# STRUCTURAL STABILITY CERTIFICATE

NAME OF THE SCHOOL

PON VIDYASHRAM

**ADDRESS** 

Plot No. 64 to 80 & 91 to 96 in S.Nos. 5/1 Part, 5/2 Part, 5/13 & 5/14 Part of Porur Village, Sapthagiri Nagar, Opposite to ARS Garden, Arcot Road, Valasaravakkam, Chennai – 600 087.

ASSESED AS ON

03.05.2023

PREPARED BY

Dr.V. SUNDARARAJULU,FIE,PE,CEng, BE(Civil),ME(Struct),PhD(Constn.)

Collector Approved - Class I - A Engineer, Chennai Gazette No.5.Dt.03.09.1997, Chennai Collector No.V2,58429/96/08.07.1997

# 146(Old 410), 40<sup>th</sup> Street, TVS Avenue, Anna Nagar West Extension., Chennai – 600 101, (Off):044-2654 4488, (Mob) +91-80560 98960 E – Mail ID: <u>sundararajulu@gmail.com</u> Dr. V. Sundararajulu , PE,C.Eng., Ph.D., M.E. (Struct), FIAStructE, FIE, FIITArb, FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Govt. Approved Class I-A Engineer Approved by Collector of Chennai No. 146 / 410, TVS Avenue, 40<sup>th</sup> Street, Anna Nagar West Extn., Chennai – 101. Tel: 044-26544488, E-Mail: vsachennai65@gmail.com

Date: 03.05.2023

# FORM - A

:

1. Door Number of Building

PON VIDYASHRAM

Plot No.64 to 80 & 91 to 96 in

S.Nos.5/1 Part, 5/2 Part,5/13

& 5/14 Part of Porur Village

2. Location (St.No.Ward No.
 of the place i.e.
 (Corporation/Municipality
 /Panchayat/Township/
 Contonment).

Plot No.64 to 80 AND 91 to 96, S.Nos.5/1Part,5/2 Part,5/13&5/14 Part of Porur Village, Sapthagiri Nagar, Opposite to ARS Garden, Arcot Road, Valasaravakkam, Chennai - 600 087.

Date of Inspection

03.05.2023

4. Year of Construction

2005

5. Approximate cost of construction as per current rate

a) Present Construction Cost

Rs.1800/sft

le john

Dr. V. SUNDARARAJULU, Ph.D., P.Eng.
B.E. (Civil) M.E. (Struct), FIAStruct E., FIE, C. Eng.
FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA)
Approved Class - I - A, Engineer
Chennai Gazette No. 5, Dt. 03.09.1997
Chennai Collector / No. V2/58429/53/03.07.1997
No. 146, (Old No. 415) Oth Street,

TVS Avenue, Anna Nagar West Extn., Chennai - 600 161. Ph : 044-2654 4488 b) Present Depreciation of the : Rs.18.05 Crores total buildings with all infrastructures

a) Plinth area

GF

:

: 37,125 sft

FF

34,973 sft

SF

27,921 sft

TF

20,097 sft

Head Room :

2,153 sft

etc.,

Total Plinth Area

: 1,22,269 sft

Purpose for which the : Building is being used or proposed to be used

School Building

Purpose for which the : School Building only building is further to be used

Details of construction : Soil : Sand Mixed with Stiff Clay 8\_ of the building particular of the foundation soil, specification of the various parts under

Foundation 3.

: Isolated RCC Footings

Basement

Brick Work in Cement Mortar 1:6

Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E.(Civil)M.E.(Struct),FIAStruct E,FIE,C.Eng. FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class - I - A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997 Chennai Collector / No. V 2 / 58 4 2 9 / 9 6 / 08. 07. 1997 No. 146, (Old No. 4101 Oth Street, TVS Avenue, Anna Nagar West Extn., Connai - 600 101, Ph : 044-2554 4483

Superstructure C.

RCC Framed Structure with Brick Masonry Walls in Cement Mortar 1:6

Floor and Roof

RCC Roof in all floors.

Period for which license : 07.05.2023 to 06.05.2026 is required

10. Number of Students to be :

Teaching Staff

210 Nos

Accommodated

Non Teaching Staff

95 Nos

Students

:

3500 Nos

(As reported by the School Management)

Signature of the Owner of the Building

Signature of the Engineer Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E.(Civil)M.E.(Struct), FIA Struct E, FIE, C.Eng. FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class · I · A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997
Chennai Gollector/No.V2/58429/96/08.07.1957
No. 146, (Old No. 416) Oth Street,
TVS Avenue, Anna Nagar West Extn.,
Chennai - 600 101 Ph : CM 2154 4488

Dr. V. Sundararajulu, PE,C.Eng.,

D. M.E. (Struct), FIAStructE, FIE, FIITArb,

BY FS, FCL, FIGS, FACCE, FICA, FASCE (USA)

