

Jawahar Education Society's, INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NASHIK.

(Approved by AICTE,DTE & Affiliated to Savitribai Phule Pune University)



# **Curriculum Enrichment**

1.3.2. (Internship/Project/field Visit)

Survey No 48, Gowardhan, Gangapur Road, Nashik - 422 222. Maharashtra, India www.jitnashik.edu.in



Jawahar Education Society's, INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NASHIK.

(Approved by AICTE, DTE & Affiliated to Savitribai Phule Pune University)

# Department: - Civil Engineering

(Academic Year-2021-22)

Sr. No.	Category	Pg. No.
1	Internship	1 to 102
2	Project	103 to 169

Survey No 48, Gowardhan, Gangapur Road, Nashik - 422 222. Maharashtra, India www.jitnashik.edu.in



Jawahar Education Society's, INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NASHIK.

(Approved by AICTE, DTE & Affiliated to Savitribai Phule Pune University)

# Civil Engineering Dept.

Internship (2021-22)



Jawahar Education Society's Institute of Technology, Management & Research, Nashik Approved by AICTE and DTE, Government of Maharashtra, Affiliated to University of Pune

### **Department of Civil Engineering**

### 1.3.2. Internship/Field work/ Project (2021-22)

Roll No.	Name of Students	Industry	Category
1	Bodhare Pratik Prakash	Palaj Buildcon	Internship
2	Mhaisdhune Harshada Dnyaneshwar	M/s. Saikrupa Construction	Internship
3	Pagare Bhagyashree Sanjay	Er. Manoj Mohan Thakare Govt. Gontractor	Internship
4	Rajswaroop Uttam Mahajan	Er. Pankaj D. Chaudhari Consulting Civil Engineer	Internship
5	Adangale Aashis Dattatray	Mayur Constructions and Developers	Internship
6	Admane Harshal Bhalchandra	Mahajan Buildpro. LLP.	Internship
7	Ahire Saurabh Ramesh	Mahajan Buildpro. LLP.	Internship
8	Barve Darshan Pramod	Rohidas D. Chavan RCC Contractor	Internship
9	Bagul Mitesh Dilip	MRP Associates	Internship
10	Bagul Rohan Subhash	MRP Associates	Internship
11	Chaudhari Vijay Shankar	Mayur Constructions and Developers	Internship
12	Chine Rohit Sudhir	Er. Sagar Vasantrao Vinchu	Internship
13	Darade Bhaupatil Shivaji	M/s. Rushikesh D. Barke Govt. Contractor	Internship
14	Deore Yash Sunil	Dwarkamai Construction	Internship
15	Gaikwad Aishwarya Rajendra	arvind Laxman Gunjal Civil Engineers and Contractor	Internship
16	Gangurde Latish	· Shree Sadguru Construction	Internship
17	Gavit Nitesh Kalamsingh	Mayur Constructions and Developers	Internship
18	Gavit Siddhant Damu	Sarthak Constructions	Internship
19	Gawali Prasad Sadashiv	Dwarkamai Construction	Internship
20	Godse Vivek Ashokrao	Arihant Reality	Internship
21	Ipar Divya Dinkar	Arihant Reality	Internship
22	Jadhav Buddhabhushan Ramdas	The Signature Group	Internship
23	Kedar Shubham Sampat	M/s. Rushikesh D. Barke Govt. Contractor	Internship
24	Khandbahale Ajay Bhausaheb	Sky Buildcon & Developers	Internship
25	Kuwar Kapil Yashwant	Bharati Buildcon	Internship
26	Lokhare Abhishek Dattattray	Sarthak Constructions	Internship
27	Mate Sudan Prashant	Sarthak Constructions	Internship
28	Maule Priyanka Dattu	Hiraman Namdeo Mahale Govt. Contractor	Internship
29	Mugdiya Amar Balu	Kavach Kundal	Internship
30	Mundhe Harshal Kailas	ravaci Kundal	Internship



31	Nakade Hritvik Vinayak	Saisha Construction	Internship
32	Navsare Ashwini Shantaram	Saisha Construction	Internship
33	Nimse Jitesh Uttam	M/s. Vishal Construwell	Internship
34	Patil Harshal Vasantrao	M/s.Saikrupa Construction	Internship
35	Patil Prasad Dharma	M/s.Saikrupa Construction	Internship
36	Pagare Jayesh Bhaginath	Rohidas D. Chavan RCC Contractor	Internship
37	Pekhale Mahesh Sampat	N. U. Mirza Engineers and Contractors	Internship
38	Pund Atul Sanjay	CRV Corporation	Internship
39	Rahane Akshay Bhivsan	CRV Corporation	Internship
40	Sancheti Aman Vinod	Jay Designers Consulting Civil Engineers	Internship
41	Sangale Nitin Balasaheb	Jay Designers Consulting Civil Engineers	Internship
42	Shardul Abhijeet Vandana	Samarth Constructions and Developers	Internship
43	Shinde Shubham Ashok	Shree Buildcon	Internship
44	Shinde Rutu Sudam	Shree Buildcon	Internship
45	Singar Rohit Balwant	Er. Sagar Vasantrao Vinchu	Internship
46	Tidke Viresh Bhagwan	. Er. Sagar Vasantrao Vinchu	Internship
47	Udar Mayur Dipak	Om Builders and Developers	Internship
48	Valvi Ritesh Kantilal	Sarthak Constructions	Internship
49	Vanjari Pankaj Sunil	Sarthak Constructions	Internship
50	Vikhe Nikita Pradip	Avdhoot Associates	Internship
51	Wagh Ashutosh Khandu	Samarth Constructions and Developers	Internship
52	Gaikwad Harshal Ravindra	Sadguru Buildcon	Internship
53	Sonawane Sudarshan Sakharchand	Sadguru Buildcon	Internship
54	Tungar Ashvini Shravan	Dhanait Ahire Associates	Internship
55	Raundal Prachi Arun	Prayag Constuction	Internship
56	Bhushan Jayram Dagale	Sarthak Constructions	Internship

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(Prof. S. W. Manjarwal) (Internship Co-ordinator)



(Prof. A. N. Shukla) (HOD)

A REPORT on

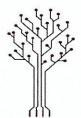
### **"ONE MONTH INTERNSHIP TRAINING"**

In the partial fulfillment of the requirements for Bachelors Degree in Civil Engineering.

> Submitted by NAKADE HRITVIK VINAYAK

Guided by PROF. S. W. MANJARWAR





DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK - 422 222



### DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK - 422 222

# **CERTIFICATE**

This is to certify that <u>NAKADE HRITVIK VINAYAK</u> has satisfactorily carried and completed the seminar work entitled

### **ONE MONTH INTERNSHIP TRAINING**.

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021-2022.

Prof. S. W. Manjarwar (Guide)	External Examiner	
Prof. A. N. Shukla (HoD)	Dr. M. V. Bhatkar (Principal)	
Chvil Engineering		
Department 5 2 Maragementante		

Nilesh S. Shelke (B.E. CIVIL) (Govt. Contractor) 8055511108 9850401134



SAISHA CONSTRUCTION

Date- 16/02/2022

### **TO WHOM SO EVER IT MAY CONCERN**

This is to certify that <u>Mr. Hritvik Vinayak Nakade</u>, Department of Civil Engineering, Jawahar Education Society's Institute of Technology, Management & Research, Nashik, Maharashtra has satisfactorily completed his Internship program on site of <u>Z. P. School</u> <u>Building</u> Construction projectat - Nirahale, Tal- Sinnar, Dist – Nashik, during the period of 17 Jan 2022 to 14 Feb 2022, under the guidance of **Er . Nilesh S. Shelke**.

We wish him every success in future.

SAISHA CONSTRUCTION

PROPRIETOR.

**Authorised Signatory** 

# A Internship Report

ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

### MUGDIYA AMAR BALU

### **GUIDED BY**

Prof. S.W. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### **JAWAHAR EDUCATION SOCIETY'S**

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i

Internship Report

OF TECHNOLOGY NASHIK

DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND **RESEARCH, NASHIK - 422 222** 

JAWAHAR INSTITUTE

# CERTIFICATE

This is to Certified that

### MUGDIYA AMAR BALU

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 - 2022.

Prof. S.W.Manjarwal (Seminar Guide)	(External Examiner)			
(Head of Department)	Civil ineering			
[JAWAHAR EDUCATION SOCIETY' S: INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page ii				



Ar. Haardik C. Bedmutha B. Arch CA/2014/63714 +91 940 3100 207 +91 94239 66 538 kavachkunddal@gmail.com

Date: 20<sup>th</sup> March 2022

#### CERTIFICATE OF EXPERIENCE

#### To whomsoever it may concern

This is to certify that **Ama\_r Balu Mugdiya** has been a part of our team from 1<sup>st</sup> Feb 2022 to 28<sup>th</sup> Feb2018. During the tenure he has undertaken various assigned tasks and has successfully completed them to his best of abilities.

During his tenure, I found Amar to be sincere, diligent, hardworking and enthusiastic about work. He has shown growth in short tenure as he assisted me in several projects too. I also found him trustworthy member of our team.

AR. HAARDIK C. BEDMUTHA

H. C. Bedmitha Kavach Kunddai

 Market Yard Shopping Cenre, Chandwad Rd, Manmad 423104 6, Sahyadri Park, Canada Corner, Nashik 422002

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## A **Internship Report**

ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

SUBMITTED BY

DARSHAN PRAMOD BARVE

#### **GUIDED BY**

Prof. S.W. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

**INSTITUTE OF TECHNOLOGY, MANAGEMENT AND** 

### **RESEARCH, NASHIK – 422 222**

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK]

Page i

Rohidas D. Chavan

# **ROHIDAS D. CHAVAN**

Prestige Home, Pargati Nagar, Old Saikheda Road, Behind Angarika Society, Jail Road, Nasik Road - 422 101. Mobile No : 9379234211 / 9371901096

### R.C.C. CONTRACTOR

Ref. No. 0151845/128/21/22.

Date: 8/03/2022

### TO WHOM ITMAY CONCERN

This is to certify that Mr. Darshan Pramod Barve, Son of Pramod Karbhari Barve a third year students of Civil Engineering of Jawahar Education Society's, Institute of Technology, Management and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 2<sup>nd</sup> January, 2022 to 28<sup>th</sup> February, 2022) internship programme at this Rohidas D. Chavan, Nashik. During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For Rohidas D. Chavan, Nashik

Authorized Signature

ROHIDAS CONSTRUCTIONS

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

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# CERTIFICATE

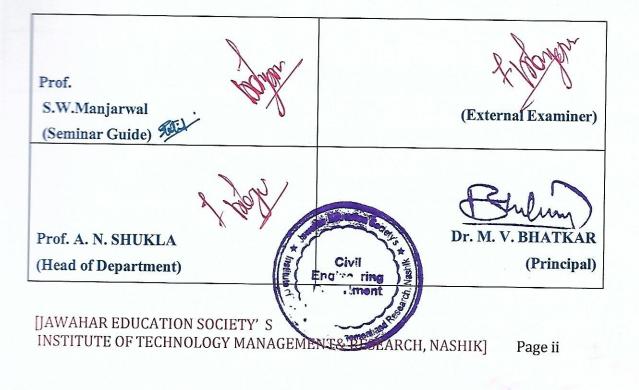
This is to Certified that

### DARSHAN PRAMOD BARVE

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



**INTERNSHIP REPORT ROL.06** 

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### A REPORT On

IN the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY ADMANE BHALCHANDRA HARSHAL

### **GUIDED BY**

Prof. S .W. Manjarwal





### JAWAHAR EDUCATION SOCIETY'S

### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022) DEPARTMENT OF CIVIL ENGINEERING

[JAWAHAR EDUCATION SOCIETY' SINSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK]Page 1

**INTERNSHIP REPORT ROL.06** 



### **DEPARTMENT OF CIVIL ENGINEERING**

### JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK – 422 222 CERTIFICATE

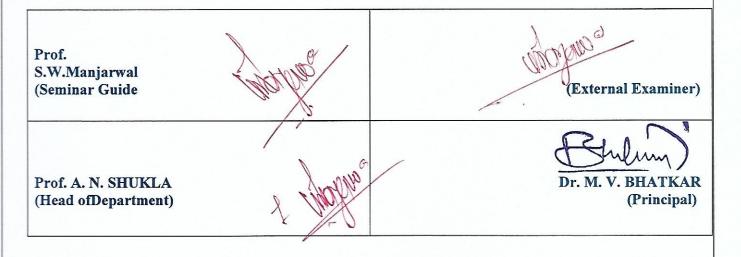
This is to Certified that ADMANE BHALCHANDRA HARSHAL has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is

submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune

University, Pune for the academic year 2021 – 2022.



