Appendix "A" (Bye laws 2.9.1 & 6.3.5)[Stage -1]

Fo	rm for Application to Erect, Re-Erect & Extension of a Building or Material Alteration in part of the Building
To Sir,	[Form No Date of Receipt/] Director, Town Planning Department of Urban Affairs Government of Arunachal Pradesh Itanagar
l he	ereby give notice on behalf of Shri, that the owner
inter	nds to erect, re-erect and extend or make alteration in part of the building in Plot No. Dag No.
	Locality/Area/Sector Purpose
of	Allotment
	in accordance with the APBBL 2019 and I forward herewith, the following plans and
spec	cification duly signed by me and by the owner.
1. 2. 3. 4. 5. 6. 7. 8. 9. 10 11 12	Location Plan (showing landmark) Site Plan – showing the details of position and setbacks. Building Plans, Elevations and Sections. Service Plan Parking and Circulation Plan. Landscape Plan Structural Drawings Heating Ventilation Air Conditioning (HVAC) Plan - wherever required. General Specifications (in attached form) 0. Ownership Title (Lease/Conveyance/Sale Deed, etc) 2. 2 (two) Nos of latest photograph 2. Other Documents: - (i) NOC from PHE Department (ii) NOC from Power Department (iii) NOC from Highway Department (wherever required) (iv) NOC from Disaster Management Department (wherever required)

- (v) ECBC NOC from APEDA (wherever required)
- (vi) NOC from Fire Department (wherever required). Fire Safety Design as required in National Building Code duly approved by the Director Fire Service. Alternatively, an undertaking to the effect that Fire Safety Plans duly approved shall be submitted along with the application.

The building plan has been prepared strictly as per the approved building Byelaws and relevant IS Codes / provisions of NBC. The construction shall be carried out in accordance with the building plan and I shall be completely accountable for any lapse on my part up to within 6 months after obtaining completion certificate of the building.

I am aware that in the event of building being constructed in violation of the sanctioned building plan approval, the Authority shall have the right to take action against me as it may deem fit including referring the matter to concerned professional and statutory councils for taking disciplinary action against me.

 Signature of the Owners
 (Signature of Registered

 Architect/Engineer)

 Name of owner(s).....

 Registration No. of the

 Address of the owner(s)....

Encl: As stated above

Address of the Architect/

Dated:

Appendix "A-1" (Bye laws 2.9.1) [Stage -1]

Statement of Proposal and Certificate

(By the Owner and Registered Architect/Engineer/Urban Designer/Town Planer)

- (Residential/Commercial/Institutional/Health/PSP/Industry)
- 3. Total Area of Plot (in sqm).....
- 4. Geographical Coordinates of Building Location : Northing -

: - Easting -

5. Built-up Area Statement

Description	Proposed (area in	Permissible	Pomarka		
Description	Sqm)	(Sqm)	Remarks		
Basement					
Max. Ground coverage					
Ground Floor					
First Floor					
Second Floor					
Third Floor					
Fourth Floor					
Fifth Floor					
Total Floor area					
Floor Area Ratio					
No. of Dwelling Units					
Height of the Building (in meters)					
Setbacks of the Building (in	Proposed (in meters)	As per approved Layout	Remarks		
meters)	roposed (in meters)	Plan	Remarks		
Front					
Rear					
Left					
Right					

6. Parking Standard

Equivalent Car Space @		Ground Floor	Pacamont Total
1.5 ECS in plot size 100 to 300 sam	Open Parking		
2 5 ECS in plot size 301 to 500 sam&	@ 18 sam per FCS	covered parking	parking (sqm)
1 additional ECS in every 100 som		@ 28 sqm per ECS	@ 32 sqm per ECS
i additional Loo in every 100 sqiii			

Area in sqm	Area in sqm@ 18 sqm per ECS Open Parking	Area in sqm @ 28 sqm per ECS Covered Gr. Floor	Area in sqm @ 32 sqm per Basement	Total (sqm)
1	2	3	4	5

7. Fee & Charges

a.	Building permit fee	Rs
b.	Use of City Infrastructure Charges	Rs
C.	Additional floor space charges (provisional)	Rs
d.	Peripheral charges (Provisional) only for Group IV CHBS	Rs
e.	Any other charges (please specify)	Rs
	Total amount (as per the details above)	Rs

Receipt No..... Dated.....

We hereby certify that

- 1. The plot in question forms part of the approved layout plan and its location size and area conform to the approved layout plan and lease/sale deed/NOC of the lease Administration Branch of concerned Development Authority.
- 2. Plot is lying vacant and no construction shall be started before sanction.
- 3. The plot is free from all encumbrances (owner responsibility).

4. The period of construction valid up to As per the lease condition / further extension of time for construction granted by the lessor is valid up to Time construction obtained from the lease Administration Branch, Concerned Development Authority.

