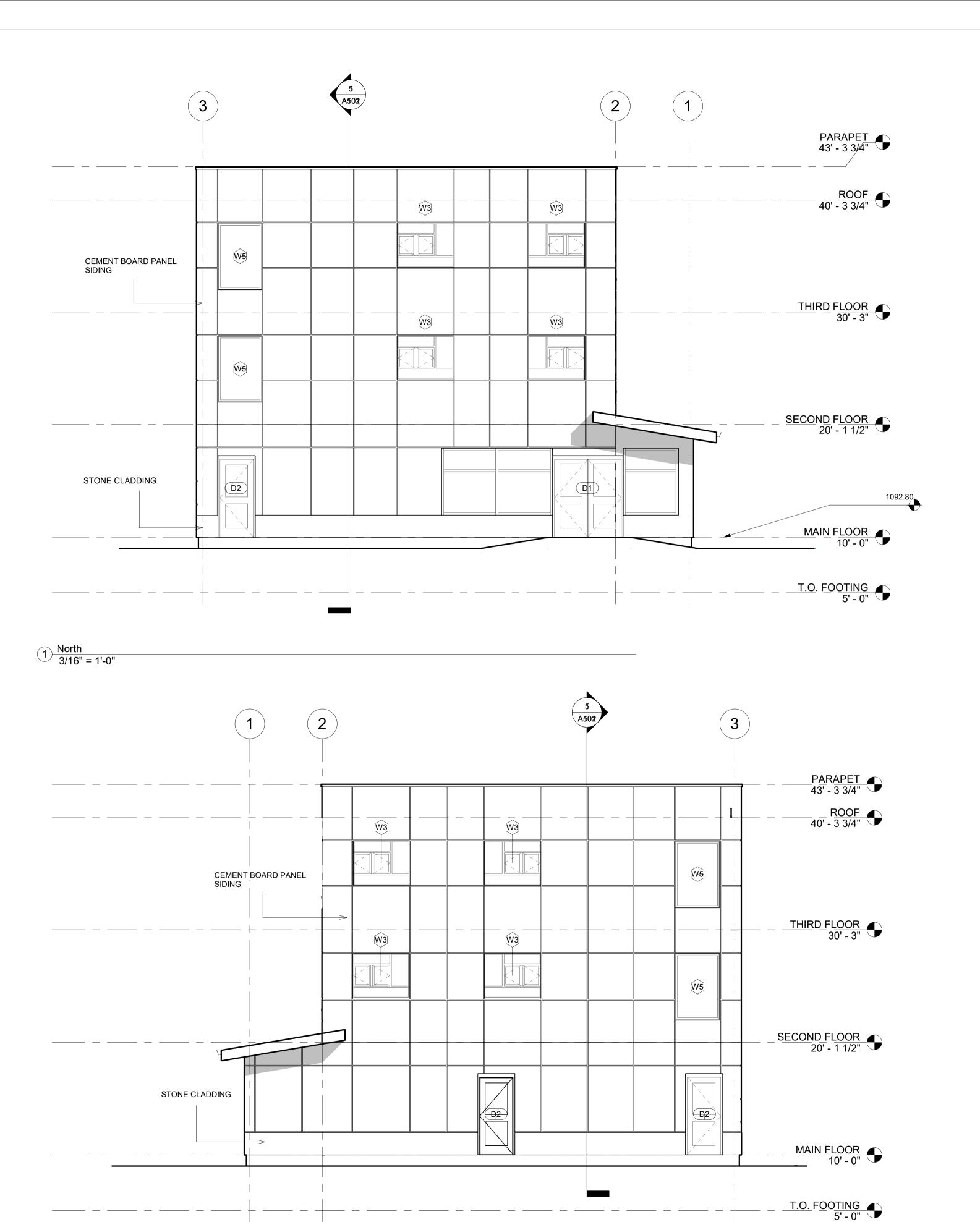
Checked by

Scale

A303

Issue Date

Author Checker



South
3/16" = 1'-0"



Architectural Technologies Diploma

PRABH KEHAL 1837 20 AVE NW

NORTH & SOUTH **ELEVATIONS** 

Project number Drawn by Checked by

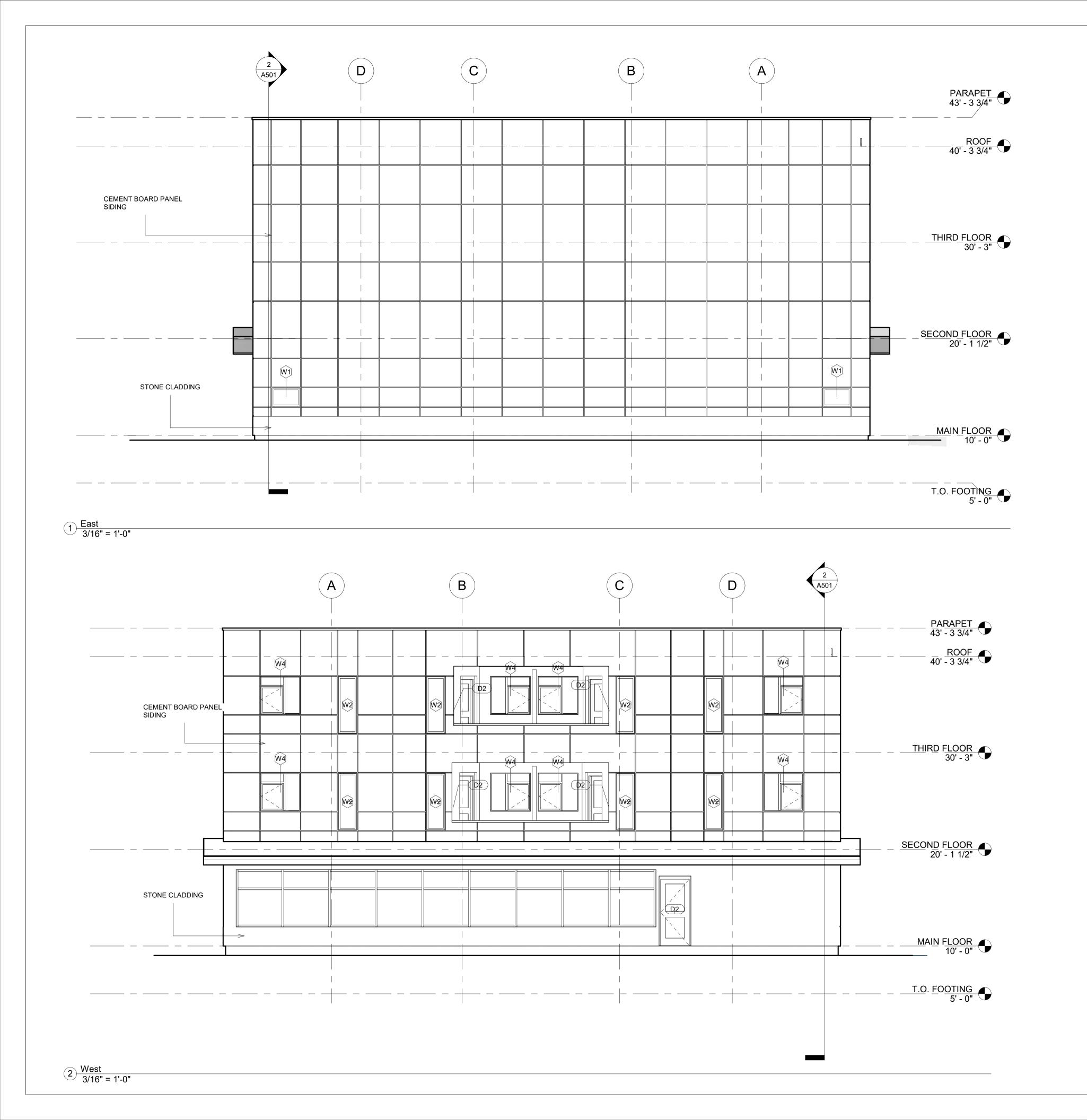
Scale

A401

3/16" = 1'-0"