Govt. Approved Class I-A Engineer

Approved by Collector of Chennai

No. 146 / 410, TVS Avenue, 40<sup>th</sup> Street, Anna Nagar West Extn., Chennai – 101. Tel: 044-26544488, E-Mail: vsachennai65@gmail.com

Date: 03.05.2023

## FORM - B

### STATEMENT TO ACCOMPANY THE CERTIFICATE OF STRUCTURAL SOUNDNESS

Lacation of	Age of the	No. of	Value of	Short	description
the building	building	floors	the	of t	the structure
			building		
1	2	3	4		5
				1	
PON VIDYASHRAM,				Fr	amed
Sapthagiri Nagar	18 Years	G+3	18,05,00,000/-	struct	ure with
Valasaravakkam				Brick	Masonry
Chennai - 87.				Walls	and RCC
				Roof.	
Purpose of	The period for w	hich	No.of students to	)	Remarks
the building					
	structurally so	ound			
	(minimum).				
6	7		8		9
School	3 Years	Teach	ning Staff -210N	los Ti	ne building
Building			hing Staff-95 N		s structurally
	06.05.2026		Students-3500 N	os	Sound

Signature of the Engineer

Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E. (Civil) M.E. (Struct), FIAStruct E, FIE, C.Eng. FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class - I - A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997 Chennai Collector (No. V2/58429/96/08.07.1997 No. 146, (Old No. 415) Oth Street, TVS Avenue, Anna Nagar West Extn., Chennai - 600 101. Ph.: 044-2654 4488

Certified that there are no thatched buildings are used for conducting any classes in this school premises. If any thatched building's are constructed after the issue of this license we are held responsible for any fire accident that occurs later and that I/We are aware that our license will be cancelled.

Signature of the owner

Sundararajulu, FIE,C.Eng., FIAStructE, FIE, FIITArb, FIGS. FACCE, FICA, FASCE (USA) Language Class I-A Engineer Approved by Collector of Chennai

No. 146 / 410, TVS Avenue, 40th Street, Anna Nagar West Extn., Chennai - 101. Tel: 044 - 26544488, E-Mail: vsachennai65@gmail.com

Dt.03.05.2023

# FORM - C

Form of certificate of structural soundness under sub section e cf section 4 of the Tamil Nadu Public Buildings (licensing) Act 1965 Madu Act 13 of 1965) referred to in Rule 4 of the Tamil Nadu Public Licensing) Rules 1966.

Certify that I have inspected the building mentioned in the statement furnish below the salient technical features:

### FOUNDATION

Depth below Ground level 2.44 m and 3.00 m from existing

Ground Level

Mature of soil set out in Sand Mixed with Stiff clay

the foundation level

Pressure at Foundation 14.5 t / sq.m.

Probable safe bearing 20.0 t / sq.m.

Capacity of the Strata met with foundation.

### SUB STRUCTURE :

Maximum Compressive stress in : 5 kg/sq.cm

the most Critical Section of masonry

Permissible maximum compressive : 7 kg/sg.cm

stress in Masonry(BW in CM 1:6,20cm thick), for (the crushing strength

of 80kg/cm<sup>2</sup>)as per Table 4 of IS 1905

Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E.(Civil)M.E.(Struct),FIAStruct E,FIE,C.Eng. FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class - I - A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997 Chennai Collector / No. V2/58429/96/08.07.1997

No. 146, (Old No. 410' Oth Street. TVS Avenue, Anna Nayar West Extn., Chennal - 600 101 En : Car 1354 4188 Maximum Compressive stress in the most :
Critical Section of concrete for M25 Grade

a) Bending :  $6 \text{ N/mm}^2 (60 \text{ kg/cm}^2)$ b) Direct :  $4 \text{ N/mm}^2 (40 \text{ kg/cm}^2)$ 

III) Maximum Permissible compressive stress for concrete M25 Grade as per Table 21 of IS 456-2000

> a) Bending : 8.5 N/mm<sup>2</sup> (85 kg/cm<sup>2</sup>) b) Direct : 6 N/mm<sup>2</sup> (60 kg/cm<sup>2</sup>)

Dy me with reference to ISI loading standards 875 (latest and other relevant Indian standards code of practice, and I that the building is structurally sound to be used as a public for the purpose noted in the statement. License may be granted the period from 07.05.2023 to 06.05.2026

Signature of the Engineer

Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E. (Civil) M.E. (Struct), FIA Struct E, FIE, C. Eng. FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class - I - A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997 Chennai Collector (No. V2/58429/96/08.07.1997 No. 146, (Old No. 410) Oth Street, TVS Avenue, Anna Nagar West Extn., Chennai - 600 101 Ph.: C11.7654 4488

# **DECLARATION**

I, Dr. V. SUNDARARAJULU, Govt. Class I - A Engineer, Approved by Collector of Chennai, residing at 146/410, TVS Avenue, 40th Street, Anna Magar Western Extension, Chennai - 600 101, do hereby declare that I possess the qualification and experience specified in the Table to Rule 11 of the Madras Public Buildings (Licensing Rule 1966) for issuing the certificate of structural soundness of the building covered by the certificate.