5. Size of each dwelling unit is not more than 300 sq.mt.

Signature of Owner(s)	Signature of Registered Architect
Name	Name
(In block letters)	(in block letters)
	Registration No.
Address	Address
Dated:	Dated:

Authority Letter

I hereby authorize to Mr./Mrs..... to collect the sanction (Building Permit) whose signature is verified below.

Specimen signature of	signature of the owner(s)/Registered Architect/
Mr./Mrs	
Dated received	Date

(Signature of authorized person / owner / Registered Architect)

Remark, if any.....

Place:	
Dated:	

Form for Specifications of Proposed Building Utility

The purpose (Residence, Office, Restaurant, Hotel, Dharmshala, School, Hostel Cinema, Shop, Factory Others) for which it is intended to be used..... Details of coverage on respective floor are given below:-

SI No	Details	Existing (sqm)	Proposed (sqm)	Total	Propose of Floor (Utility)
1	Basement Floor -6				
2	Basement Floor -5				
3	Basement Floor-4				
4	Basement Floor-3				
5	Basement Floor-2				
6	Basement Floor -1				
7	Ground Floor				
8	Mezzanine Floor				
9	First Floor				
10	Second Floor				
11	Third Floor				
12	Fourth Floor				
13	Fifth Floor				
14	Sixth Floor				
15	Seventh Floor				

a)	Approximate number of inhabitants proposed to be accommodated
b)	The number of latrines, Urinals, Kitchens, Baths to be provided
c)	The source of water to be used in the construction
d)	Distance from public sewer
e)	The materials to be used in construction Walls/Columns/Foundations/Roof/ Floors
	Signature of Registered Architect/Engineer/Town Planner
	Name
	Registration No
	Address

Appendix "A-3" (Bye laws: 2.10.10)[Stage -1]

[Form for Supervision]

То

The Director Town Planning Department of Urban Affairs, Government of Arunachal Pradesh Itanagar

Sir,

I hereby certify that erection/re-erection/extension or material alteration in the Building No......Plot/ No.....Dag No.Map Sheet No.Ward/ VillageLocality/SectorShall be carried out under my supervision and I certify that all the materials (type & Grade) and workmanship of the work shall be generally in accordance with the general specification submitted along with and the work shall be carried out according to the sanctioned plans which also included the services like drainage, sanitary, water supply, and electrical.

Signature of Registered Architect Engineer/Supervisor...... Name of Registered Architect/Engineer/Supervisor

(In block letters).....

Registration No. of Architect/Engineer/Supervisor

.....

Address of Registered Architect/Engineer/Supervisor

.....

Place: Dated:

Appendix "A-4" (Bye laws: 2.13) [Stage -1]

Undertaking for Payment of Other and Peripheral Charges Note: It should be on non-judicial stamp paper of specified amount attested by Notary Public / First class

Magistrate.

Undertaking

ISo	on of Shri	aged
Years residents of	Owner of Plot No	
in sector/colony	Landmarks	
hereby undertake to pay the balance of	peripheral and other charges as and when r	required by the
concerned Authority and in this regard Au	thority's decision will be finally binding on me.	

Executed by me as.....on day of......20.....

.....

Executant

Witness:

1	 •••	• •	•••	• •	•	• •	• •	•	 •	•	• •	•	•	• •	 •	•	•	•
2	 													• •				

Affidavit-cum-Undertaking

(Affidavit of Competent Professional on Rs. 100/- Non-Judicial Stamp paper of specified amount to be attested by Notary Public/ Metropolitan Magistrate)

- That I am a Licensed Architect/Engineer/Supervisor/Plumber duly registered with the Authority vide registration No.
- 2. That I have been engaged as a Competent professional as per Appendix 'E'of the Bye-Laws for preparing the building plans and to supervise construction in respect of Plot No......Block No.......Block
- 3. That I have prepared the building plans in respect of the aforesaid plot.
- 4. That I have studied the layout plan of the colony and gone through the instructions, policy decisions and other relevant documents in respect of the plot and colony.
- 5. That I have personally inspected the site. The plot under proposal forms part of the approved layout plan with respect to its location, size shape and area of the plot and proposed land use is also in conformity with the approved layout plan. The plot has been demarcated at site and the size, shape and area of plot available at site tallies with the approved layout plan.
- 6. That the ownership documents are in the shape of registered sale-deed/lease-deed in favour of the applicants and have been thoroughly examined and the ownership in favour of the applicant is in order.
- 7. That there is no construction in existence at the plot and no construction shall be started before sanction of the building plans.
- 8. That there is no encroachment on the Municipal land/road/other property and road widths as shown in the layout plan are available at site.
- 9. That the proposal are in conformity with the terms and condition of lease deed which is still valid and period of construction as per lease-deed and the extension granted by the lessor is valid up to.....
- 10. That the proposal have been prepared strictly in accordance with the Building Bye-laws rules regulation and practice of the department and no misinterpretation on inference of provision of Building Bye-Law has been done while preparing the plans. The construction shall be carried out strictly in accordance with the sanctioned building plans and in case any deviation is carried out, I shall inform the concerned Authority within 48 hours.
- 11. That in case the owner dispenses with my services at any stage whatsoever, I shall inform the concerned Authority within 48 hours.
- 12. That the size of each dwelling unit is not more than 300 sq. mt.