Checker

Issue Date





No. Description Date

PRABH KEHAL 1837 20 AVE NW

EAST AND WEST ELEVATIONS

Project number

Date

Drawn by

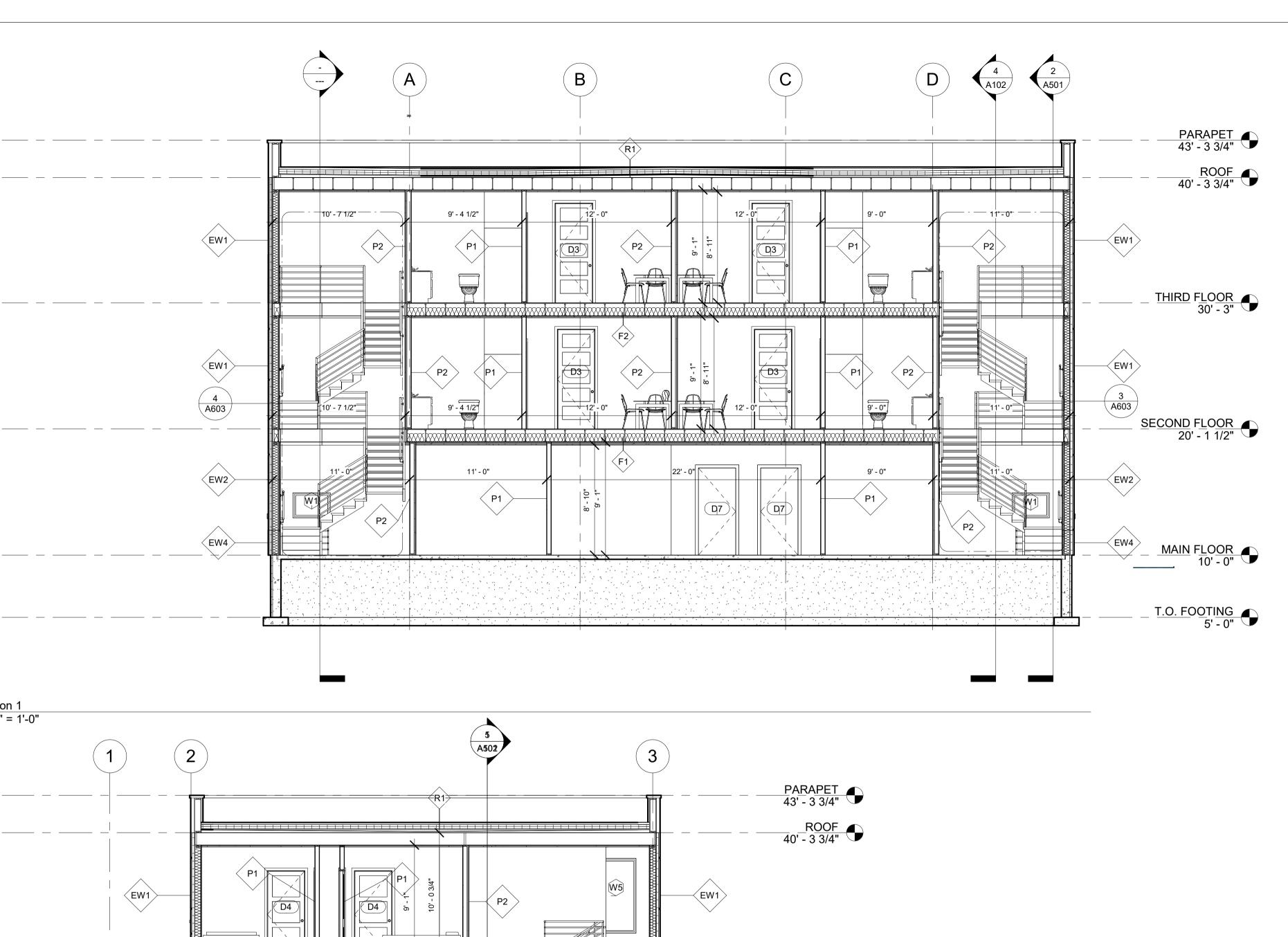
Checked by

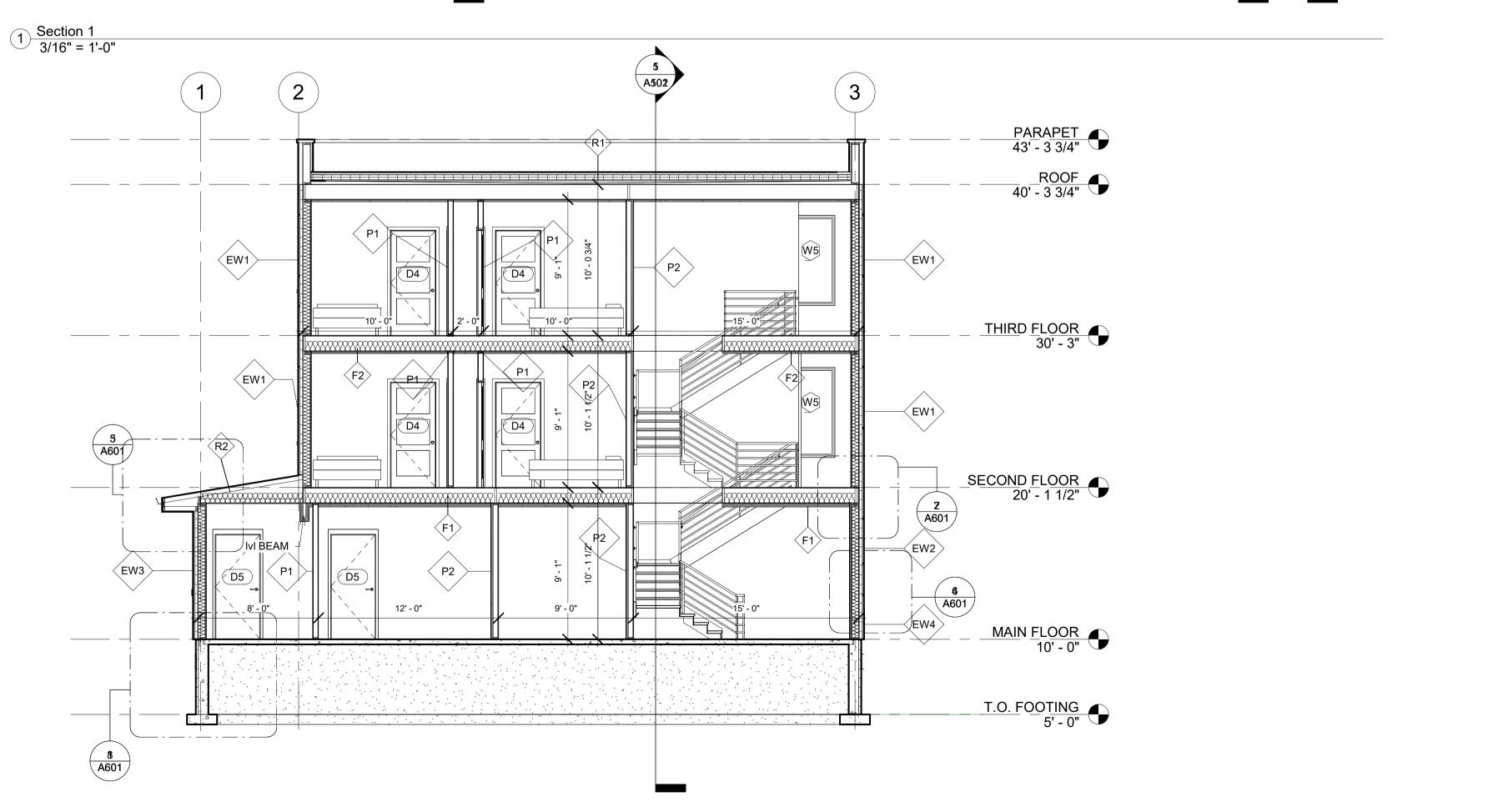
Scale

A402

3/16" = 1'-0"