[JAWAHAR EDUCATION SOCIETY' SINSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK]Page 2



Date:2/3/2022

### TO WHOM IT MAY CONCERN

This is to certify that Mr. HARSHAL BHALCHANDRA ADMANE, student of 3<sup>rd</sup> year in civil Engineering of Jawhar Institute of Technology, Management & Research, Nashik has been Under Trading (Intership ) with our Organization Name "MAHAJAN BUILDPRO LLP "at 203, Navarang complex, Nashik poona road, Nashik. From 01/02/2022 to 28/02/2022.

HARSHAL BHALCHANDRA ADMANE Completed his trading in Various constructions related activities i.e. shuttering of slab., steel binding, concerting, plaster work etc. during this period his performance was outstanding and successfully contribute in his role to the organizations his attitude towards positive learning is highly Appreciated.

We wish him All the Best for bright future .

MAHAJAN BUILDPRO LLP PARTNER

Internship Report

# A Internship Report

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#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

BODHARE PRATIK PRAKASH

#### **GUIDED BY**

Prof. S.W. Manjarwal



### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i

Internship Report



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# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

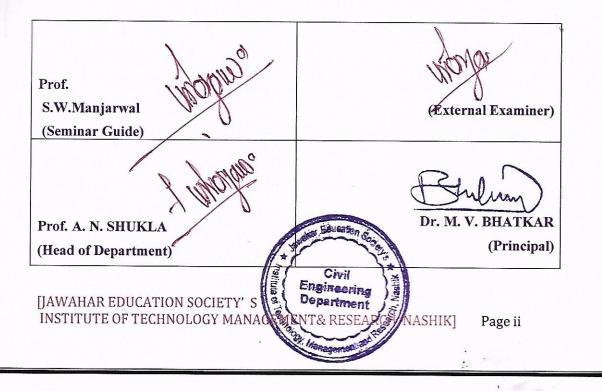
This is to Certified that

BODHARE PRATIK PRAKASH

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



### Palaj Buildcon

#### **Builder | Developer**

PAN NO.:- AAYFP 5279J , GST NO.:- 27AAYFP 5279J1Z7, RERA REGI.NO.:- P51600025799

Off. Add. Shop- No. 5, Chandrawel Apartments, Bhd. Prakash petrol Pump, Govind nagar, Nashik- 9

Email :- ajinkya9688@gmail.com Place: Nashik

### TO WHOMSOEVER IT MAY CONCERN

Date:07 /03/2022

This is to certify that Mr. Pratik Prakash Bodhare ,student of 3rd year in Civil Engineering of Jawhar Institute of Techonology, Management and Research ,Nashik has been under Training (Internship) with our Organization name "PALAJ BUILDCON" at Shop No.5 Chandrawel Apartment, Govind nagar, Nashik. From 1/02/2022 to 28/02/2022. Mr.Pratik Prakash Bodhare completed his training in various construction related activities i.e. shuttering of slab, steel binding , concreting ,plaster work etc. During this period his performance was outstanding and has successfully contributed in his role to the organization .His attitude toward positive learning is highly appreciated. We wish him ALL THE BEST for a bright future "PALAJ BUILDCON"

PALAI BUILDCON

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### REPORT

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### "INTERNSHIP"

In the partial fulfillment of the requirement for

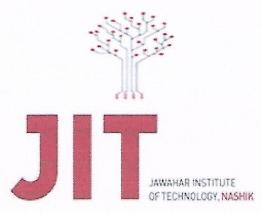
Bachelor Degree in Civil Engineering

#### SUBMITTED BY

BUDDHABHUSHAN.R.JADHAV

### **GUIDED BY**

Prof. S. W.MANJARWAL



### DEPARTMENT OF CIVIL ENGINEERING

#### JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JES's Institute of Technology, Management and Research, Nashik.

"INTERNSHIP REPORT"



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH,

NASHIK - 422 222

# CERTIFICATE

This is to Certified that

BUDDHABHUSHAN.R.JADHAV(T15000000)

has satisfactorily carried and completed the report work entitled

### "INTERNSHIP"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 - 2022.

Prof. S.W.MANJARWAL (Seminar Guide)

Prof. A. N. SHUKLA (Head of Department)



Dr. M. V. BHATKAR (Principal)

JES's Institute of Technology, Management and Research, Nashik.



THE SIGNATURE GROUP

Date: 05/03/2022

# TO WHOM IT MAY CONCERN

This is to certify that Mr. Buddhabhushan Ramdas Jadhav, student of 3<sup>rd</sup> year in Civil Engineering of Jawhar Institute of Techonology, Management and Research, Nashik has been under Tranning (Intership) with our Organization name "THE SIGNATURE GROUP" at Sarthak, D.K. Nagar, Gangapur, Road Nashik. From 1/02/2022 to 28/02/2022.

Buddhabhushan Ramdas Jadhav completed his tranning in various construction related activites i.e shuttering of slab, steel binding, concreating, plasterwork etc. During this period his performance was outstanding and has successfully contributed in his role to the organization. His attitude toward positive learning is highly appreciated.

We wish him ALL THE BEST for a bright future "THE SIGNATURE GROUP".



Director

"THE SIGNATURE GROUP"

# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

### NITIN BALASAHEB SANGALE

#### **GUIDED BY**

Prof. S.W. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

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Internship Report



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

### NITIN BALASAHEB SANGALE

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

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This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



Reference No.: 016

DESIGNE

Date : 04/03/2022

### TO WHOM IT MAY CONCERN

**JAY DESIGNERS** 

**CONSULTING CIVIL ENGINEERS** 

This is to certify that Mr. Nitin Balasaheb Sangale, Son of Balasaheb Shivram Sangale a third year students of Civil Engineering of Jawahar Education Society's, Institute of Technology, Management and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 3<sup>rd</sup> January, 2022 to 2<sup>nd</sup> February, 2022) internship programme at this JAY DESIGNERS CONSULTING CIVIL ENGINEERS, Nashik. During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For JAY DESIGNERS, Nashik

Authorized Signature

Er. YOGESH SHIVAJIRAO PATIL B.E.(Civil) A.I.E., A.I.V.

#### **INTERNSHP REPORT**

A

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

### SUBMITTED BY

Harshada D Mhaisdhune

### **GUIDED BY**

Prof. S. Manjarwal





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

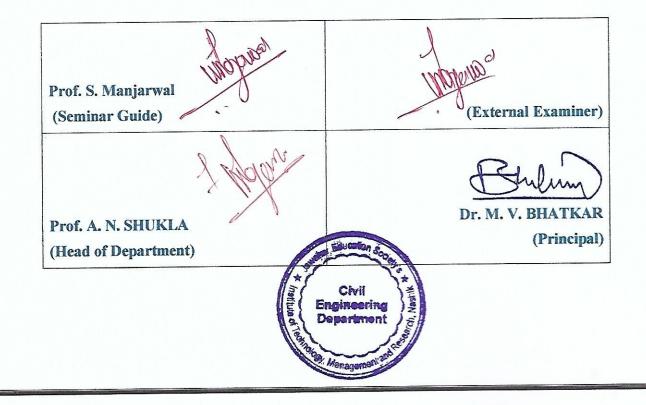
This is to Certified that

### HARSHADA D MHAISDHUNE

(71923170B)

has satisfactorily carried and completed the seminar work entitled **\*INTERNSHIP TRAINING**<sup>\*\*</sup>

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.





# M/s. SAIKRUPA CONSTRUCTION

**Govt.** Contractor

Member of B.A.I.

Prop. Bhushan Kautik Pagar © 9422754165

Ref. No.:0185

### **Experience** Certificate

To whom it may concern that Miss. Harshada Dyaneshwar Mhaisdhune has worked as a "Site Engineer for Internship" in our project.

She worked with us 1Dec 2021 to 31Dec 2021.

During this period her performance was satisfactory. She worked very honestly and sincerely.

We wish his all the all the success for bright future.

Thanking you in anticipation.

Date:01/01/2022

Place: Kalwan

में,साईकृपा कन कोतिक पगार

Date:04/ 63/ 20 22

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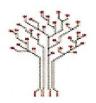
In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

HARSHAL V PATIL

### **GUIDED BY**

Prof. S. Manjarwal





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

6 1 



RESEARCH, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

### HARSHAL V PATIL

(72177159K)

Has satisfactorily carried and completed the seminar work entitled

### **"INTERNSHIP TRAINING"**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.





# M/s. SAIKRUPA CONSTRUCTION

**Govt.** Contractor

Member of B.A.I.

Prop. Bhushan Kautik Pagar © 9422754165

Date:09/03/2022

Ref. No.: 0188

# Experience Certificate

To whom it may concern that Mr. Harshal Vasantrao Patil has worked as a "Site Engineer for Internship" in our project.

He worked with us 1Dec 2021 to 31Dec 2021.

During this period his performance was satisfactory. He worked very honestly and sincerely.

We wish his all the all the success for bright future.

Thanking you in anticipation.

Date:01/01/2022

Place: Kalwan

मे.साईकृपा कन्स प्री.प्रा.भूषण कीतिक पगार

# **Internship Report**

ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

### RAHANE AKSHAY BHIVSAN

#### **GUIDED BY**

Prof. S.W. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

# INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i

Internship Report



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 CERTIFICATE

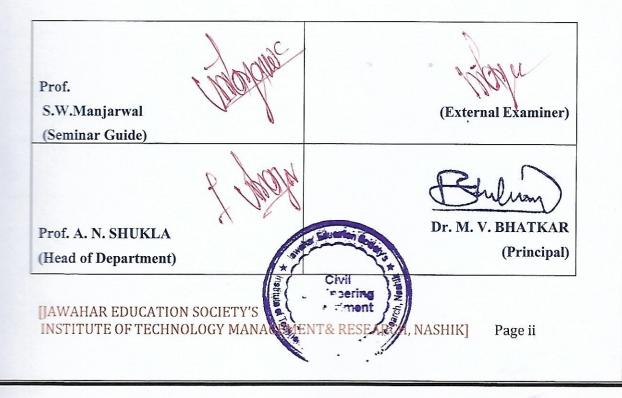
This is to Certified that

RAHANE AKSHAY BHIVSAN

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.