Verification:

- 13. That mandatory setbacks have been proposed and shall be maintained in accordance with the setbacks marked in the layout plan/Master Plan.
- 14. That before submission of the proposal, necessary information/clarification have been obtained from the concerned department of the concerned Authority. The plot is safe and is not affected in any scheme or the road widening. Building activities for residential use are allowed with number of storeys as per approved layout plan.
- 15. That no development/additional development/deficiency charges are payable, against this plot (in case development/additional development/deficiency charges are payable then its details be given in the separate para)
- 16. That no non-compoundable deviations shall be carried out during the course of construction.
- 17. That nothing has been concealed and no misrepresentation has been made while preparing and submitting the building plans.
- 18. That in case anything contrary to the above is found or established at any stage, the concerned Authority shall be at liberty to take any action as it may deem fit including revocation of sanction of building plans and debarring me for submission of building plans with the Authority under the scheme and also lodge a complaint with the Council of Architecture for appropriate action.

Deponent

Certificate of Structural Safety

10	The Director, Town Planning, Department of Urban Affairs Government of Arunachal Pradesh Itanagar
Ref:	Proposed work of
	[Title of the project]
C.S. No Sector/	o. /R.S. No./P.F No at Locality Town/City ward No
Owner.	
Address	S
Phone I	No. (Mobile)
	I am a Registered Structural Engineer (RSE). This is to certify that I have been appointed as the

Structural Engineer on record to prepared the Structural Design Basis Report, detailed structural and detailed structural drawings for above mention project. I am fully conversant of my duties and responsibilities under the Regulations and assure that I shall fulfill them in all respects.

I have prepared and signed a structural design and prepared detailed structural drawings of the proposed buildings as per the latest Indian Standard Specifications, and as indicated in the Structural Basis Design Report.

I undertake to supply the owner and the supervise the detailed structural drawings. I shall also undertake the responsibilities if there is any structure failure even after my drawing and supervision. If my services are terminated I undertake to intimated the authority in writings.

Signature

Registration No.

Empanelment No.

Name:					
-------	--	--	--	--	--

т.

Address

Phone:

Appendix "A-21" (Bye laws: 6.1.2) [Stage -1]

Structural Design Basis Report

- 1. This report to accompany the application for Building Construction Permission.
- 2. In case information on items 3, 10, 17,18 and 19 cannot be given at this time, it should be submitted at least one week before commencement of construction.

Part 1	General Data		
S.No.	Description	Information	Notes
	Address of the building		
	Name of the building		
	Plot number		
	Subplot number		
1	TPS scheme		
	a. Name		
	b. Number		
	Locality /Township		
	District		
2	Name of the owner		
3	Name of builder on record		
4	Name of Architect/Engineer on record		
5	Name of Structural Engineer on record		
6	Use of the building		
_	Number of storevs above ground level (including storev		
1	to be added later, if any)		
8	Number of basements below ground level		
	Type of structure		
	Load bearing		
9	R.C.C frame		
	R.C.C frame and shear walls		
	Steel frame		
	Soil data		
10	Type of soil		IS: 1893 CI.6.3.5.2
	Design safe bearing capacity		IS: 1904
	Dead load (unit weight adopted)		
	• Earth		IS:875 Part 1
	Water		
	Brick masonry		
11	Plain cement concrete		
	Reinforced cement concrete		
	Floor finish		
	Other fill materials		
	Piazza floor fill and landscape		
<u> </u>	Imposed (Live) loads		IS: 875 Part 2
	Piazza floor accessible to Fire Tender		
12	Piazza floor not accessible to Fire Tender		
	♥ Floor loads		
	♦ Roof loads		
	Cyclone / Wind		IS: 875 Part 3
13	Speed		
	Design pressure intensity		
14	Seismic zone		IS: 1893 (2002)
15	Importance factor		IS: 1893 (2002) Table 6
16	Seismic zone factor (Z)		IS: 1893 Table 2
17	Response reduction factor		IS: 1893 Table 7
18	Fundamental natural period -approximate		IS: 1893 CL. 7.6
19	Design horizontal acceleration spectrum value (Ah)		IS: 1893 CL. 6.4.2
20	▲ Expansion / Separation joints		

• Enclose small scale plans of each floor on 44 sheets

- Incase terrace garden is provided, indicate additional fill load and live load
- ▲ Indicate on a small scale plan on A₄ sheet.

Affidavit/Undertaking (For Handing Over Land Required For Road Widening)

	That	l/We	have	submitted	building	plans	for	construction	of	building	on	plot
No						Sector/Lo	ocality	/				
				Block No						unde	r Sar	iction
			of the		. Act for fav	our of s	anctio	on.				