Issue Date





2 Section 2 3/16" = 1'-0"



Architectural Technologies Diploma

PRABH KEHAL 1837 20 AVE NW SECTION 1 & 2

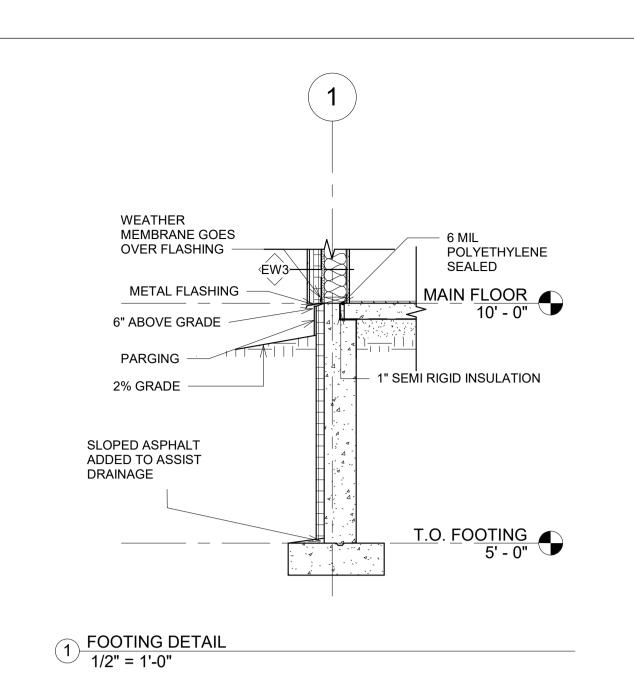
Project number Drawn by Checked by

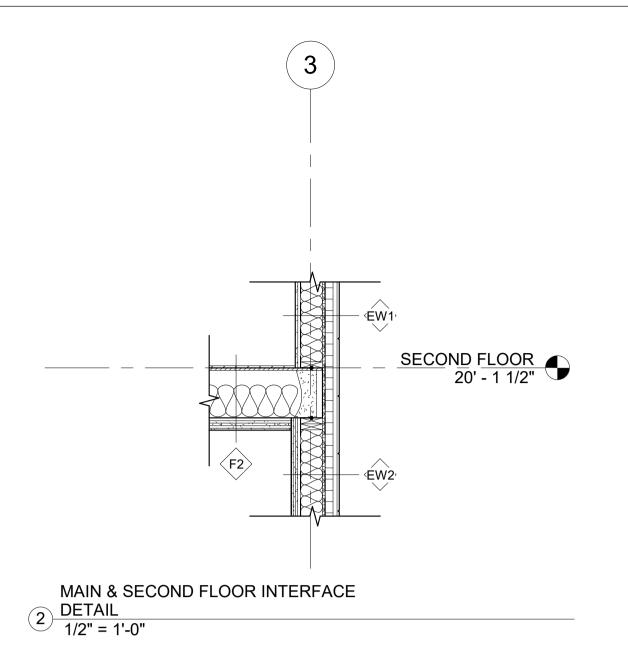
Scale

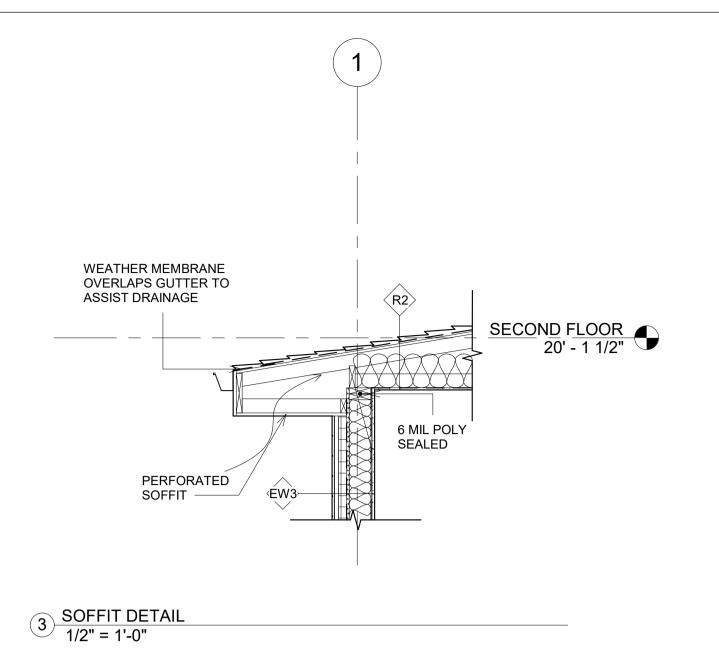
A501

3/16" = 1'-0"