### Dnyaneshwar A. Surase

M.Tech. Structure I Chartered Engineer

95 95 99 22 11

crvcorporation@gmail.com

www.crvcorporation.com

### Architectural | Structural | 3D Designers | Interior Designer | Govt. Approved Valuer

# **EXPERIENCE CERTIFICATE**

DATE : 1 Jan 2022

This is to certify that Mr. Akshay Bhivsan Rahane was working with us in CRV Corporation Aurangabad since 1 Dec 2021to 31 Dec 2021. He has worked on civil engineering project . He was under training for site supervision in our corporation , we found that he is very punctul in his work.

To the best of our knowledge he his sincere hard worker technically sound and honest with good moral and good character. We wish him all the success for his future endeavours

Hence this certificated Date: 1jan 2022

Carra mine Agrianta ago

d in inestic

Place : Aurangabad.

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# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

GAIKWAD AISHWARYA RAJENDRA

#### **GUIDED BY**

Prof. S.W. Manjarwal



JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

### DEPARTMENT OF CIVIL ENGINEERINGJAWAHAR

#### **EDUCATION SOCIETY'S**

### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH,

Page i

JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

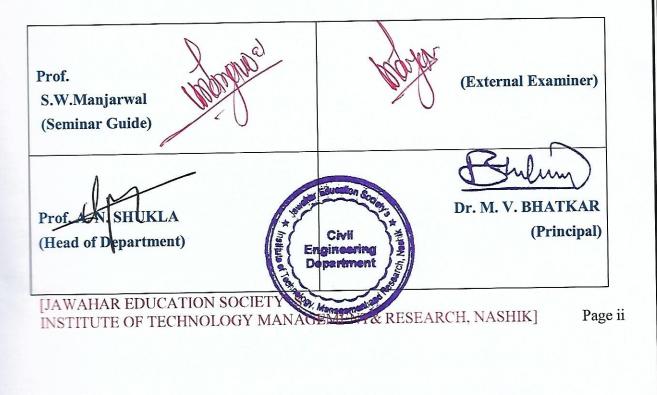
This is to Certified that

GAIKWAD AISHWARYA RAJENDRA

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



### **ARVIND LAXMAN GUNJAL**

**CIVIL ENGINEERS & CONTRACTORS** 

H.No.1915, Old Tambat Lane, Nashik-422001 Mob. 9689294210

Ref.: Date.:07/03/2022

This is to certify that Mrs. Aishwarya Rajendra Gaikwad, student of 3rd year in Civil Engineering of Jawhar Institute of Techonology, Management and Research, Nashik has been under Training (Internship) with our Organization name "ARVIND LAXMAN GUNJAL CIVIL ENGINEERS & CONTRACTORS" at H. NO. 1915,Old Tambat Lane, Nashik-422001 From 1/02/2022 to 28/02/2022. Mrs. Aishwarya Rajendra Gaikwad completed her training in various construction related activities i.e. chattering of slab, steel binding, concreting, plaster work etc. During this period her performance was outstanding and has successfully contributed in her role to the organization. Her attitude toward positive learning is highly appreciated. We wish her ALL THE BEST for a bright future.

मे. अरविद लक्ष्मण गुंजाक

पार्टनर

#### INTERNSHP REPORT

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

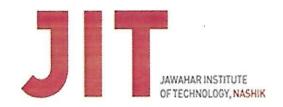
### SUBMITTED BY

Yash Sunil Deore

### **GUIDED BY**

Prof. S. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

## INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK -

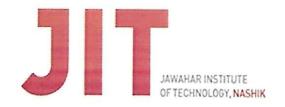
422 222

### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

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# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S

## **INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK –**

### 422 222

# CERTIFICATE

This is to Certified that

### YASH SUNIL DEORE

#### (72177136L)

has satisfactorily carried and completed the seminar work entitled

## **"INTERNSHIP TRAINING"**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 - 2022.



Department of civil Engineering



# **DWARKAMAI CONSTRUCTION**

Shop No 4 Laxmi Narayan Apartment,Dindori Road, Lamkhede mala,Mery colony Nashik 422004

## Mob No.7304042519

Date:10/02/2022

## **INTERNSHIP CERTIFICATE**

This Is Certify That Mr. Deore Yash Sunil Was Training

With Dwarkamai Construction From 09/01/2022 To 08/02/2022 WithOur

Entire Satisfaction And Completed Traning Period.

During His Training Period We Found His Is A Sincere, Honest,

Dedicated Trainee With Very Good Construction Knowledge.

He Is Amiable In Nature And Character Is Well.

Well Wishes For Future Endeavor.

Dwarkamai Construction

For Dwarkamai Construction

А

#### **Internship Report**

On

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering **SUBMITTED BY** 

**GODSE VIVEK ASHOK** 

#### **GUIDED BY**

Prof. S.W. Manjarwal





DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK

1 | Page

A

#### Internship Report

On

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering **SUBMITTED BY** 

**GODSE VIVEK ASHOK** 

#### **GUIDED BY**

Prof. S.W. Manjarwal



JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK

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DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK – 422 222

# CERTIFICATE

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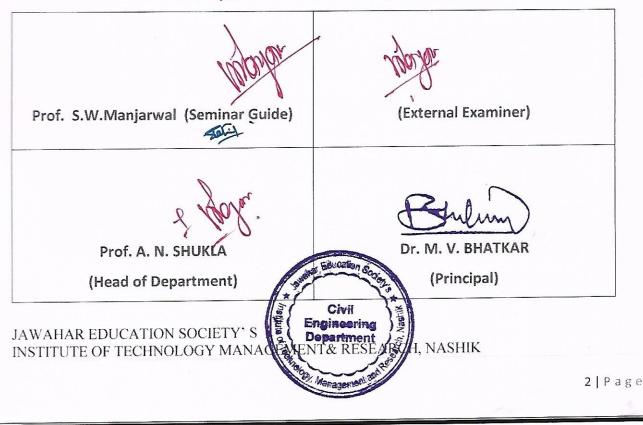
GODSE VIVEK ASHOK

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is

submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022





JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK - 422 222

# **CERTIFICATE**

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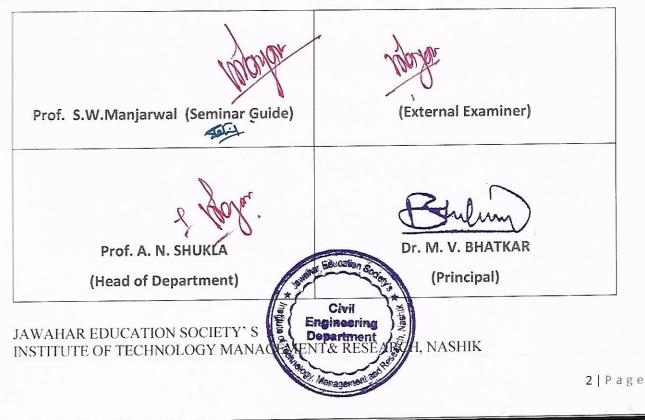
GODSE VIVEK ASHOK

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is

submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 - 2022





## CERTIFICATE FOR INTERNSHIP

Date: 05/03/2022

### TO WHOMSOEVER IT MAY CONCERN

This is certify that Mr. Vivek Ashok Godse, student of third year in Civil Engineering of Jawahar Institute of Technology, Management and Research, Nashik has been under Training (Internship) with our organisation name "ARIHANT REALTY" at From 01/02/2022 to 03/03/2022. Mr. Vivek Ashok Godse completed his training in various construction related activities i.e. shuttering of slab, steel binding, cocreting, plaster work etc. During this period his performance was outstanding and has successfully contrubuted in his role to the organisation. His attitude towards positive learning is highly appreciated. We wish him ALL THE BEST for a bright future "ARIHANT REALTY"

ARIHANT REALTY

PARTNER

**"ARIHANT REALTY** 

Site Address: Arihant Baug, Sonje Nagar, Behind Podar International School, Agartakli, Nashik Road, Nashik – 422 006

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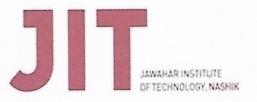
In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

SUBMITTED BY

Shinde Shubham Ashok

#### **GUIDED BY**

Prof. S.W.Manjarwal



### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

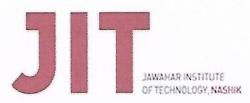
## INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 CERTIFICATE

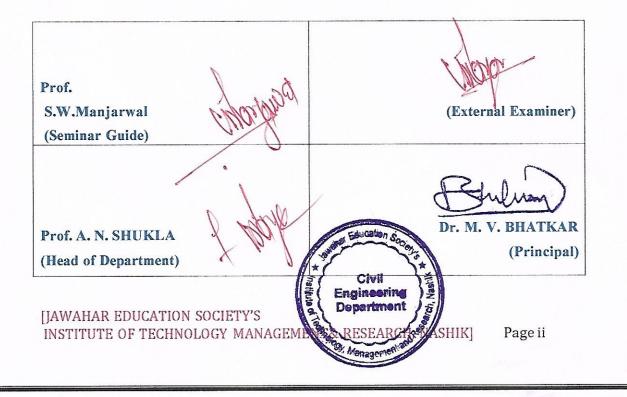
This is to Certified that

Shinde Shubham Ashok

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.





(R.V. BAGLE)

**Opp.** Roopjatan Tower,StationRoad , Vaijapur - 423 701 Mob : 9850594204 **Resi**. Jeevan Ganga, Station Road , Vaijapur – 423 701, Dist . Aurangabad. E-Mail :- . Rahulbagle65@gmail.com

DATE :-06/02/2022

## **CERTIFICATE**

This is to certify that Mr. **SHUBHAM ASHOK SHINDE** a third year student of Civil Engineering of J I T institute of technology Nashik Work as " **CIVIL ENGINEER** " in our firm from One Month (01/01/22 to 01/02/22). He Also Doing Supervision On Our Site .

Such as Bungalows, Row Housing Schemes, Shopping Complex Plans also making Residential as well as Commercial Building.

We found him to be Sincere,skillful,hardworking and Perfection to his Work & Punctual. To the best of our knowledge He bears a good moral character.

RAHUL V. BAGLE Civil Engineer, Vaijapur Lic. No. VMC /MS/II/2008/22 SIGN BY ENGR

DATE : 06/02/2022 PLACE : VAIJAPUR

INTERNSHIP REPORT

A

#### **INTERNSHIP REPORT**

ON

INDUSTRIAL TRAINING

#### AT BHARATI BUILDCON

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

### SUBMITTED BY

KUWAR KAPIL YASHWANT

#### **GUIDED BY**

Prof. S. W. Manjarwal





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE (2021-2022)

JAWAHAR EDUCATION SOCIETY'S

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INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK - 422 222

**INTERNSHIP REPORT** 



JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

## KUWAR KAPIL YASHWANT

has satisfactorily carried and completed the Industrial Training At Bharati Buildcon. This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Guide Prof. S.W. Manjarwal.	External Examinar.	
Prof. A.N. Shukla. (Head Of Department)	Dr. M.V. Bhatkar. (Principal)	
JAWAHAR EDUCATION SOCIET YS Monagement INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222		

Page | - 2 -



Shri Dattakrupa Niwas, S.V.No. 233/K, Plot No. 53/54, Behind Aakash Petrol Pump, Kala Nagar, Dindori Road, Nashik. Mob.: +91 73504 67911, 95294 84473 **Prop. Aakash N. Patil** 

Ref. No.: 32

## Date: 2-05-2022

### **TO WHOM IT MAY CONCERN**

This is to certify that Mr.Kapil Yashwant Kuwar student of 3rd year in Civil Engineering of Jawahar Institute of Technology, Management and Research, Nashik has been under Tranning (Intership) with our Organization name "Bharati Buildcon" at Shri Dattakrupa Niwas, S.V.No. 233/K, Plot No. 53/54, Behind Aakash Petrol Pump, Kala Nagar, Dindori Road, Nashik, From 01/03/2022 to 31/03/2022.