I/We undertake to hand over the land required for road widening as shown on site plan to concerned Authority free of cost as and when asked by.....to do so.

I/We have already understood that the.....is granting sanction on the basis of my undertaking.

DEPONENT

Verification

I/We verify that the contents of the above undertaking are correct to the best of my knowledge and belief and nothing material has been concealed there from.

DEPONENT

Indemnity Bond for Basement

This Indemnity Bond is executed by Shri/Smt......S/o, D/O, W/O Shri/ Smt R/o..... in favour of Director Town Planning, Department of Urban Affairs, Govt. of Arunachal Pradesh.

Whereas the executant has submitted to the concerned Authority the plans for, sanction of basement over Plot No..... under the provisions of the Act and lie bye- laws made there under:-

And whereas the concerned Authority has agreed to sanction the aforesaid construction subject to the conditions that the owner shall indemnify the concerned Authority in the event of any loss or damage being cause to the adjoining building on account of the construction of the said basement either at the time of digging of its foundations or in the course of its construction or even thereafter and also against any claim of any concern thereto.

And whereas the executant has agreed to execute an indemnity bond to the above affect and also to abide by the terms imposed by the concerned Authority to the grant of sanction for construction of the basement. Now this deed witnesses:

- That in consideration of the sanction of the plans by...... for construction of the basement the
 executant undertakes that he/she shall at all times keep......harmless and free from any liability, loss
 or damages/ flowing from any injury or damage caused to the adjoining built-up properties or to any person as a
 consequence of the construction of at the time of digging of its foundations or during the course of its construction
 or at any time thereafter.
- 2. The owner agreed and undertakes that in the event of any claim being made by any person or persons against the concerned Authority either in respect of the sanction granted by the concerned Authority to the owner for the construction of basement or in respect of the construction or manner of construction of the basement by the owner or the consequences flowing from the said sanction the executant shall be responsible and liable and not the concerned Authority.
- 3. The executant agrees and undertake to indemnify the concerned Authority fully in respect of any amount which the concerned Authority may be required to pay to any person either by way of compensation or damages or on any other account as a result of any claim or suit or any other proceedings concerning the sanctioning of the construction of the basement of the making thereof and also in respect of the costs and expenses which the concerned Authority may incur on defending any action.
- 4 Without prejudice to the above undertaking the executant hereby binds itself to pay to the concerned Authority to the full extent any amount which the concerned Authority may be required to pay to any person in connection with, relating to or concerning the sanctioning of the basement or the making thereof.
- 5 The owner further agrees and undertakes that this bond shall remain in full force and effect till the executant faithfully observes/performs the undertaking herein before contained.

In	witness	whereof	the	executant	above	named	has	signed	this	bond	on	this	 day	of
							at							

Indemnifier

W	/itness: (Signatures)	
1.	Name	Full Address
	(Signatures)	
2.	Name	Full Address

Performa to be Submitted by Owner

- 1. Name, Status, and Address of the applicant: -
- 2. Name of the Architect and address with Registration number with Council of Architecture:-
- 3. Details of the property/plot:
 - a) Location;-
 - b) Boundaries:-
 - c) Area in sq.mt. with dimensions (net plot area):-
 - d) Width of the roads:-
- 4. Land use
 - a) Master Plan:-
 - b) Zonal Development Plan:-
 - c) Approved Layout Plan;-
- 5. Title
 - a) Free Hold:-
 - b) Leasehold under notification for acquisition if lease hold permission of lessor for construction under the leasehold condition obtained:-
 - c) Whether under acquisition, if so give details:-
- 6. Whether the plot/land is affected under the Urban Land (Ceiling & Regulation) Act, 1976. If so, copy of the NCO from the concerned Authority be furnished.
 - copy of the NCO from the concerned At
- 7. Proposals
 - a) Land Use:-
 - b) Coverage on each floor with proposed use of the floor space including basement:-
 - c) FAR:-
 - d) Height;-
 - e) No. of floors:-
 - f) Envelope controls/set backs:-
 - g) Parking norms:-

Encl:

- 1. Ownership title
- 2. Permission to construct under the lease
- 3. Permission under the Land Ceiling Act, 1976.
- 4. Site/Location Plan
- 5. Tentative proposals to explain the scheme

Signature of Architect	Signature of the owner
Name	Name
Reg. No	Address
Address	

Number and Type of Lifts Required for Different Occupancies and Space for Electrical Installations

1. The number and type of lifts required depending on the capacity of lift, desired speed nature of operation are as given in table below:

				No. of persons that can be carried by a lift							
		Canacity		ln 6 r	nin	In 30 m	in.	In 50	min.	In 60 m	iin.
SI.	No. of	of lifts in	Sneed m/s	Manuall	Automati	Manually	Automati	Manuall	Automati	Manually	Automati
No.	floors	person	opeeu m/s	У	C	Operated	C	У	C	Operated	C
		percen		Operate				Operate			
	•	•		a	•	-	•	a	10	44	10
1	2	3	4	5	6	1	8	9	10	11	12
1	7	6	0.6-0.75	17	-	102	-	170	-	204	-
2	7	8	0.6-0.75	22	-	132	-	220	-	-	-
3	7	10	0.6-0.75	26	-	156	-	260	-	312	-
4	7	10	1.0	30	-	180	-	300	-	360	-
5	7	13	1.0	37	-	122	-	370	-	444	-
6	11	6	0.6-0.75	11	-	70	-	115	-	140	-
7	11	8	0.6-0.75	15	-	90	-	150	-	180	-
8	11	10	0.6-0.75	18	-	108	-	180	-	216	-
9	11	13	0.6-0.75	22	-	132	-	220	-	264	-
10	11	10	1.0	21	-	126	-	210	-	252	-
11	11	10	1.5	24	-	144	-	240	-	288	-
12	11	13	1.5	28	-	156	-	260	-	312	-
13	11	13	1.5	32	-	180	-	300	-	-	-
14	16	10	1.0	17	-	100	126	170	210	-	252
15	16	13	1.5	20	24	120	145	200	240	248	290
16	16	13	1.5	23	30	138	180	230	300	-	360
17	16	16	1.5	25	33	150	198	250	330	300	356
18	21	10	1.5	18	32	108	132	180	220	214	264
19	21	13	1.5	21	26	126	156	210	250	250	312
20	21	14	1.5	23	28	138	168	230	280	-	-

Table: Number and types of lifts for non-residential Multistoried Building

Note-1: (a) For all non-residential buildings, the traffic cleared in 50 minutes is considered adequate and is approved by Authority. As such for calculation the number of lifts required, the rate of the clearance of traffic in column 9 and 10 and the population may be taken into consideration.

(b) In addition to total number of lifts required as above, provision of one lift of the same capacity may be considered to serve as stand-by.

Note-2: The population may be worked out on the basis of useful carpet area which the person occupies (excluding area of Verandah, Lobbies, Halls, Passages, Lavatory blocks, etc.)

Note-3: The population on ground and first floor may not be taken into consideration since these floors are not generally served by lifts.

Note-4: 0.75 meter per sec.

1.00 meter per sec.

Equivalent to 150 ft. per Min.

1.5 meter per sec.

Equivalent to 200 ft. per Min.

Equivalent to 300 ft. per Min.

Note-5: The height of buildings for lift installation i.e. the travel on the lift presumed in the above statements is as below:

11 floors 33.0) mt.
16 floors 48.0) mt.
21 floors 64.0) mt.

SI. No.	floors	No	Passenger unit capacity Persons	Speed in m/s	Landing Gate Type	Central System	Service Lift No.	Capacity Persons	Type of Gate	Central System
1	5 to 8	2	6	0.0 to 0.5	*	Automatic push button operation both from car and landing	-	-	-	-
2	9 to 11	2	8	0.6 to 1	*	Do	1	8	-	Push button car handle switch control
3	11 to 13	2	8	0.6 to 0.74	*	Do—and without collection system	1	8	-	do
		1	6		Power operated doors	do				
4	13 to 19	2	8	1	-	do	1	8	-	do
		2	8	1	Power operated doors					

Table: Number and types of lifts for Residential Building

* For buildings more than 15 meters in height collapsible gates shall not be permitted. (see bye-law No. 7.9.1(f))

The dimensions and relevant information for lift installations like lift well, pit depth, machine room, clearance from top floor landing to machine room flooring is given in table below:

Carrying Capacity of lift (persons) Number	Load (kg)	Lift Speed	Dimer of Lift front c (In c	ision ∶well lepth m.)	(Cm)	Leading Pit Entrance (Cm)	Dim Mac	nension hine Ro	of bom	Clearance from top floor landing to machine room flooring cm	Imposed load in tones on top of lift well due to installation. It may be noted that figures do not include weight of the machine from floors and well, etc.
1	2	3	4	5	6	7	8	9	10	11	12
4	272	Up to & including 1 m/s	175	115	70	140	230	275	245	450	6.5
6	408	do	195	135	80	140	230	335	275	450	7.0
8	544	do	200	170	80	150	245	395	275	450	8.5
10	680	Up to & including 1.5 m/s	225	170	90	150	245	395	305	470	10.5
13	884	do	235	188	90	150	245	425	335	470	13.0
16	1088	do	255	205	105	150	245	520	335	480	15.0
20	1360	do	255	220	105	150	245	520	335	480	15.0

Table: Dimensions and required information for Lift Installation in Building

Note:

- i) All lift well dimensions are minimum clear finished plumb requirements.
- ii) Where more than one lift is located in the lift well, extra width of 10 cm. Separator beam should be provided.
- iii) 1 m/s = 200 ft./min.
- iv) The height of landing entrance should be 210 cm. (about 7 ft.) for all lifts.

D.2.0 Spaces for Electrical Installations

The spaces required for different electrical installations are given at 3.1 to 3.3 **D.2.1 Electric Sub-station** – The norms given in 3.1.1 and 3.1.2 shall be adopted for provision of space for sub-station.