V2-58429-96 Collector letter of Chennai approved no. dt. 08.07.97 notified in the Chennai Gazette No.5, dt. 03.09.1997 for the purpose of issue of Certificate of Soundness.

Signature of the Engineer

Dr. V. SUNDARARAJULU, Ph.D., P.Eng. B.E.(Civil)M.E.(Struct), FIA Struct E, FIE, C. Eng.

FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Approved Class - I - A, Engineer Chennai Gazette No. 5, Dt. 03.09.1997 Chennai Collector / No. V2/58429/56/08.07.1997

No. 146, (Old No. 4101 Oth Street, TVS Avenue, Anna Nanar West Extn., Chee

Chennai-101 03.05.2023

Date

Dr. V. Sundararajulu, PE,C.Eng.,

Ph.D., M.E. (Struet), FIAStruete, FIE, FIITArb, FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA) Govt. Approved Class I-A Engineer

Approved by Collector of Chennai

No. 146 / 410, TVS Avenue, 40<sup>th</sup> Street, Anna Nagar West Extn.,

Chennai – 101. Tel: 044 -26544488,

E-Mail: sundararajulu@gmail.com

Dt.03.05.2023

# STATEMENT ACCOMPANYING FORM - E

Form of report to be made to the Competent Authority by ispecting authorities or officers appointed under section 28 of the Madras Public building (Licensing) Act 1965 (Madras Act 13 of 1965 referred to rule 7 of the Madras Public Building (Licensing) Rule 1966

ous pp, to be	T			
If in a dangerous condition step, recommender to be taken		Nil		
Suggestion for rectifying the defect		Nii		
Nature of defects noticed	4	ΪŻ		
Purpose for which building is uses		School Building		
Date of Inspection		03.05.2023		
Sl. Location of the building Door No.  No. Street Name & Name of the locality of the building inspected (Door No., Name of place, Municipality, Panchayat or Panchayat Union Township, Cantonment	1	Plot No.64 to 80 & 91 to 96 within S.Nos.5/1 Part, 5/2 Part, 5/13 & 5/14 Part of Porur Village, Sapthagiri Nagar, Opposite to ARS Garden, Arcot Road, Valasaravakkam, Chennai – 600 087.		
No.		<del>-</del> -		

Place : Chennai - 600 101

Date: 03.05.2023

Dr. V. SLSignaturierof Cengineering.

B.E.(Civil)M.E.(Struct),FIAStruct E,FIE,C.Eng.
FIV, FIS, FICI, FIGS, FACCE,FICA, FASCE (USA)
Approved Class - I - A, Engineer
Chennai Gazette No. 5, Dt. 03.09.1997

Chennai Collector/No.V2/58429/53/08.07. No. 146, (Old No. 410. - 0th Street Dr. V. Sundararajulu, PE,C.Eng.,

Ph.D., M.E. (Struct), FIAStructE, FIE, FIITArb, FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA)

Govt. Approved Class I-A Engineer

Approved by Collector of Chennai

No. 146 / 410, TVS Avenue, 40<sup>th</sup> Street, Anna Nagar West Extn., Chennai – 101. Tel: 044-26544488, E-Mail: vsachennai65@gmail.com

Dt.03.05.2023

# **CALCULATION SHEET**

1 Total Area of the Building

: 1,22,269, sft

2 Present Construction Cost for Hall Type Buildings

: Rs.1800 / sft

3 Depreciation is considered the salvage value of 10%

: 1% per year

(For 90 Years life for RCC Buildings)

10% debris cost will be there even after 90 years

So, 90 Year / 90% = 1% per Year

4 For 18 Years Depreciation is

18%

5 Present Depreciation Value of the Building

Rs.1800 x 1,22,269 x (100 - 18)/100

= 1800\*1,22,269\*(82/100)

= Rs.18,04,69,044/-

Say Rs.18.05 Crores

Dr. V. SUNDARARAJULU, Ph.D., P.Eng.
B.E. (Civil) M.E. (Struct), FIAStruct E, FIE, C. Eng.
FIV, FIS, FICI, FIGS, FACCE, FICA, FASCE (USA)
Approved Class - I - A, Engineer
Chennai Gazette No. 5, Dt. 03.09.1997
Chennai Collector (No. V2/58429/96/08.07.1997
No. 146, (Old No. 41000th Street,
TVS Avenue, Anna Nagar West Extn.,
Charalia, 600.101 Physical 1188