**Mr.Kapil Yashwant Kuwar** completed his training in various constructions related activities. During this period his performance was outstanding and has successfully contributed in his role to the organization His attitude toward positive learning is highly appreciated.

We wish him ALL THE BEST for a bright future "Bharati Buildcon"



#### ON

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

#### SUBMITTED BY

VIKHE NIKITA PRADIP

### **GUIDED BY**

Prof. S.W. Manjarwal





#### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

### [JAWAHAR EDUCATION SOCIETY' S

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### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

RESEARCH, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

### BODHARE PRATIK PRAKASH

has satisfactorily carried and completed the seminar work entitled

# A Internship Report

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

[JAWAHAR EDUCATION SOCIETY' S

Internship Report Prof. (External Examiner) S.W.Manjarwal (Seminar Guide) Dr. M. V. BHATKAR Prof. A. N. SHUKLA (Principal) (Head of Department) Civil Engineering Department INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page iii :

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Tulja Bhavani Complex, Vinchur Road, YEOLA - 423 401 (Dist. Nashik) 🔳 E-mail : sameerrdahake@gmail.com

Date: 17/4 /2022

### TO WHOM IT MAY CONCERN

This is to certify that Miss. Nikita Pradip Vikhe, a third year student of Civil Engineering of Jawhar Institute Techonology of Engineering Education and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 3rd January, 2022 to 2nd February, 2022) internship programme at Avdhoot Associates Engineers & Developers. During the period of his internship programme with us she was found punctual, hardworking and inquisitive.

We wish her every success in life.

AVDHOOT ASSOCIATES ENGINEERS & PLANNERS Sameer R. Dahake Patel Colony, Yeola, (Nashik)

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

PUND ATUL SANJAY

#### **GUIDED BY**

Prof. S.W. Manjarwal





#### **DEPARTMENT OF CIVIL ENGINEERING**

### JAWAHAR EDUCATION SOCIETY'S

# INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 CERTIFICATE

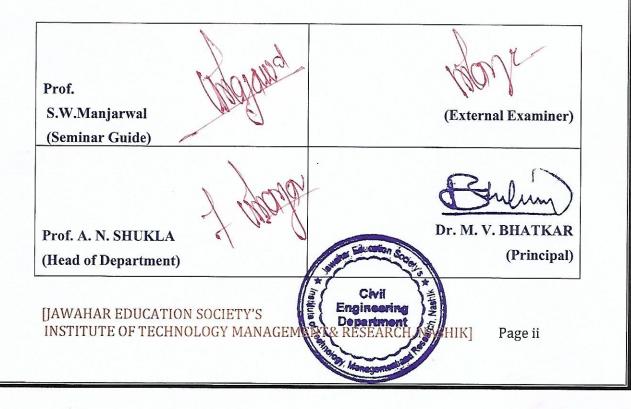
This is to Certified that

PUND ATUL SANJAY

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.





### Dnyaneshwar A. Surase

M.Tech. Structure I Chartered Engineer

95 95 99 22 11

- crvcorporation@gmail.com
- www.crvcorporation.com

## Architectural | Structural | 3D Designers | Interior Designer | Govt. Approved Valuer

# **EXPERIENCE CERTIFICATE**

DATE :5 Jan 2022

This is to certify that Mr. Atul Sanjay Pund was working with us in CRV Corporation Aurangabad since 1 Dec 2021to 31 Dec 2021. He has worked on civil engineering project . He was under training for site supervision in our corporation , we found that he is very punctul in his work.

To the best of our knowledge he his sincere hard worker technically sound and honest with good moral and good character. We wish him all the success for his future endeavours

Hence this certificated

Date: 5 jan 2022

Place : Aurangabad.

1.1000



#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### **SUBMITTED BY**

JAYESH BHAGINATH PAGARE

#### **GUIDED BY**

Prof. S.W. Manjarwal





JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

### DEPARTMENT OF CIVIL ENGINEERING

### **JAWAHAR EDUCATION SOCIETY'S**

## INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

## RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i

Internship Report

JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH,

NASHIK – 422 222

# CERTIFICATE

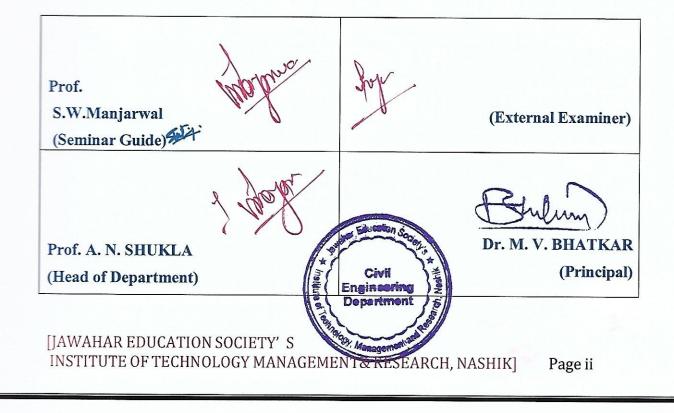
This is to Certified that

JAYESH BHAGINATH PAGARE

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



Rohidas D. Chavan

# **ROHIDAS D. CHAVAN**

Prestige Home, Pargati Nagar, Old Saikheda Road, Behind Angarika Society, Jail Road, Nasik Road - 422 101. Mobile No : 9379234211 / 9371901096

## R.C.C. CONTRACTOR

Ref. No. 0151845/138/21-22

Date: 12/03/2022

### TO WHOM ITMAY CONCERN

This is to certify that Mr.Jayesh Bhaginath Pagare, Son of Bhaginath Nagoji pagare a third year students of Civil Engineering of Jawahar Education Society's, Institute of Technology, Management and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 5<sup>th</sup> January, 2022 to 15<sup>th</sup> February, 2022) internship programme at this Rohidas D. Chavan, Nashik. During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For Rohidas D. Chavan, Nashik

Authorized Signature ROHIDAS CONSTRUCTIONS

ON

.

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

### SUBMITTED BY

VALVI RITESH KANTILAL

### **GUIDED BY**

Prof. S.W. Manjarwal





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

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# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

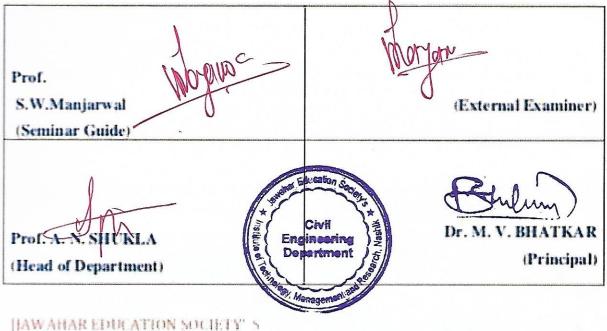
# CERTIFICATE

This is to Certified that VALVI RITESH KANTILAL

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH NASHIK] Page ii

# SARTHAK CONSTRUCTION BUILDER\DEVELOPER

Pan No: AAYFP5279J GST NO: 27NPHPS1165H1ZC RERA REGI.NO: P51600025799

Off. Add :- At Post Wadivhre, near by Marathi Highschool, Sarthak Traders.

Email: tushardshinde15@gmail.com

Place:Nashik.

## **TO WHOMSOEVER IT MY CONCER**

DATE:28/02/2022

THIS IS TO CERTIFY THAT RITESH KANTILAL VALVI, STUDENT OF 3 RD YEAR IN CIVIL **ENGINEERING** OF JAWAR INSTITUTE OF TECHONOLOGY, MANAGEMENT AND RESERCH, NASHIK HAS BEEN UNDER TRAINING WITH OUR ORGANIATION NAME **"SARTHAK** COMSTRUCTION"AT POST WADIBHER BY MARATHI HIGH SCHOOL, SARTHAK TREDRADS FROM 1/02/2022 TO 28/02/2022 MR. RITESH KANTILAL VALVI COMPLETED HIS TRAINING COMPLETED HIS TRAINING IN VARIOUS CONSTRUCTION RELATRED ACTIVITIES I.E, SHUTTERING OF SLAB, STEEL STEEL BINDING, CONCRETING, PLASTER WORK ETC. DURING THIS PERIOD HIS PERFOMANCE WAS OUSTANDING AND HAS SUCESSFULLY CONTRIBUTED IN HIS ROLE TO THE ORGANIZATION.HIS ATTITUDE TOWARD POSITIVE LEARNING IS HIGHLY APPWECIATED. WE WISH HIM ALL THE BEST FOR BRIGHT FUTURE FROM "SARTHAK CONSTRUCTION"

CONSTRUCTION NO. 9370236153 AT.POS T: WADIVARHE,

# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

CHAUDHARI VIJAY SHANKAR

#### **GUIDED BY**

Prof. S.W. Manjarwal





### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

## INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH,

Page i

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

#### CHAUDHARI VIJAY SHANKAR

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. S.W.Manjarwal (Seminar Guide)	(External Examiner)
Prof. A. N. SHUKLA (Head of Department)	Civil gineering
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#### MAYUR CONSTRUCTIONS & DEVELOPERS CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST- NASHIK MOB.9823262513

Date: 1st Jan,2022

### CERTIFICATE OF COMPLETION

This certificate is awarded to Mr.VIJAY SHANKAR CHAUDHARI from JIT College, Nashik, for successfully completing his internship at Mayur Construction & Developers as a Civil Engineering Intern during 1 Dec 2021 to 31 Dec 2021.

We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects.

During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

have

Mayur khandbahale CIVIL AND GOVT. CONTRACTOR E-mail :-mkhandbahale1@gmail.com Mayur Uttamrao Khandbahale Civil Engineers & Govt. Contractor



**MAYUR CONSTRUCTIONS & DEVELOPERS** 

### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

# Mahesh Sampat Pekhale

#### **GUIDED BY**

Prof. S.W. Manjarwal





JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

## DEPARTMENT OF CIVIL ENGINEERING

## JAWAHAR EDUCATION SOCIETY'S

# INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

## SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page i



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

# Mahesh Sampat Pekhale

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



# N. U: MIRZA

## ENGINERS AND CONTRACTORS

C-23/01, BLUE MOON HOUSING SOCIETY, INDIRA NAGAR, NASHIK-09

Mail:- numirza@gmail.com, phone:- +919404989486/+917757023123.

## Reference No. : NUM /2/4/2022 TO WHOM IT MAY CONCERN

Date: 04/03/2022

This is to certify that Mr. Mahesh Sampat Pekhale, Son of Sampat Kashinath Pekhale a third year students of Civil Engineering of Jawahar Education Society's, Institute of Technology, Management and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 3rd January, 2022 to 2nd February, 2022) internship programme at this N. U. MIRZA Enginers and Contractors, Nashik. During the period of his internship programme with us he was found punctual, hardworking and inquisitive. We wish him every success in life.