SI No.	Total covered Area (sqm)	Transformer Capacity (KVA)	S/Stn. Size Required (sqm)
1	2500	1 X 400	70
2	4500	1 X 630	70
3	8000	2 X 630	100
4	10,000	2 X 630	130
5	15,000	4 X 630	160
6	20,000	5 X 630	175
7	25,000	6 X 630	200
8	30,000	7 X 630	220

D.2.1.1Area Requirements for Sub-Station for buildings

Note

- 1. For additional 1000 sq.mt. covered area, a load of 90 KVA will come up with 150 KVA TR. Capacity at 60 % loading.
- 2. For additional of one transformer as per covered area, a space of additional 16 sq.mt. is to be provided.
- 3. In case of any deviation in space size due to unavoidable circumstance, the same may be considered with the approval of Electricity Board.
- 4. The floor of the sub-station shall have cable trenches of 0.6 mt. depth, the layout for which will be given at the time of actual construction. For this purpose, a dummy floor of 0.6 mt. depth shall be provided to facilitate cutting/digging of floor for installation of equipment's and making subsequent changes in trenches. This floor shall be capable to withstand minimum load of 10 tones of each transformer mounted on flour wheels.

The break-up spaces required for different installations in a sub-station are given as below:

- 1. Supply company's Switchgear room and or space of meters.
- 2. Transformer Rooms: The number and size of transformer rooms shall beascertained from the total power requirements of the company. To determine the size of transformer and clearance around a transformer, reference may be made to good practice (I.S.1887-1967 code of practice for installation and maintenance of Transformer). A 500 KVA transformer may be provided with a minimum space of 4 mt. X 4 mt. If transformer is to be installed outdoor space shall be provided on similar considerations and adequate provision for safety enclosure is to be made. For transformer having large oil content (more than 2000 lt.) soak pits are to be provided in accordance with rule 64 of Indian Electricity Rules, 1956.
- 3. High Voltage Switch Rooms: In case of sub-station having one transformer, theowner is required to provide only one high voltage switch. In the case of single point supply for two transformers, the number of switches required is 3 and for 'n' transformers the number of switches is n+1. The floor area required in case of a single switch will be roughly 4 mt. X 1mt. and for every additional switch the length should be increased by 1mt.
- 4. Low Voltage Switch Rooms: The floor area requirement in respect of low voltageswitchgear room cannot be determined by any formula.
- 5. *Room for Stand-by-Generator:* A room space not less then 6 mt. X 9 mt. may be provided for housing a standby Generator set of 50 KW.

D.2.1.1.A: Location of electric sub-station in basement of multistoried buildings:

1. The electric sub-station should be provided in the approved/sanctioned covered area of the buildings not below the first basement level and should be on the periphery of the building with clear independent round the clock approach having proper ramp with slope.

The ramp should be designed in such a manner that in case of fire no smoke should enter the main buildings. The exit from basement electric sub-station shall have self-closing fire/smoke check doors of 2 hours. F.R. near entry to ramp. Additional exit shall be provided if traveled distance from the farthest corner of the ramp is more than 15mt.

2. The electric sub-station should be totally segregated from rest of the basement having 4 hours. F.R. wall and should have adequate internal lighting and ventilation. A perfect independent ventilation system of 30

air charges per hour linked with detection as well as automatic medium velocity water spray system for individual transformer shall be located outside the building at ground floor, fire control room shall be manned round the clock and shall also have and audio system in the basement as well as in the control room. No service such as water, sewer, air-conditioning, gas pipes or telegraphs services should pass through electric substation of the cable trench.

- 3. The rising mains should be of metal bus bars. The floor of electric sub-station should be 2 ft above the rest of basement floor and designed suitably to carry 10 tons of transformer weight on wheels also having provision of proper cable trenches 0.6 X 0.6 mt. depth. Dummy floor of 0.6 mt. depth be provided to facilitate laying of cables inside the building connecting to equipment. Fire retarding cables should be provided and cable trenches be filed with said cables. R.C.C. pipes at suitably places as required will be provided for cable entries to the sub-station spaces with suitable water proofing arrangement. A provision of 12 ft. clear height below beams should be made in the electric sub-station area along with adequate arrangement for fixing chain pulley block for a load of 15 tons. Provision of sumps shall be kept in the floor so that complete volume of transformer oil in the event of spillover could be accommodated. Sufficient arrangement to prevent spread of fire to oil pumps be made.
- 4. Transformers room and sub-station room shall be provided with steel shutters of 8' X 8' with suitable grills. Sufficient arrangement for pumping the water out, in case of flooding should be made to minimize loss to switchgear and transformer.
- 5. In view of experience of installation of exhaust chimneys in the multi-storeyed buildings at undesirable locations, proper provision in the form of vertical exhaust leading to above terrace level should be made for the sub-station.
- 6. Electric sub-station space should be made available free of cost by promoters and should be free of seepage/leakage of water. There should be no combustible material kept in side or in the vicinity. Periodic inspection of electric sub-station shall be mandatory and violation of any bye-law will be dealt, sternly with penalty and immediate disconnection.