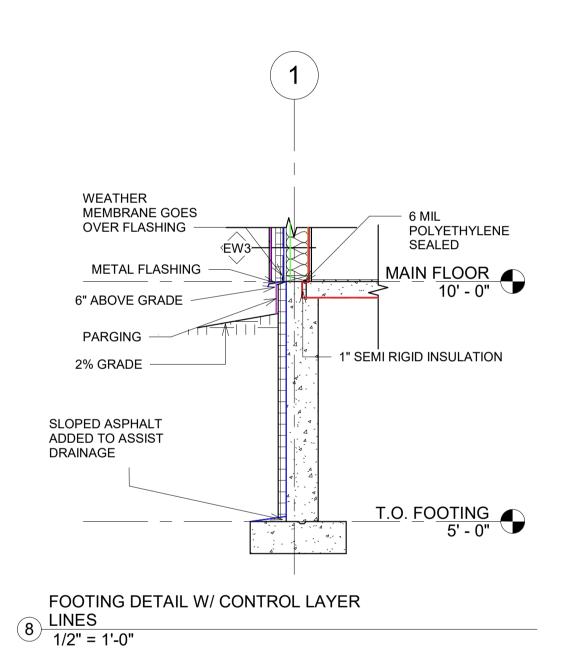
Issue Date

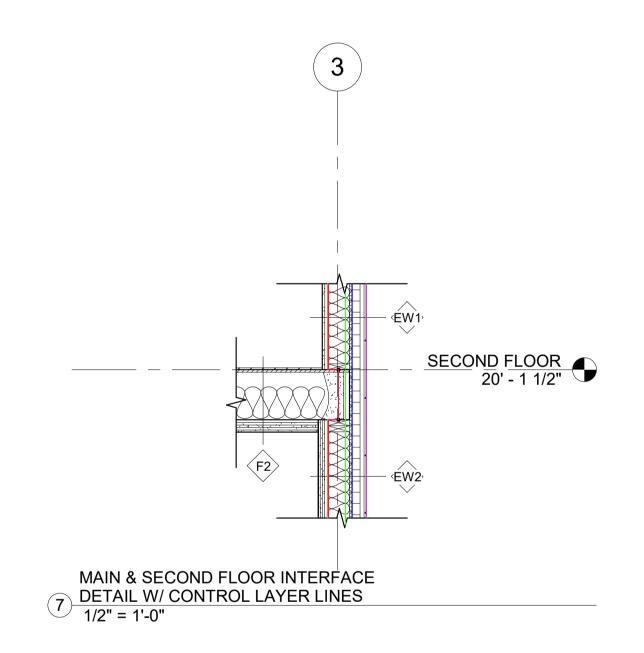


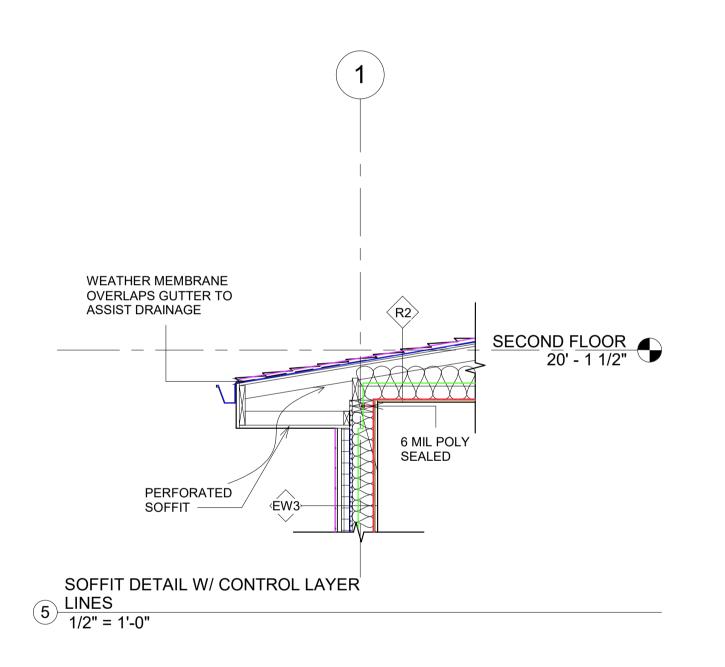


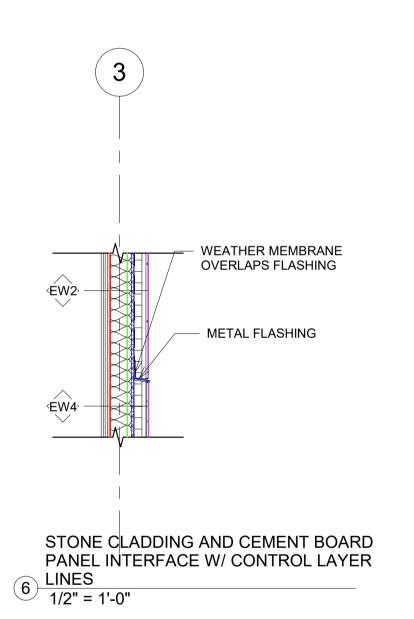












STONE CLADDING AND CEMENT BOARD

PANEL INTERFACE

1/2" = 1'-0"

√EW2,

√EW4

Type of Control Layer	Line Types
Deflection Layer	
Drainage Layer	
Air Barrier Layer	
Vapour Barrier Layer	
Dew Point/ Mid Line	

PRABH KEHAL	-
1837 20 AVE NV	<b>\</b>

Project number	1
Date	Issue Date
Drawn by	PK
Checked by	Checker

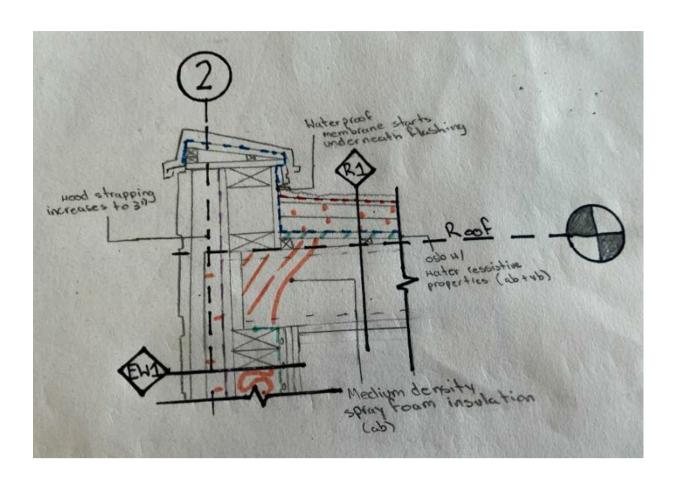
A601

Scale

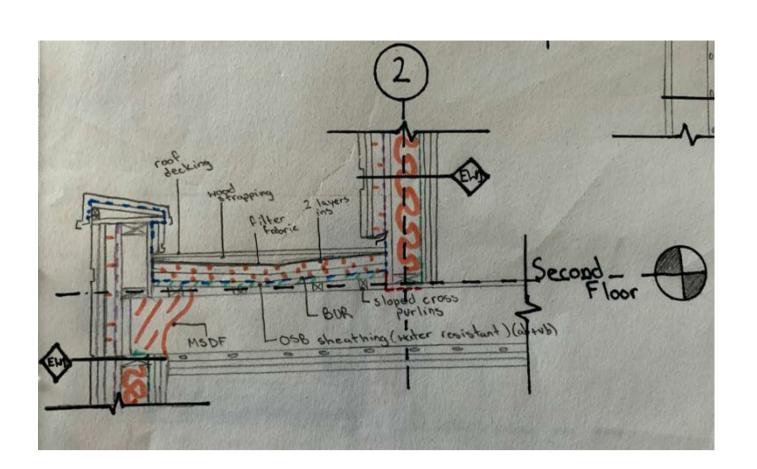
1/2" = 1'-0"