For N. U. MIRZA Enginers and Contractors, Nashik

Authorized Signature

**INTERNSHP REPORT** 

A

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

Rajswaroop Uttam Mahajan

### **GUIDED BY**

Prof. S. Manjarwal





# OF TECHNOLOGY, NASHIK

# DEPARTMENT OF CIVIL ENGINEERING **JAWAHAR EDUCATION SOCIETY'S** INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND EE, NASHIK – 422 222

# **CERTIFICATE**

This is to Certified that

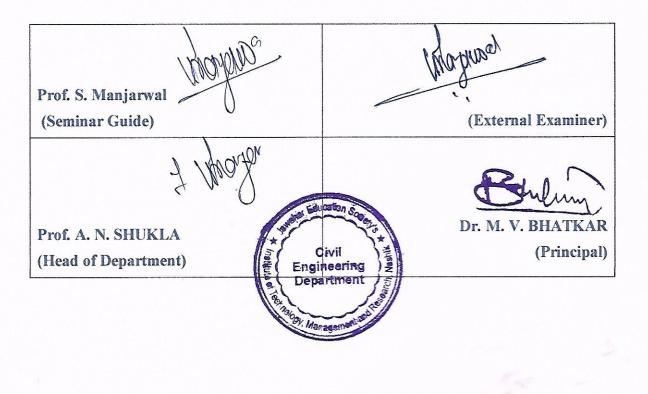
#### RAJSWAROOP UTTAM MAHAJAN

(71923174E)

has satisfactorily carried and completed the seminar work entitled

### "INTERNSHIP TRAINING"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



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ER. PANKAJ D.CHAUDHARI. CONSULTING CIVIL ENGINEER. ARCHITECTURAL DESIGNER. PLANNING, ESTIMATE, MUNCIPLE, SUPERVISION, 3D VIEW, CONSULTING & BUILDERSHIP. OFFICE, 03 YASHODHAN PARK-1, KOKANI HILL NANDURBAR CELL. 9922798683. 7020440221.

DATE - 04/04/2022

#### CERTIFICATE To Whom It May Concern:

This is to certify that Mr. Rajswaroop Uttam Mahajan. has been Working as a Building Engineer from 01 Dec 2021 To 25 Jan 2022 Internship under my Technical Supervision, he has got good Experience in all kinds of Civil Engineering works. He is Sincere, Having capacity to Generate a Good Business, hard Working and bears good Moral Character to the best of my Knowledge.

Pankaj D.Chaudhari 992279868 INTERIOR LANDSCAPE & ARCHITECTURAL DESINER PLANNING NMC. No .-DESIGN Mus CONSTRUCTION

Your's Fhaithfully

#### "INTERNSHIP REPORT"

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### REPORT

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### "INTERNSHIP"

In the partial fulfillment of the requirement for

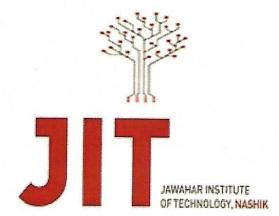
Bachelor Degree in Civil Engineering

SUBMITTED BY

Siddhant Damu Gavit

#### **GUIDED BY**

Prof. S. W.MANJARWAL



### **DEPARTMENT OF CIVIL ENGINEERING**

### JAWAHAR EDUCATION SOCIETY'S

# INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH,

#### NASHIK - 422 222

### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

JES's Institute of Technology, Management and Research, Nashik.

"INTERNSHIP REPORT"



### **DEPARTMENT OF CIVIL ENGINEERING**

### JAWAHAR EDUCATION SOCIETY'S

**INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH,** 

#### NASHIK – 422 222

# CERTIFICATE

This is to Certified that

Siddhant Damu Gavit

has satisfactorily carried and completed the report work entitled

### "INTERNSHIP"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. S.W.MANJÄRWAL (Seminar Guide)

Prof. A. N. SHUKLA

(Head of Department)



Dr. M. V. BHATKAR (Principal)

JES's Institute of Technology, Management and Research, Nashik.

# SARTHAK CONSTRUCTION

#### **BUILDER \ DEVELOPER**

Pan No: AAYFP5279J

GST NO: 27NPHPS1165H1ZC

RERA REGI.NO: P51600025799

Off. Add :- At Post Wadivhre, near by Marathi Highschool, Sarthak Traders. Nashik

Email: tushardshinde15@gmail.com

Place:Nashik

### **TO WHOMSOEVER IT MY CONCER**

DATE:28/02/2022

THIS IS TO CERTIFY THAT SIDDHANT DAMU GAVIT, STUDENT OF 3<sup>RD</sup> YEAR IN CIVIL ENGINEERING OF JAWAR INSTITUTE OF TECHONOLOGY, MANAGEMENT AND RESERCH, NASHIK HAS BEEN UNDER TRAINING WITH OUR ORGANIATION NAME "SARTHAK COMSTRUCTION" AT POST WADIBHER BY MARATHI HIGH SCHOOL, SARTHAK TREDRADS FROM 1/02/2022 TO 28/02/2022 MR.SIDDHANT DAMU GAVIT COMPLETED HIS TRAINING COMPLETED HIS TRAINING IN VARIOUS CONSTRUCTION RELATRED ACTIVITIES I.E, SHUTTERING OF SLAB, STEEL STEEL BINDING, CONCRETING , PLASTER WORK ETC. DURING THIS PERIOD HIS PERFOMANCE WAS OUSTANDING AND HAS SUCESSFULLY CONTRIBUTED IN HIS ROLE TO THE ORGANIZATION.HIS ATTITUDE TOWARD POSITIVE LEARNING IS HIGHLY APPWECIATED. WE WISH HIM ALL THE BEST FOR BRIGHT FUTURE FROM "SARTHAK CONSTRUCTION"

Frele

SARTHAK CONSTRUCTION NO. 9370236153 AT.POST: WADIVARHE, NASHIK

A

#### SEARCH REPORT

ON

### **"CEMENT CONCRETE ROAD"**

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

Latish Pandharinath Gangurde

**GUIDED BY** 

Prof. S. Manjarwal Sir





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE (2021-2022)

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Cellular Lightweight Concrete



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

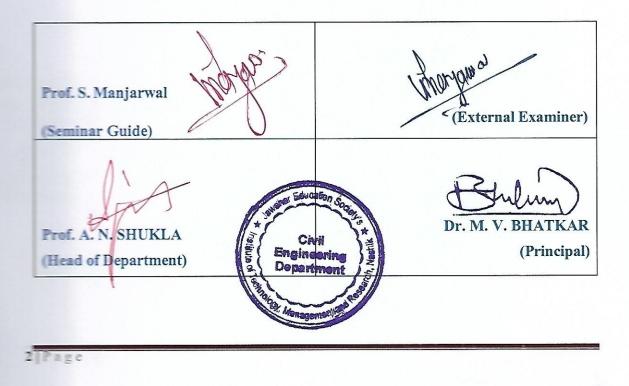
# CERTIFICATE

This is to Certified that

Latish Pandharinath Gangurde

has satisfactorily carried and completed the seminar work entitled

#### **"CEMENT CONCRETE ROAD"**



# SHREE SADGURU CONSTRUCTION

Shree

Chinchkhed Road, Pimpalgaon Baswant, Tal- Niphad, Dist- Nashik. Maharashtra – 422 209 Mob No. : +917387783698, +918208878308

PAN NO: - BCCPN7408L

GST NO :- 27BCCPN7408/18A

Ref No. :

Date: / / 2022

### **TO WHOM IT MAY CONCERN**

A start of Civil Engineering of Jawahar Education Society's Management & Research, Nashik (SPPU University, Pune) has successfully completed one month (from 2<sup>nd</sup> March, 2022 to 3<sup>rd</sup> April, 2022) internship programme at SHREE SADGURU CONSTRUCTION. During this programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

For SHREE SADGURU CONSTRUCTION, Pimpalgaon Baswant, Nashik.

Author PROFENETOR

# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

NITESH KALAMSINGH GAVIT

#### **GUIDED BY**

Prof. S.W. Manjarwal





JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

### DEPARTMENT OF CIVIL ENGINEERING

#### **JAWAHAR EDUCATION SOCIETY'S**

#### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

#### RESEARCH, NASHIK – 422 222

#### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 1

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

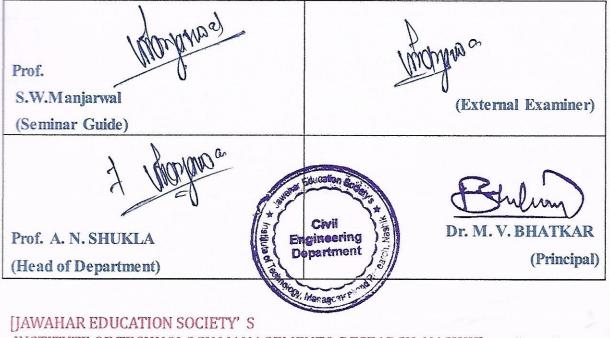
This is to Certified that

#### NITESH KALAMSINGH GAVIT

has satisfactorily carried and completed the seminar work entitled

### A Internship Report

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.



INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 2

#### MAYUR CONSTRUCTIONS & DEVELOPERS CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST- NASHIK MOB.9823262513

Date: 1st Jan, 2022

#### CERTIFICATE OF COMPLETION

This certificate is awarded to Mr.NITESH KALAMSINGH GAVIT from JIT College, Nashik, for successfully completing his internship at Mayur Construction & Developers as a Civil Engineering Intern during 1 Dec 2021 to 31 Dec 2021.

We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects.

During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

Mayur Uttamrao Khandbahale Civil Engineers & Govt. Contractor

Mayur khandbahale CIVIL AND GOVT. CONTRACTOR E-<u>mail</u> :-<u>mkhandbahale1@gmail.com</u> Gst No.:- 27ELVPK6527E1EZA

Internship Report

### A

### **Internship Report**

ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

#### GAIKWAD HARSHAL RAVINDRA

#### **GUIDED BY**

Prof. S.W. Manjarwal





#### DEPARTMENT OF CIVIL ENGINEERING

# JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

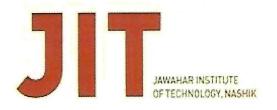
#### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

Internship Report

#### [JAWAHAR EDUCATION SOCIETY' S

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# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

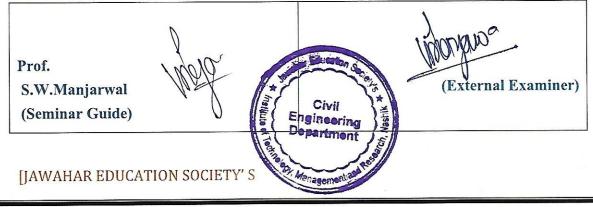
# CERTIFICATE

This is to Certified that

#### GAIKWAD HARSHAL RAVINDRA

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**



Address - Mol No. 2, Shivnegr, Talathi Colony, Schurd Tarwala Neglar, Dinderi Road, Nashik - 422 904 Contact - 9420494459

#### Date: / /2022

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### TO WHOM IT MAY CONCERN

This is to certify that **Mr. Gaikwad Harshal Ravindra**, student of 3<sup>rd</sup> year in Civil Engineering of Jawhar Institute of Technology, Management and Research, Nashik has been under Training (Internship) with our Organization name "SADGURU BUILDCON" at Plot No.2, Shiv Nagar, Behind Tarwala Nagar, Dindori Road, Nashik - 422004 From 1/02/2022 to 28/02/2022

Mr. Gaikwad Harshal Ravindra Completed his training in various construction related activity i.e., shuttering of slab, steel binding concreting, plasterwork etc. During this period his performance was outstanding and has successfully contributed in his role to the organization. His attitude toward positive learning is highly appreciated.

We Wish him ALL THE BEST for a bright future "SADGURU BUILDCON".