D.2.1.2. Other Requirements for Sub-station

- 1. The sub-station will preferably be located on the ground level failing which it can be in the basement floor in no case at higher level.
- 2. The entire space will be provided at one floor in continuation.
- 3. The minimum width of the sub-station space shall not be less than 6 mt.
- 4. The areas given above in respect of the different categories of rooms hold good if they are provided with windows and independent access doors.
- 5. All the rooms should be provided with partition up to the Ceilings and shall have proper ventilation. Special care should be taken to ventilate the transformer rooms and where necessary, louvers at lower levels and exhaust fans at higher level shall be provided at suitable locations.
- 6. In order to prevent storm water entering the transformer and switch rooms through the soak pits, the floor level of the sub-station shall be at least 15 cm above the highest flood water level that may be anticipated in the locality.

D.2.2 Cable Trenches Shafts Etc.

D.2.2.1 Suitable number of vertical shafts, rising mains, distribution boxes, etc. shall also be provided as per the requirements at suitable location. Cable trenches with suitable handy covers for entry of the cables up to the substation onwards up to the street adjoining other building shall also be provided as per the requirements. These vertical shafts, rising mains, distribution boxes, cable trenches, etc. shall be so constructed as to be accessible only to authorized personnel. The rising mains and other installations in the vertical shafts, tap off boxes distribution boxes etc. required at each floor shall be provided, installed and maintained by the owner at their own cost.

Adequate enclosed space shall also be provided at each floor for installation of equipment's for distribution on respective floors such as distribution boxes, cut-out, and meter boxes and main switches.

D.2.2.2 Location of Switch Room: In large installations other than where a sub-station is provided, a separate switch room shall be provided. This shall be located as closely possible to the electrical load center and suitable ducts shall be laid with minimum number of bends form the point of entry of the supply to the position of the main switchgear. The switch room shall also be placed in such a position that rising ducts may readily be provided there from to the upper floors of the building in one straight vertical run. In larger building, more than one rising duct and horizontal ducts may also be required for running cables from the

switch room to the foot of each rising main. Such cable ducts shall be reserved for the electrical services only, which may, however, include medium and low voltage installations, such as call bell systems. Telephone installation should be suitably segregated.

- **D.2.2.3** Location and Requirement of Distribution Panels: The electrical geardistribution panels and other apparatus, which are required on such floor may conveniently be mounted adjacent to the rising mains, and adequate space should be provided at each floor for this purpose.
- **D.2.2.4** Location and Requirement of PBX/PABX Room: Information regardingprovision and location of PBX/PABX room, telephone outlets and riser shall be ascertained form the relevant Authority. Adequate space should be provided for installation of Sub-DistributionBoard.

D.2.3. GENERAL

D.2.3.1 The maintenance of the built up space for electric sub-station, distribution equipment, vertical shafts and enclosure at each floor shall be done by the owner.

The standby arrangement for electricity supply up to and including the sub-station equipment and distribution pillars at the sub-station shall be provided compulsorily.

STAGE – 2 FORM

Information for Intimation of Completion of Work up to Plinth Level To

The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar

Sub: Information for Intimation of Completion of Work up to Plinth Level

Sir,

The construction up to plinth/column up to plinth level has been completed in Building No on						
Plot	No	Sector/Colony	Ward/Village			in
accorda	ance with your perr	mission No	dated	under my	supervision	and in
accordance with the sanctioned plan.						

Yours faithfully,

Signature of Licensed Architect/Engineer/Supervisor

Name
(In Block letters)
Address:

Date:....

Form of Notice of Completion

(To be submitted along with prescribed fee for notice of completion and other relevant documents)

То

The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar

Dear Sir,

2. Permission to occupy or use the building may be granted.

Yours Faithfully,

Signature of owner.....

Name of owner

(In Block letters)

Address of the owner

.....

Dated:

Encl : As above

Form for Certificate of Architect/Engineer (To be submitted along with notice of completion)

То

The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar

Dear Sir,

- 2. Certificate:
 - i) Certified that the building(s) has been constructed according to the sanctioned plan and structural design (one set of structural drawings as executed is enclosed) which incorporate the provisions of structural safety as specified in relevant prevailing NBC Part 6 and IS codes standards/Guidelines.
 - ii) Further certified that water harvesting as well as waste water re-cycling systems have been provided as per the sanctioned building plan.
 - iii) It is also certified that construction has been one under our supervision and guidelines and adheres to the drawings submitted and the records of supervision have been maintained by us.
- 3. Permission to occupy of use the building may be granted.
- 4. Any subsequent change from completion drawings will be the responsibility of the owner(s)

a) Signature of the owner Architect/Engineer with date	b) Signature of the with date			
Name in Block letters	Name in Block letter, License No.			
Address	Address			
Signature of the Structural Engineer with date (for certificate 1) (as defined in NBC of India)	Signature of Architect/Engineer/ Group/Engineer with date			
Name in Block Letters	Name in Block letters, License No			
Address	Address			
Dated :	Dated			