2021 4:51:27 PM

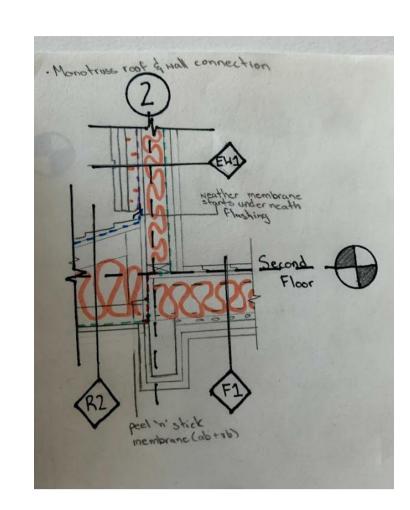
#### **PARAPET DETAIL**



#### **BALCONY DETAIL**



#### **MONOTRUSS & WALL INTERFACE**

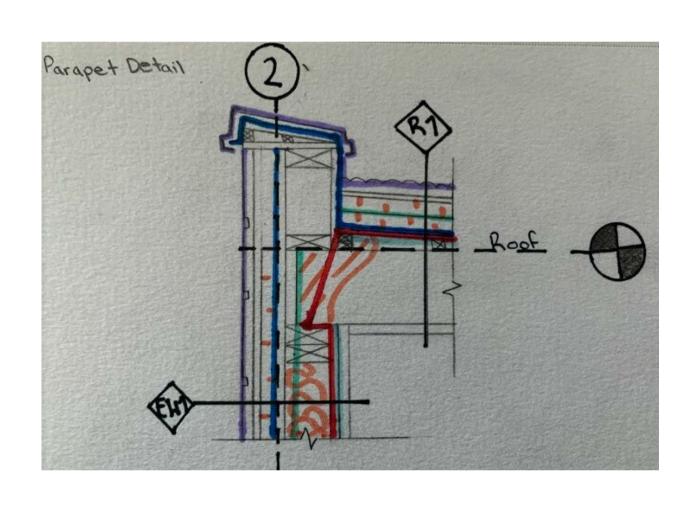


#### Architectural Technologies Diploma

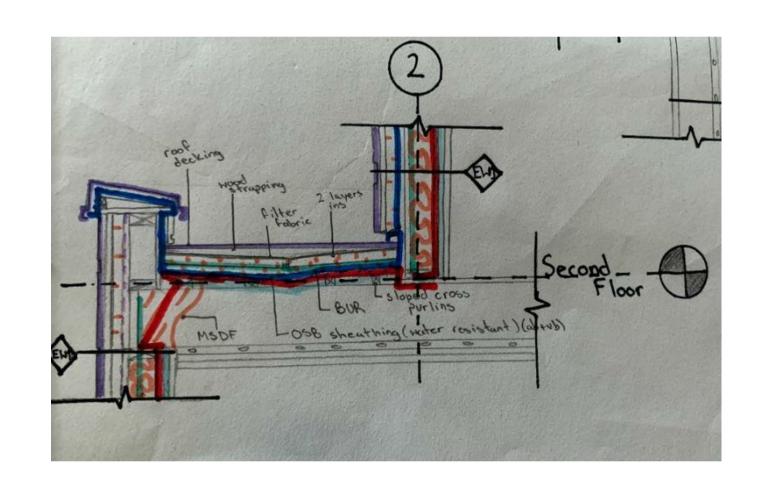
School of Construction

**SSAIT** 

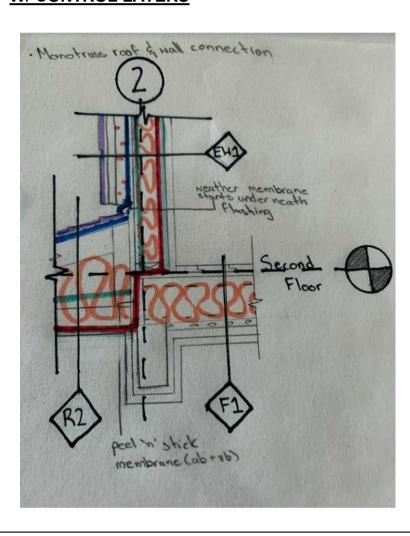
#### PARAPET DETAIL W/ CONRTOL LAYERS



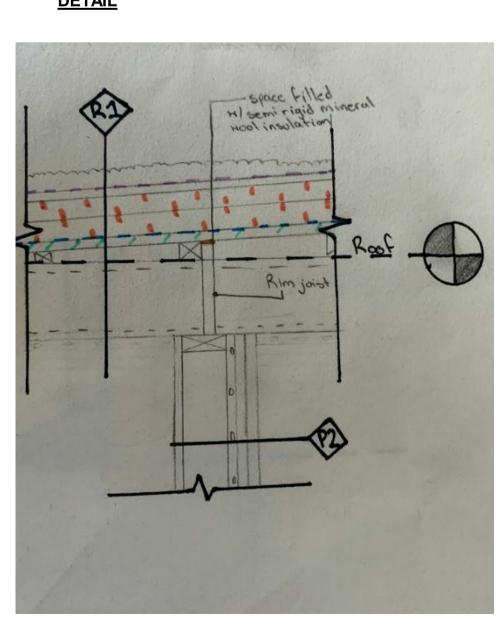
#### **BALCONY DETAIL W/ CONTROL LAYERS**



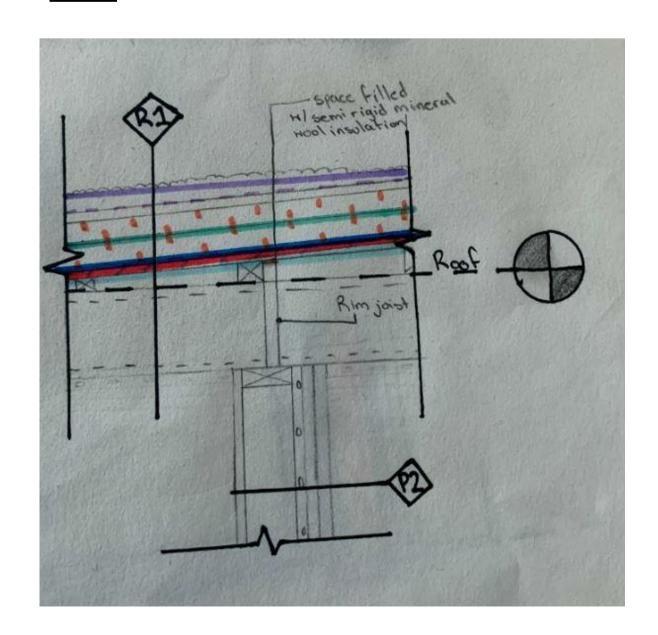
### MONOTRUSS ROOF & WALL INTERFACE W/ CONTROL LAYERS



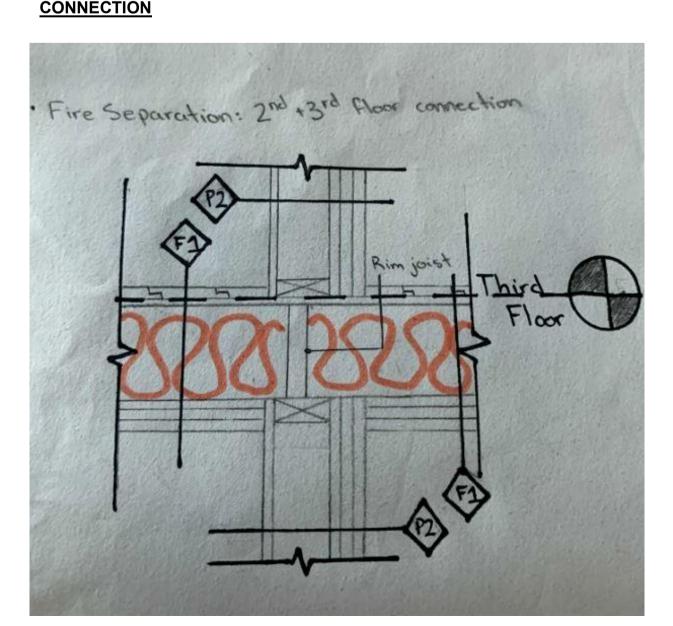
### FIRE SEPARATION: ROOF INTERFACE DETAIL



### FIRE SEPARATION: ROOF INTERFACE DETAIL W/ CONTROL LAYERS



### FIRE SEPARATION: SECOND AND THIRD FLOOR CONNECTION



No.	Description	Dat

### PRABH KEHAL 1837 20 AVE NW

CONSTRUCTION **DETAILS PT2** Project number Issue Date

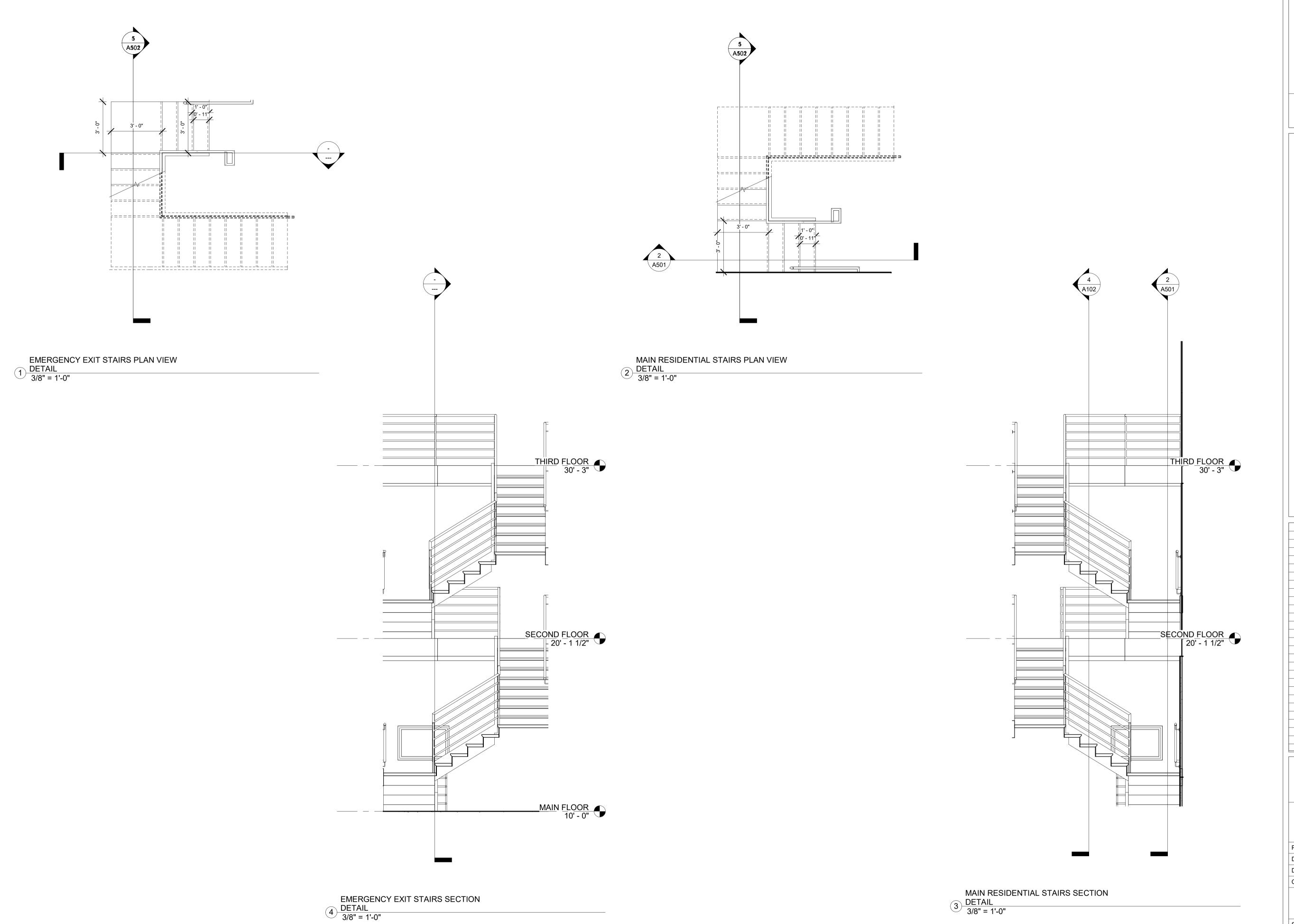
A602

Drawn by

Scale

Checked by

Author





PRABH KEHAL