SADGURU B ariners Director

"SADGURU BUILDCON"

JAWAHAR INSTITUTE OFTECHNOLOGY, NASHIK
Jawahar Education Society's,
INSTITUTE OF TECHNOLOGY,
MANAGEMENT & RESEARCH, NASHIK.
Survey No. 48,Gowardhan, Gangapur Road, Nashik
Certificate
Exam Seat No. :
JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK This is to certify that, Mr. / Miss_ Sengor 2019 Balward of
Class_T.F. Department_Civil
Roll No has completed term work in the subject
Interstep report satisfactorily as prescribed by University
of Pune in the Academic Year 20 Pl - 20 P2.
man & man Enem
Practical In Charge H.O.D. Dr. M. V. Bhatkar
Date: / /20

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# A Presentation on

# "INTERNSHIP"



**Presented By** 

SINGAR ROHIT BALWANT

Guided By Prof. Prof. S. W.MANJARWAL

ARE.

(Exam Seat No.)

Assistant Professor (Civil Engg. Dept.)

No.

(1)

Jawahar Education Society's Institute of Technology, Management & Research, Nashik - 422222



# **Er. Sagar Vasantrao Vinchu**

**Civil Engr. & Contractor** 

GST No. 27AYLPV9991N1ZX PAN No. AYLPV9991N Email: sagarvinchu97@gmail.com Address : Matoshree Bungalow, Parth Colony, Shanti Nagar, Nashik - 3. Mob.: 9604112592, 7888045450

Ref. No. 104

Date: 3 - 02 - 2022

### **TO WHOM IT MAY CONCERN**

This is to certify that Mr. Singar Rohit Balwant, a third year student of Civil Engineering of Jawhar Institute Technology of Engineering Education and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 3<sup>rd</sup> January, 2022 to 2<sup>nd</sup> February, 2022) internship programme at Sagar Vasantrao Vinchu Contractor. During the period of his internship programme with us he was found punctual, hardworking and inquisitive.

We wish him every success in life.

Form at Sagar Vasantrao Vinchu Contractor, Nashik



# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### **SUBMITTED BY**

#### AJAY BHAUSAHEB KHANDBAHALE

#### **GUIDED BY**

Prof. S.W. Manjarwal





# DEPARTMENT OF CIVILENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 1

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

#### AJAY BHAUSAHEB KHANDBAHALE

has satisfactorily carried and completed the seminar work entitled

### A Internship Report

Prof. S.W.Manjarwal	Marton
(Seminar Guide)	(External Examiner)
	Civil rigineering
[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEM	SEARCH, NASHIK] Page 2

#### SKY BUILDCON & DEVELOPERS CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST- NASHIK MOB.9823262513

Date: 2 Feb ,2022

#### **CERTIFICATE OF COMPLETION**

This certificate is awarded to Mr. AJAY BHAUSAHEB KHANDBAHALE from JIT College, Nashik, for successfully completing his internship at SKY Buildcon & Developers as a Civil Engineering Intern during 2 Jan 2022 to 2 Feb 2022. We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects. During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

Akash salunkhe CIVIL AND GOVT. CONTRACTOR E-mail :-akashsalunkhe01@gmail.com

#### SKY BUILDCON & DEVELOPERS

Internship Report

# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

ABHIJEET GANESH SHARDUL

#### **GUIDED BY**

Prof. S.W. Manjarwal





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JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

#### **DEPARTMENT OF CIVIL ENGINEERING**

#### JAWAHAR EDUCATION SOCIETY'S

#### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

#### RESEARCH, NASHIK - 422 222

#### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 1

# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

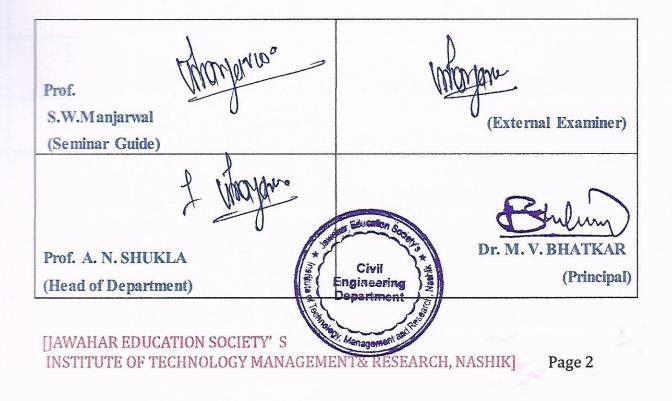
# CERTIFICATE

This is to Certified that

#### ABHIJEET GANESH SHARDUL

has satisfactorily carried and completed the seminar work entitled

### **A Internship Report**



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

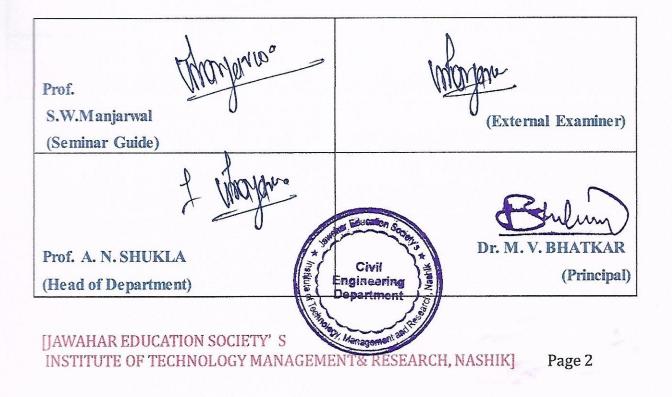
# CERTIFICATE

This is to Certified that

#### ABHIJEET GANESH SHARDUL

has satisfactorily carried and completed the seminar work entitled

## **A Internship Report**





Date: 1<sup>st</sup> Jan,2022

### **CERTIFICATE OF COMPLETION**

This certificate is awarded to **Mr. Shardul Abhijeet Ganesh** from JIT College, Nashik, for successfully completing his internship at **Samarth Construction & Developers** as a Civil Engineering Intern during 1 Dec 2021 to 31 Dec 2021.

We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects.

During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

Sandeep khandbahale CIVIL AND GOVT. CONTRACTOR E-mail :-sandeepk23141@gmail.com

SAMARTH CONSTRUCTIONS & DEVELOPERA PROPRIETOR

SAMARTH CONSTRUCTIONS & DEVELOPERS CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST- NASHIK MO.7798779858 / 9922773176 GSTIN:- 27EZJPK3537A1ZH

Internship Report

# A **Internship** Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

#### ASHISH DATTATRAY ADANGLE

#### **GUIDED BY**

Prof. S.W. Manjarwal





#### **DEPARTMENT OF CIVIL ENGINEERING**

### JAWAHAR EDUCATION SOCIETY'S

### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

#### **RESEARCH, NASHIK-422222**

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 1

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# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

#### ASHISH DATTATRAY ADANGLE

has satisfactorily carried and completed the seminar work entitled

### A Internship Report

Prof. S.W.Manjarwal (Seminar Guide)	(External Examiner)
Prof. A. N. SHUKLA (Head of Department)	Civil Civil
	Department
[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGE	CH, NASHIK] Page 2

#### **MAYUR CONSTRUCTIONS & DEVELOPERS** CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST-NASHIK MOB.9823262513

Date: 1st Jan, 2022

#### **CERTIFICATE OF COMPLETION**

This certificate is awarded to Mr.ASHISH DATTATRAY ADANGLE from JIT College, Nashik, for successfully completing his internship at Mayur Construction & Developers as a Civil Engineering Intern during 1 Dec 2021 to 31 Dec 2021.

We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects.

During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

Mayur Uttamrao Khandbahale Civil Engineers & Govt. Contractor

Mayur khandbahale

CIVIL AND GOVT. CONTRACTOR E-mail :-mkhandbahale1@gmail.com Gst No.:- 27ELVPK6527E1EZA

Internship Report

# A Internship Report

#### ON

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

#### ASHUTOSH KHANDU WAGH

#### **GUIDED BY**

Prof. S.W. Manjarwal



#### **DEPARTMENT OF CIVIL ENGINEERING**

#### JAWAHAR EDUCATION SOCIETY'S

#### INSTITUTE OF TECHNOLOGY, MANAGEMENT AND

#### RESEARCH, NASHIK – 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 1 DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENTAND RESEARCH, NASHIK – 422 222

Internship Report

# CERTIFICATE

This is to Certified that

#### ASHUTOSH KHANDU WAGH

has satisfactorily carried and completed the seminar work entitled

# **A Internship Report**

Prof. S.W.Manjarwal (Seminar Guide)		(External Examiner)	
7 Why	Killing and All	Dr. M. V. BHATKAR	
Prof. A. N. SHUKLA (Head of Department)			
(Head of Department)	Department	(Principal)	
[JAWAHAR EDUCATION SOCIETY' S INSTITUTE OF TECHNOLOGY MANAGEMENT& RESEARCH, NASHIK] Page 2			



SAMARTH CONSTRUCTIONS & DEVELOPERS

Ref.no.

Date: 1st Jan,2022

#### **CERTIFICATE OF COMPLETION**

This certificate is awarded to **Mr.Ashutosh Khandu Wagh** from JIT College, Nashik, for successfully completing his internship at **Samarth Construction & Developers** as a Civil Engineering Intern during 1 Dec 2021 to 31 Dec 2021.

We appreciate his focus towards learning and analysing things as a supervisor in one of our existing projects.

During his tenure as an Engineering Intern, we found his efforts sincere, meticulous and result oriented.

We wish all the best in his future endeavors.

**Sandeep khandbahale** CIVIL AND GOVT. CONTRACTOR E-mail :-sandeepk23141@gmail.com

SAMARTH CONSTRUCTIONS & DEVELOP and

SAMARTH CONSTRUCTIONS & DEVELOPERS CIVIL AND GOVT. CONTRACTOR A/P MAHIRAWANI, TAL- DIST- NASHIK MO.7798779858 / 9922773176 GSTIN :- 27EZJPK3537A1ZH

#### **INTERNSHIP REPORT**

ON

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

#### SUBMITTED BY

DIVYA DINKAR IPAR

**GUIDED BY** 

Prof. S. W. MANJARWAL.





JAWAHAR INSTITUTE OF TECHNOLOGY, NASHIK

DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE (2021-2022)



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT AND RESEARCH, NASHIK – 422 222

# CERTIFICATE

This is to Certified that

#### DIVYA DINKAR IPAR

has satisfactorily carried and completed the internship work entitled

### **"A INTERNSHIP REPORT"**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. S. W. MANJAR WAL (Internship Guide)

Prof. A. N. SHUKLA



(External Examiner)

Dr. M. V. BHATKAR

(Principal)

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9028284999/7038594948/9921979214
kathale999@gmail.com
Off. No.5, Udhavesh Appt. Kulkarni Colony, Nashik

### TO WHOM IT MAY CONCERN

Date: 17/04/2022

This is to certify that Miss. Divya Dinkar Ipar, a third-year student of Civil Engineering of Jawhar Institute Technology of Engineering Education and Research, Nashik (SPPU University, Pune) has successfully completed one month (From 3<sup>rd</sup> January 2022 to 2<sup>nd</sup> February 2022 ) internship program at Maulidhan Associates, Engineers & Planners. During the period of her internship program with us she was found punctual, hardworking and inquisitive.

We wish her every success in life.

Kather

ER. V. G. KATHALE Reg. No. 156/119892 ADD. - F. NO. 13, THIRD FLOOR, KAMAL APPT., SHARANPUR ROAD, CANADA CORNER, NASHIK-422 002. MOBILE : 9028284999.



Jawahar Education Society's, INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NASHIK.