FORM NO. 12 BUILDING COMPLETION CERTIFICATE

{By Architect on Record}

Referer Owner's	nce No s Name:	Location :
Submit	ted on :	Received on :
10	The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar	
Sir,	C C C C C C C C C C C C C C C C C C C	

- 1. The building/s has /have been constructed according to the sanctioned plan.
- 2. The building/s has /have been constructed as per approved plan and design as per detailed architectural drawings and specifications prepared by Architect on Record.
- 3. Construction has been done under our supervision / guidance and adheres to the drawings submitted.

Signature of the Owner	Signature of Architect on Record	Signature of Architect on Record				
Date:						
Name in block letter:	Name in block letters:					
Address:	Address:					

FORM NO. 13 BUILDING COMPLETION CERTIFICATE {By Construction Engineer on Record}

Reference No	
Owner's Name:	Location :
Submitted on :	.Received on :

То

The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar

Sir,

- 1. The building/s has/have been constructed according to the sanctioned plan -
- The building/s has / have been constructed as per the detailed structural drawings and structural specifications prepared by the Structural Engineer on Record – the detailed Architectural drawings and Architectural specifications prepared by the Architect on Record. detailed drawings and specifications of all services
- 3. All materials used in the construction have been tested as provided in specifications and a record of test reports has been kept

Signature of the Owner	Signature of Construction Engineer on Record
Date:	Date:
Name in block letter:	Name in block letters:
Address:	. Address:

FORM NO. 14 BUILDING COMPLETION CERTIFICATE {By Structural Engineer On Record}

Refere	nce No	
Owner's Name:		Location :
Submi	tted on :	Received on :
То	The Director Town Planning Department of Urban Affairs, Govt. of Arunachal Pradesh Itanagar	
Sir,		

This is to certify that detailed structural drawings of the buildings/s has / have been prepared on the basis of a detailed analysis and a detailed design carried out according to relevant previsions of the latest Indian Standard Codes, National Building Code and as indicated in the structural design basis report.

Signature of the Owner	Signature of Structural Engineer on Record
Date:	Date:
Name in block letter:	Name in block letters:
Address:	Address:

CERTIFICATE OF STRUCTURAL INSPECTION REPORT

(This form has to be completed by registered Structural Designer after his site inspection and verification regarding of all recommendation by the owner, which in the option of the registered structural designer are necessary for safety of the structure).

- (I) Description by title and location of the property including, T.P. No., F.P. No. etc.
- (II) Name of Present owner:
- (III) Description of the structure:

Class I or Class II (Briefly describe the property in general and structure in particular)

(A) Function (B) Framed construction								
	Residential (with or without shop	Apartment with or without	Office Buildings	Shopping Centers	School Colleges	Hostel	Auditoria	Factory
	1	2	3	4	5	6	7	8
A. Load Bearing masonry wall construction								
B. Framed Structure								
Construction and structural materials	Critical load bearing element	Brick	RCC	Stone	Timber	Steel		
	Roof floor	RCC	Timber	RCC	Steel	Jack-arch		

(IV) Year of construction:

Year of subsequent additional or rectification's (please describe nature of additions or rectification).

- (V) Date of last inspection report filed: Last filed by whom (This does not apply to the first report).
- (VI) Soil on which building is founded.
 - i. Any changes subsequent to construction :
 - ii. Nearby open excavation
 - iii. Nearby collection of water
 - iv. Proximity of drain
 - v. Underground water tank
 - vi. R.W. Pipes out-lets
 - vii. Settlements
- (VII) The super-structure (R.C.C. frame structure)
 - i. Crack in beam or column nature and extent of crack probable causes:
 - ii. Cover spell
 - iii. Exposure of reinforcement
 - iv. Subsequent drainage by user for taking pipes, conduits, hanging, fans or any other fixtures, etc

:

- v. Crack in slab
- vi. Spalling of concrete or plaster of slab :
- vii. Corrosion of reinforcement
- viii. Loads in excess of design loads
- (VIII) The Super Structure (steel structure)

i. Painting

vi.

- ii. Corrosion
- iii. Joints, nuts, bolts, rivets, welds, guest plates :
- iv. Bending or bucking of members
- v. Base plate connections with columns or pedestals
 - Loadings : (please describe some of the major cracks, their nature, extent and location, with a sketch, if necessary)

:

(IX) Recommendations if any

This is to certify that the above is a correct representation of fact as given to me by the owner and as determined by me after site inspection to the best of my ability and judgement.

The recommendations made by me to ensure adequate safety of the structure are complied with by the owner to entre satisfactory.

Signature of Registered Structural Engineer on Record	
Date:	
Name in block letter:	
Registration Number:	
Address:	