1837 20 AVE NW STAIR

CON	ISI	RU	C
roject number	DE.	TAI	LS

Drawn by Checked by

Scale

A603

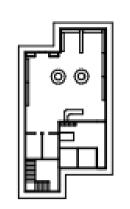
3/8" = 1'-0"

Issue Date

Author

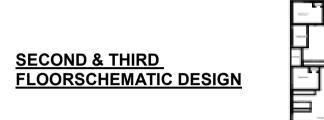
### SCHEMATIC DESIGN











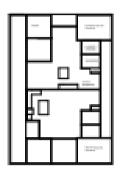












### **SITE ANALYSIS**



### **CASE STUDIES**







<b>SSAIT</b>
School of Construction

Architectural Technologies Diploma

) <b>.</b>	Description	Date

PRABH KEHAL

1837 20 AVE NW

DESIGN

DEVELOPMENT

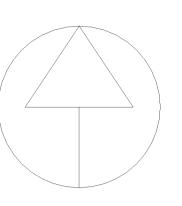
AP001

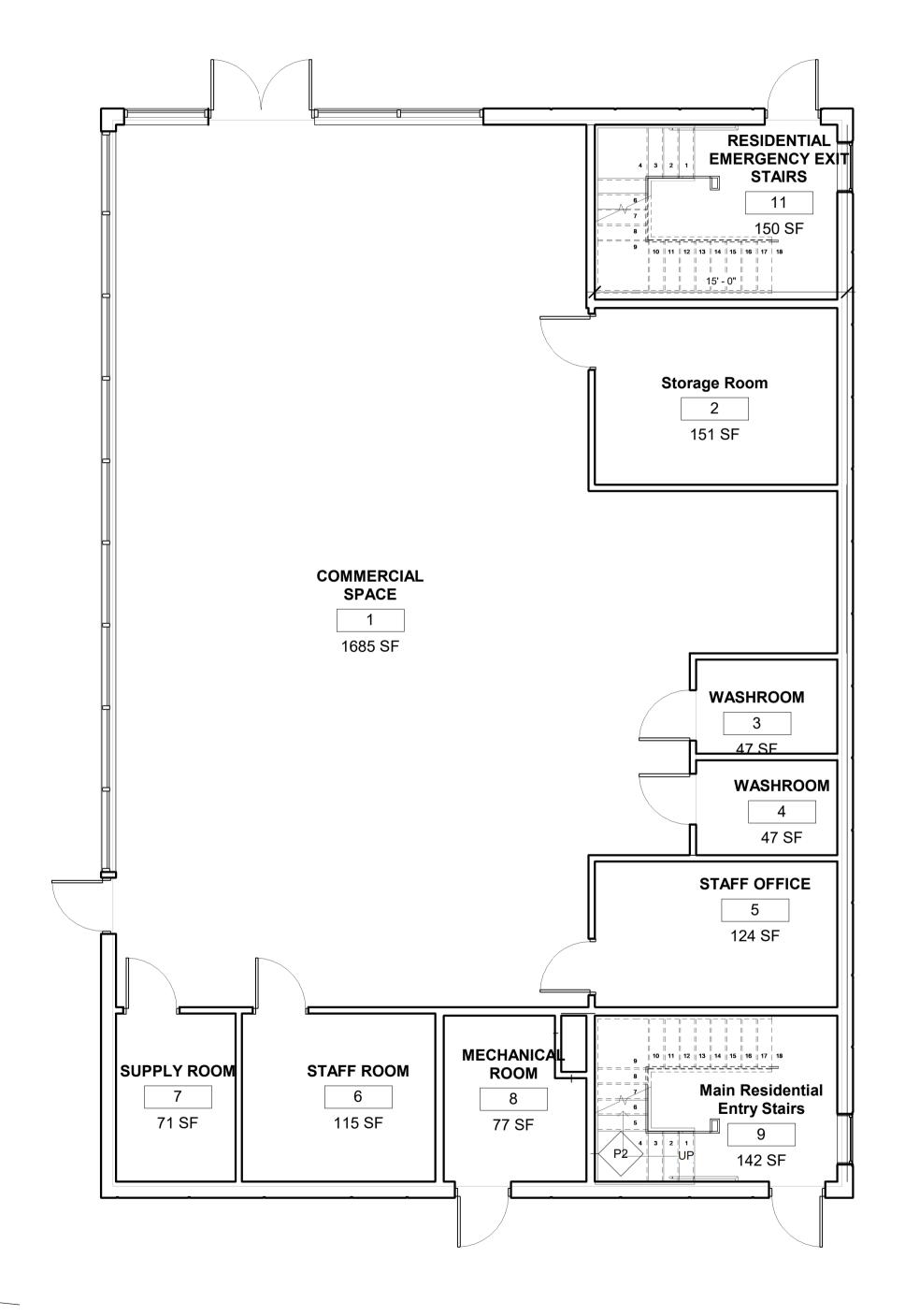
Scale

021 4:51:28 PM

Issue Date

Author Checker





\$5AIT
School of Construction

Architectural Technologies Diploma

No. Description Date

PRABH KEHAL 1837 20 AVE NW

MAIN FLOOR DESIGN PLAN

Project number

Date

Drawn by

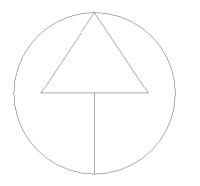
Scale

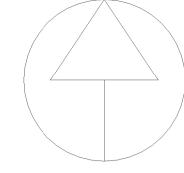
Checked by

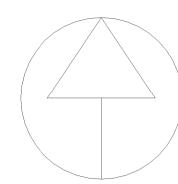
**AP101**3/16" = 1'-0"