(Approved by AICTE, DTE & Affiliated to Savitribai Phule Pune University)

# Civil Engineering Dept.

Project (2021-22)



Jawahar Education Society's Institute of Technology, Management & Research, Nashik Approved by AICTE and DTE, Governent of Maharashtra, Affiliated to University of Pune

### **Department of Civil Engineering**

### B.E. CIVIL PROJECT (2021-22)

Group No.	Name of Students	Guide	Topic Name
G-1	AKASH UTTAM BACHHAV	– Prof. A. N. Shukla	
	ROHAN SITARAM PAWAR		Analysis of Pavement Using Modified Bitumen
	PATIL SACHIN SUBHASH		
	MRUNAL RAMESH KHARE		
G-2	SUSHANT SANJAY PAGARE	– – Prof. S. W. Manjarwal	"Partial Replacement of Fine Aggregate with Recycled Plastic Granules in Concrete"
	MORE SARANG ANIL		
	SHAHRUKH AAINODDIN MANSURI		
	MAHADEV ATMARAM BANGARE		
G-3	PRATIK ABASAHEB DEORE	 Prof. A. N. Shukla 	Analysis On Residential Projects And Impact Of Supply Management System
	MAHENDRA MALJI DEORE		
	DEEPMOL KESHAV DEORE		
	CHOTALIYA NIRAV RAMESH		
	NAMDEV DHENUPAL JADHAV	– Prof. A. N. Shukla	"Increasing Properties Of Structures With Engineered Cementations Material "
G-4	KAMLESH RAMDASGIRI GOSAVI		
	ROHIT ASHOK PANDIT		
	RAHUL SANTILAL CHAVAN		
	LAJARI SURESH SONAWANE	Prof. S. L. Desale	"Study of Floods And Flood Protection System In Maharashtra: Analysis of Flood Preventing Water Tank Using Staad.Pro Software"
	MANSI RAJENDRAPAERDESHI		
G-5	NUTAN DEVRAM RAUT		
	NITIN SHANKAR PAGAR		
and the second	SAURABH NITIN BHADKWADE	· Prof. A. N. Shukla	Impact Of Quality On Construction and Cost
	BINNAR SAMEER KAILAS		
G-6	TEJAS BALASAHEB PAGARE		
	AKANKSHA GULABRAO SALUNKE		
G-7	SANTOSH KISHOR DEORE	— Prof. A. N. Shukla	
	PAVAN SANJAY KHAIRNAR		"Analysis of An Supply Chain Concept Ir
	NILESH JAYWANT BACHHAV		Commercial Projects "
	GAURAV BARKU TARVATE		



. <b>G-8</b>	CHAITANYA ARVIND GUNJAL	Prof. S. W. Manjarwal	
	SAHID MUJAFFAR KOTWAL		"Basalt Fiber"
	ZIYA ARIF SHAIKH	1101. S. W. Manjai wai	Dasait Fiber
	CHAUDHARI TAUKEER ALI		
G-9	MAYURI RAJENDRA RAGADE	Prof. S. W. Manjarwal	"Reduction In Cost With Used Sand And Recycled Aggregates In Preparing Concrete Without Compromising Strength"
	MAYURI SHARAD PATIL		
	KAVITA MUKUND MORE		
	BHUSHAN NIMBA AHIRE		
	RITZ RUMON MUTHEDAM		"Experimental Investigation on Basalt Fiber- Reinforced Concrete"
	TEJAS SAHEBRAO BHAMRE	Brof C D Nagara	
G-10	NACHIKET VILAS NIKAM	Prof. S. D. Nagare	
	VAIBHAV AJINATH BELGE		
	PRANALI BHAGWAN CHUDHARI		"Road Accident Prediction In Nashik City"
G-11	GAYATRI RAMESH WAGHCHURE	Prof. S. B. Kajabe	
	PATIL SHARAD BHAUSAHEB		
	SHREYAS RAVINDRA GORTE	Prof. A. N. Shukla	"Analysis of Effect of Size of Aggregate on Properties of Concrete."
G-12	BHUSHAN SANJAY BATTASE		
	ADITYA BHAGWAN SONAS		
	PRATHAMESH SHASHIKANT AHHERA		
	SAGAR DILIP PAWAR		"Comparative Analysis Of Reinforced Concrete Oblique Columns And Y-Shaped Columns By Using Etabs"
	DURGESH DASHRATH PATIL	Prcf. S. D. Nagare	
G-13	GAURAV GANESH VISE		
	SHUBHAM BALASAHEB KEDAR		
•	VALVI KHUSHAL GOVIND		"Investigation of Various Mixes Using Plastic Waste"
	KHEDKAR SWAPNIL SHESHRSO		
G-14	SAYALI RAVINDRA GURAO	Prof. S. W. Manjarwal	
	BHAVANA PANDURANG CHAVAN		
	BHAVESH KHANDERAO PATIL	Prof. S. W. Manjarwal	Investigation Of Mechanical Properties Of Paver Block With Partial Replacement Of Cement With Fly Ash
	PANKAJ RAVINDRA KALKULDE		
G-15	SHUBHAM DAULATRAO MURKUTE		
	AKASH MANIK AHHIRAO		
G-16	SHUBHAM SANJAY NAGARE		
	ANKUSH JAYRAM PURKAR		"Experimental Study on Papercrete: A Sustainable Building Material"
	AKASHY ARUN GHUGE	Prof. A. N. Shukla	
	YASH RAJENDRA WAGH		



G-17	SANKET SANJAY AVHAD	Prof. S. L. Desale	"Architectural Design Principles and Processes for Sustainability: Towards A Typology of Sustainable Building Design "
	ABHISHEK PRAKASH SALVE		
	GAURAV GOKULSINGH PARDESHI		
G-18	TUSHAR SANJAY THAKARE	Prof. S. L. Desale	"Amphibious Flood Protectin House for River Side Area"
	KANKUTE SACHIN LAXMAN		
	SANDIP MOTHABHAU NAROTE		
G-19	NILESH YASHWANT AHIRE	Prof. S. B. Kajabe	A Case Study of Fast Track Construction of Mega Projects In India: Current Scenario, Challenges, Limitations And Implementation
	DINESH PRAKASH BHADANE		
	CHAUDHARI PRAVIN VITTHAL		
G-20	ROHIT PRAKASH RAUNDAL	, Prof. A. N. Shukla	"Waste Polymeric Packaging Material Use in Bituminous Roads"

(Prof. A. N. Shukla) Project Co-ordinator



(Prof. A. N. Shukla)

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## PROJECT REPORT ON

ALC: NO

"AMPHIBIOUS FLOOD PROTECTING HOUSE FOR RIVER SIDE AREA"

## IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR

## **BACHELOR DEGREE IN CIVIL ENGINEERING**

## SUBMITTED BY SACHIN LAXMAN KANKUTE SANDIP MOTHABHAU NAROTE TUSHAR SANJAY THAKRE

## GUIDED BY PROF. S. L. DESALE



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

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**PROJECT REPORT** 

ON

# "AMPHIBIOUS FLOOD PROTECTING HOUSE FOR RIVER SIDE AREA"

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

#### **SUBMITTED BY**

### SACHIN LAXMAN KANKUTE

### SANDIP MOTHABHAU NAROTE

TUSHAR SANJAY THAKRE

#### **GUIDED BY**

Prof. S. L. DESALE



#### DEPARTMENT OF CIVIL ENGINEERING

### **JAWAHAR EDUCATION SOCIETY'S**

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

Civil Ergineerin Dupartmen



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

## SACHIN LAXMAN KANKUTE SANDIP MOTHABHAU NAROTE TUSHAR SANJAY THAKRE

have satisfactorily carried and completed the project work entitled

# "AMPHIBIOUS FLOOD PROTECTING HOUSES FOR RIVER SIDE AREA"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. S. L. DESALE (Project Guide)

Prof. A. N.\SHUKLA (Head of Department)



**External Examiner** 

Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

i

## **EXAMINERS' CERTIFICATE OF APPROVAL**

The project entitled

# "AMPHIBIOUS FLOOD PROTECTING HOUSE FOR RIVER SIDEAREA"

submitted by

## SACHIN LAXMAN KANKUTE SANDIP MOTHABHAU NAROTE TUSHAR SANJAY THAKRE

in partial fulfillment of the requirement for the award of the degree of **Bachelor of Engineering** in **Civil Engineering** of **Savitribai Phule Pune University**, **Pune** is hereby approved for the award of the degree.

Internal Examiner

APT

**External Examiner** 



Place: Nashik Date: 0610612022

ii

"Amphibious Flood Protecting Houses for River Side Area"

### ABSTRACT

Humans rely on heavy engineering, tidal barriers and riverside and coastal defenses to protect our built environment from flooding. The desire to live adjacent to water reflects our cultural heritage and historic settlement patterns, and we continue to build on flood plains and other floodingprone areas. However, coastal defenses, such as the river barriers in the Netherlands and the levee system in New Orleans, have proven ineffective when it comes to a drastic rise in sea level. The Federal Emergency Management Agency (FEMA) predicts a 16 sea level by midcentury and a 55-- inch rise in inch rise in sea level by the end of the century in the San Francisco Bay.

A 16 flooding, and a 55-- inch rise would potentially expose 281 square miles of Bay sho reline to inch rise would potentially expose 333 square miles to flooding. If no adaptation measures are taken, a 55inch rise in sea level will place an estimated 270,000 people in the Bay Area at risk from flooding. Residents, businesses and entire industries that currently thrive on the shoreline will be at risk of flooding by the middle of the century if nothing is done to protect, elevate or relocate them. In order to defend our communities against rising sea levels and flooding, lo ngterm approaches to building design must be considered that will provide alternative dwelling opportunities for coastal residents.

**Keywords**: Humans rely on heavy engineering, built environment, historic settlement patterns, Federal Emergency Management Ag ency (FEMA), risk from flooding, sea levels and flooding, JES's, Nashik. Institute of Technology, Management and Research etc.



JES's Institute of Technology, Management and Research, Nashik.

## PROJECT REPORT ON "STUDY OF FLOODS AND FLOOD PROTECTION SYSTEM IN MAHARASHTRA: ANALYSIS OF FLOOD PREVENTING WATER TANK USING STAAD.PRO SOFTWARE"

T.M

IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR

BACHELOR DEGREE IN CIVIL ENGINEERING

SUBMITTED BY

LAJARI SURESH SONAWANE NUTAN DEVRAM RAUT MANSI RAJENDR PARDESHI NITIN SHANKAR PAGAR (B151140068) (B151140061) (B151140052) (B151140047)

GUIDED BY

PROF. S. L. DESALE



DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITEIBAI PHULE PUNE UNIVERSITY, PUNE (2021-2022) **PROJECT REPORT** 

A

ON

# "STUDY OF FLOODS AND FLOOD PROTECTION SYSTEM IN MAHARASHTRA: ANALYSIS OF FLOOD PREVENTING WATER TANK USING STAAD.PRO SOFTWARE"

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### **SUBMITTED BY**

LAJARI SURESH SONAWANE (B151140068) NUTAN DEVRAM RAUT (B151140061) MANSI RAJENDR PARDESHI (B151140052) NITIN SHANKAR PAGAR (B151140047)

**GUIDED BY** 

Prof. S. L. DESALE





#### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

LAJARI SURESH SONAWANE (B151140068) NUTAN DEVRAM RAUT (B151140061) MANSI RAJENDR PARDESHI (B151140052) NITIN SHANKAR PAGAR (B151140047)

have satisfactorily carried and completed the project work entitled

"STUDY OF FLOODS AND FLOOD PROTECTION SYSTEM IN MAHARASHTRA: ANALYSIS OF FLOOD PREVENTING WATER TANK USING STAAD.PRO SOFTWARE"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 - 2022.