Issue Date

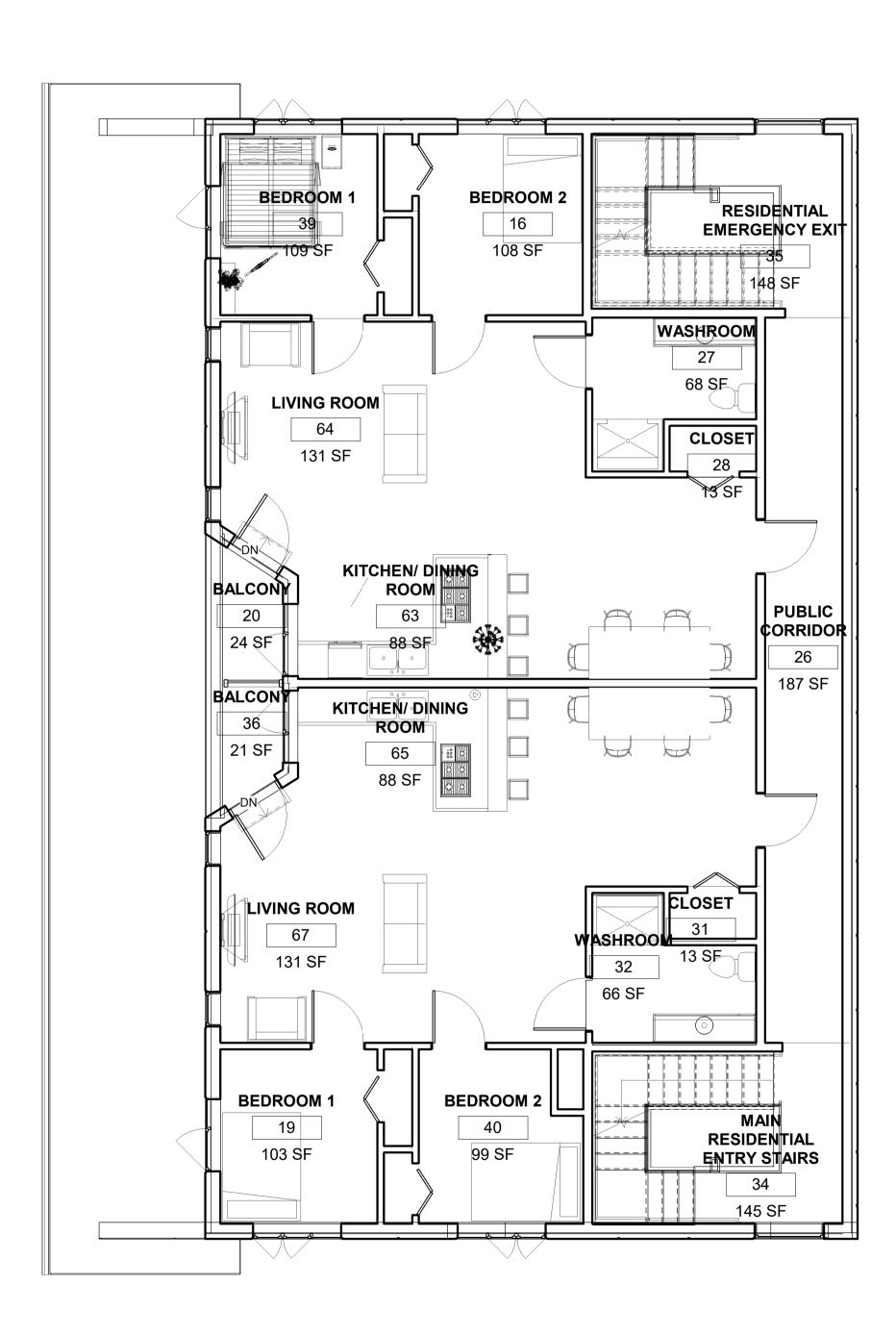
Author

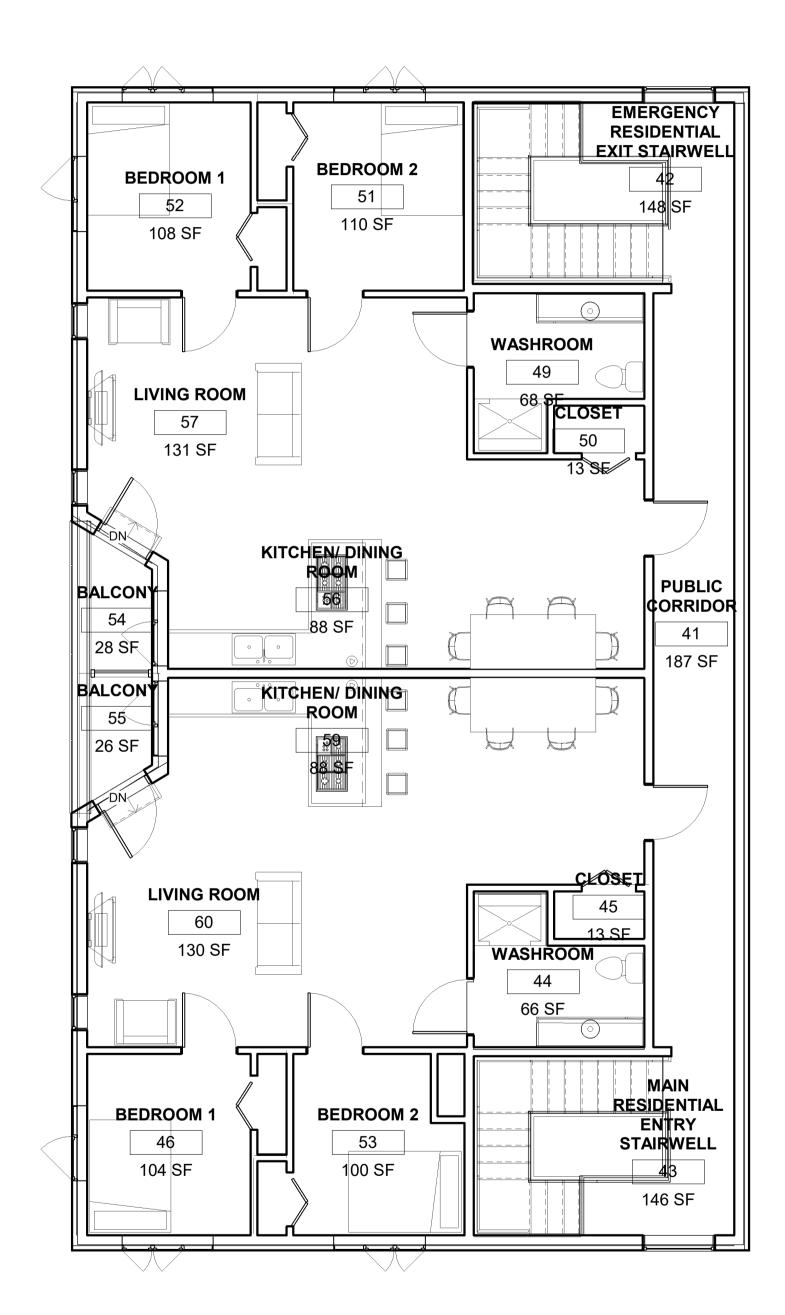












No.	Description	Date

PRABH KEHAL 1837 20 AVE NW

SECOND & THIRD **DESIGN PLAN** 

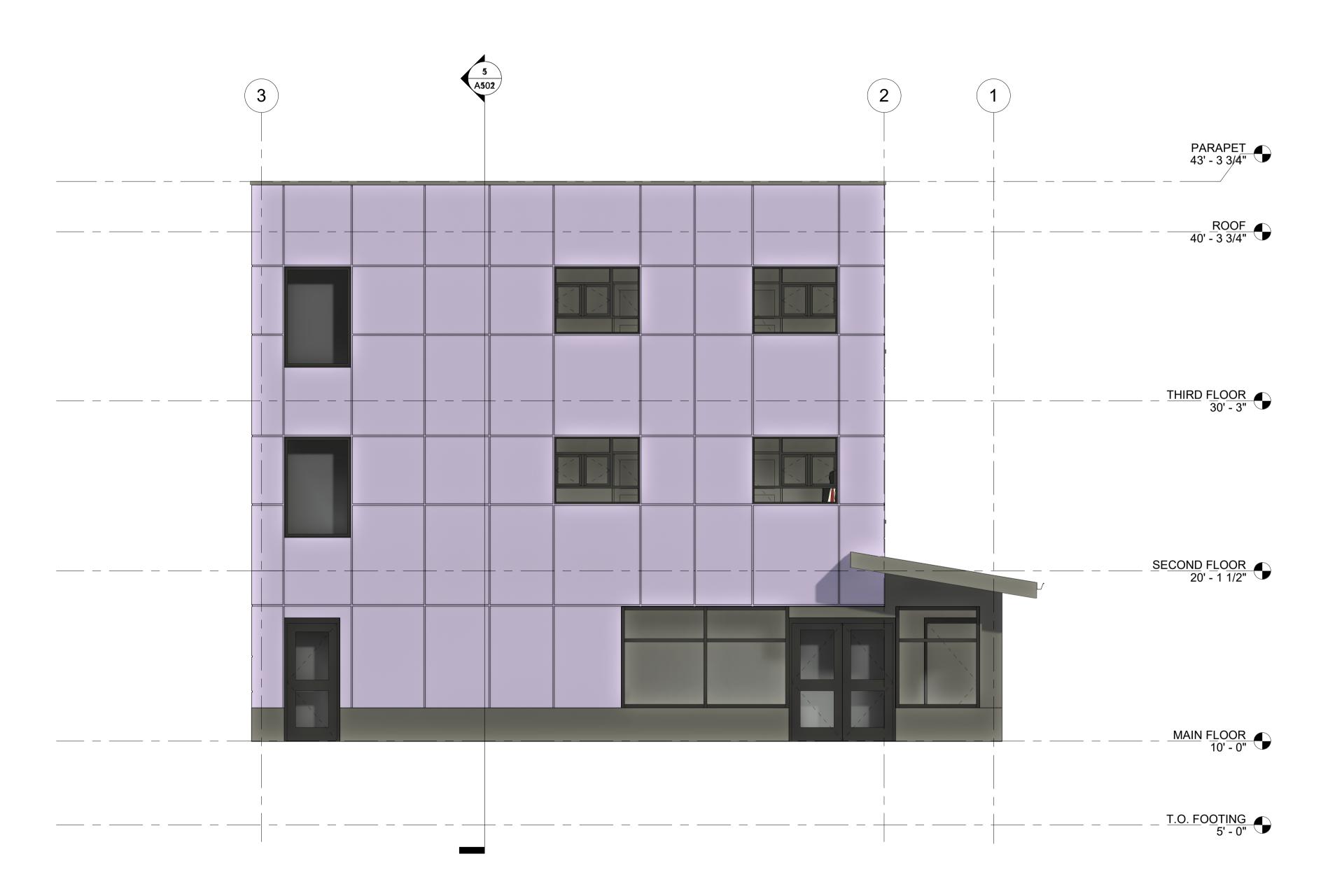
Project number Drawn by Checked by

Scale

AP102

Issue Date

Author



1 North Design 1/4" = 1'-0"

\$3 SAIT
School of Construction

Architectural Technologies Diploma

No. Description Date

PRABH KEHAL

1837 20 AVE NW NORTH DESIGN

Project number 1

Date Issue Date

Drawn by Author

Drawn by
Checked by

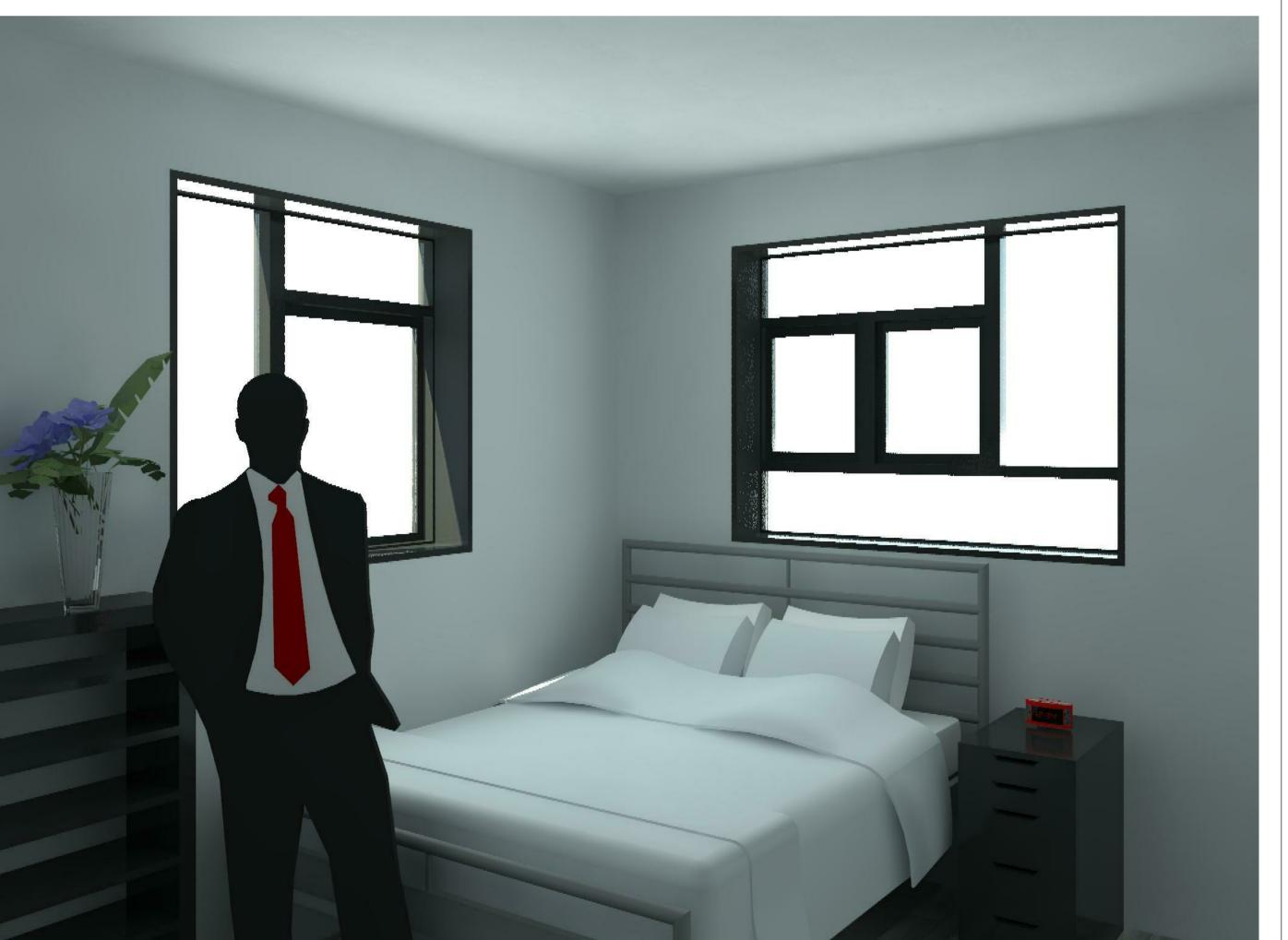
Scale

AP201

1/4" = 1'-0"







No.	Description	Date

PRABH KEHAL 1837 20 AVE NW

INTERIOR PERSPECTIVES

Project number 1

Date Issue Date

Drawn by Author

Checked by Checker

AP301

12" = 1'-0"







No.	Description	Date

PRABH KEHAL 1837 20 AVE NW

EXTERIOR PERSPECTIVES

Project number 1

Date Issue Date

Drawn by Author

Checked by Checker

Scale

AP302

12" = 1'-0"

3/2021 4:51:46 P