Prof. S.L. DESALE (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



**External Examiner** 

Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

i

### **EXAMINERS' CERTIFICATE OF APPROVAL**

The project entitled

## "STUDY OF FLOODS AND FLOOD PROTECTION SYSTEM IN MAHARASHTRA: ANALYSIS OF FLOOD PREVENTING WATER TANK USING STAAD.PRO SOFTWARE"

submitted by

LAJARI SURESH SONAWANE (B151140068) NUTAN DEVRAM RAUT (B151140061) MANSI RAJENDR PARDESHI (B151140052) NITIN SHANKAR PAGAR (B151140047)

in partial fulfillment of the requirement for the award of the degree of **Bachelor of Engineering** in **Civil Engineering** of **Savitribai Phule Pune University, Pune** is hereby approved for the award of the degree.

Internal Examiner

**External Examiner** 



Place: Nashik Date: 31/05/2022 "Study of Floods and Flood Protection System in Maharashtra: Analysis of Flood Preventing Water Tank Using STAAD.Pro Software"

### ABSTRACT

Flooding may occur as an overflow of water from water bodies, such as a river, lake, or ocean, in which the water overtops or breaks levees, resulting in some of that water escaping its usual change's increased rainfall and extreme boundaries. In particular climate weather events increases the severity of other causes for flooding, resulting in more intense floods and increased flood risk. This paper describes that to avoid the flood situation Tokyo and Hong Kong construct the underground flood preventing water tank which store large amount of flood water in it. Due to which flooding will minimize. Maharashtra saw heavy rainfall in many of its western districts in which Kolhapur also faces large flood situation and also form some flood preventing system for that but climate change could have played an important role in causing large-scale floods across Maharashtra. So construction of underground flood preventing water tank for Kolhapur, Maharashtra is one of the best flood preventing measure. This project includes Case study of underground flood preventing water tank in Tokyo and Hong Kong, Analysis of underground flood preventing water tank wants to be construct for Kolhapur and Design of underground flood preventing water tank for Kolhapur.

Maximum absolute stress for full tank condition is 12.18 N/mm<sup>2</sup> and for half tank condition is 5.92 N/mm<sup>2</sup> in the analysis of underground flood preventing water tank and maximum major principle stress for full tank condition is 8.25 N/mm<sup>2</sup> and for half tank condition is 3.59 N/mm<sup>2</sup> in the analysis of underground flood preventing water tank. The maximum base pressure for tank full condition is 0.15 N/mm<sup>2</sup> and for half tank condition 0.083 N/mm<sup>2</sup> in the analysis of underground flood preventing water tank. Maximum and minimum bending moment is calculated towards X axis and Y axis is 195.9 N/mm<sup>2</sup> and 4.38 N/mm<sup>2</sup> respectively for full tank condition. Maximum and minimum Shear Stress is calculated towards X axis and Y axis is 0.067 N/mm<sup>2</sup> and 0.094 N/mm<sup>2</sup> respectively for full tank condition and maximum and minimum displacement is calculated towards X axis, Y axis and Y axis is 0.0032 N/mm<sup>2</sup>, 0.00048 N/mm<sup>2</sup> and 0.002 N/mm<sup>2</sup> respectively for full tank condition.

"Study of Floods and Flood Protection System in Maharashtra: Analysis of Flood Preventing Water Tank Using STAAD.Pro Software"

and maximum and minimum displacement is calculated towards X axis, Y axis and Z axis are  $0.0025 \text{ N/mm}^2$ ,  $0.00048 \text{ N/mm}^2$  and  $0.0016 \text{ N/mm}^2$  respectively for half tank condition.

Keywords: Flood, Flood Preventing Measures, Underground Flood Preventing Water Tank, Rainfall, Rainfall Data, etc.



JES's Institute of Technology, Management and Research, Nashik

### REPORT

"REDUCTION IN COST WITH USED SAND AND RECYCLED AGGREGATES IN PREPARING CONCRETE WITHOUT COMPROMISING STRENGTH"

IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR

# BACHELOR DEGREE IN CIVIL ENGINEERING

### SUBMITTED BY

MAYURI SHARAD PATIL MAYURI RAJENDRA RAGADE KAVITA MUKUND MORE BHOSHAN NIMBA AHIRE 72011464M 71727740C 72011459E 72016334L

GUIDED BY

## PROF. S.W.MANJARWAL



DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)

#### REPORT

ON

## "REDUCTION IN COST WITH USED SAND AND RECYCLED AGGREGATES IN PREPARING CONCRETE WITHOUT COMPROMISING STRENGTH"

In the partial fulfillment of the requirement for

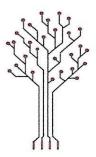
Bachelor Degree in Civil Engineering

#### SUBMITTED BY

Mayuri Sharad Patil72011464M Mayuri Rajendra Ragade71727740C Kavita Mukund More72011459E Bhushan Nimba Ahire72016334L

**GUIDED BY** 

Prof. S.W.MANJARWAL



### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

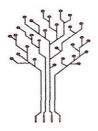
**INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH,** 

GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that Mayuri Sharad Patil Mayuri Rajendra Ragade Kavita Mukund More Bhushan Nimba Ahire

have satisfactorily carried and completed the project work entitled

## "REDUCTION IN COST WITH USED SAND AND RECYCLED AGGREGATES IN PREPARING CONCRETE WITHOUT COMPROMISING STRENGTH"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune

University, Pune for the academic year 2021 - 2022.

Prof. S.W.MANJARWAL (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

#### ABSTRACT

Now-a-days, increasing in quantities of waste materials and industrial by-products is a prime concern in the world. Disposal of these by-products becoming major problem and also increasing cost for disposal. Metal foundries use large amounts of Sand as a part of the metal casting process. Foundry Sand is basically a Fine Aggregate and commonly used in hand and machine type moulds.

Used Sand is typically sub-granular to rounded in shape after being used in Foundry process. Foundry is most often collected and stockpiled outside of foundries, exposed to the environment. Prior to use in an engineering application, the majority of Foundry Sand is collected in closed trucks and transported to a central collection facility. There are two basic types of Foundry Sands available, Green Sand and Silica Sand. Since Silica Foundry Sand has nearly all the properties of natural Sand, so it can be normally used as a Sand replacement.

This project discusses about the partial replacement of the Fine Aggregate with Silica Waste Sand by varying different percentages for M 30 mix. Waste Sand can be blended with themas a partial replacement to satisfy the specifications. Generally, the Waste Foundry Sand is too fine or to blend the spent Waste Foundry Sand with coarser Sands. Estimation is based on the design mixby conducting varies experiments related to material.

Thus, Waste Sand usage in building materials, construction and in other fields is essential for the reduction of environmental problems. In this study, the maximum strength is attained at 40% replacement of Waste Foundry Sand by weight of Fine Aggregate for both Compression Strength and Split Tensile Strength for 7 days and 28 days. But for Split Tensile Strength, the results obtained are less than the target strength. Hence, it is not suitable for PCC works. It can be used for RCC for case of considering tensile forces. In case of Compressive Strength, it can be used for both RCC and PCC works. This research is carried out to produce an ecofriendly concrete.

Keywords: Waste Foundry Sand (WFS), Fine Aggregate (FA), Coarse Aggregate (CA), Reinforced Cement Concrete (RCC), Plain Cement Concrete (PCC), Compressive Strength, Split Tensile Strength.



#### REPORT

#### ON

# "ANALYSIS OF EFFECT OF SIZE OF AGGREGATE ON PROPERTIES OF CONCRETE"

In the partial fulfillment of the requirement for

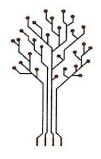
Bachelor Degree in Civil Engineering

#### SUBMITTED BY

### BHUSHAN SANJAY BATTASE (72016337E) SHREYAS RAVINDRA GORTE(72016357K) PRATHAMESH SHASHIKANT AHIRRAO (72016335J) ADITYA BHAGWAN SONAS (72016358H)

#### **GUIDED BY**

Prof. A. N. SHUKLA



#### DEPARTMENT OF CIVIL ENGINEERING

#### **JAWAHAR EDUCATION SOCIETY'S**

**INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH,** 

### GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)



### DEPARTMENT OF CIVIL ENGINEERING

## JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

BHUSHAN SANJAY BATTASE SHREYAS RAVINDRA GORTE PRATHAMESH SHASHIKANT AHIRRAO ADITYA BHAGWAN SONAS

Have satisfactorily carried and completed the project work entitled

## "ANALYSIS OF EFFECT OF SIZE OF AGGREGATE ON PROPERTIES OF CONCRETE"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

#### Abstract

Concrete is a versatile widely used construction material. Ever since concrete has been accepted as a material for construction, researchers have been trying to improve its quality and enhance its performance. Recent changes in construction industry demand improved durability of structures. There is a methodological shift in the concrete design from a strength based concept to a performance based design. At present there is a large emphasis on performance aspect of concrete. One such thought has lead to the development of Self Compacting Concrete (SCC). It is considered as "the most revolutionary development in concrete construction". SCC is a new kind of High Performance Concrete (HPC) with excellent deformability and segregation resistance. It can flow through and fill the gaps of reinforcement and corners of moulds without any need for vibration and compaction during the placing process.

The guiding principle behind self-compaction is that "the sedimentation velocity of a particle is inversely proportional to the viscosity of the floating medium in which the particle exists". The other features of mix proportion of SCC include low water to cementitious material ratio, high volume of powder, high paste to aggregate ratio and less amount of coarse aggregate. The original contribution in the field of SCC is attributed to the pioneering work of Nan Su etal; who have developed a simple mix design methodology for Self Compacting Concrete. In this method, the amount of aggregate required is determined first, based on Packing Factor (PF). This will ensure that the concrete obtained has good flowability, self-compacting ability and other desired SCC properties. The European Federation of Producers and Applicators of Specialist Products for Structures (EFNARC) [2005] have also laid down certain guidelines for fresh properties of SCC.

The present investigation is aimed at developing high strength Self Compacting Concrete of M70 Grade. The parameters of study include grade of concrete and effect of size of aggregate. The existing Nan Su [2001] method of mix design was based on packing factor for a particular grade of concrete, obtained on the basis of experimental investigation. SCC characteristics such as flowability, passing ability and segregation resistance have been verified using slump flow, L box and V funnel tests.



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### **PROJECT PHASE – II REPORT**

#### ON

# "PARTIALLY REPLACEMENT OF FINE AGGREGATE WITH RECYCLED PLASTIC GRANULES IN CONCRETE"

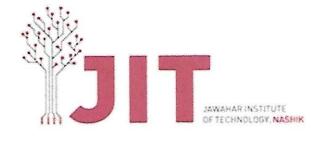
In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

SUSHANT SANJAY PAGARE (71727730F) SARANG ANIL MORE (72016348L) SHAHARUK AAINODDIN MANSURI (71806878F) MAHADEV ATMARAM BANGARE (72016347B)

#### **GUIDED BY**

Prof. S. W. MANJARWAL



### DEPARTMENT OF CIVIL ENGINEERING

**JAWAHAR EDUCATION SOCIETY'S** 

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH,

GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

Augaton.

Civil

(2021-2022)



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

SUSHANT SANJAY PAGARE	(71727730F)
SARANG ANIL MORE	(72016348L)
SHAHARUK AAINODDIN MANSURI	(71806878F)
MAHADEV ATMARAM BANGARE	(72016347B)

have satisfactorily carried and completed the project work entitled **"PARTIALLY REPLACEMENT OF FINE AGGREGATE WITH RECYCLED PLASTIC GRANULES IN CONCRETE"** 

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune

University, Pune for the academic year 2021 – 2022.

Rulal

Prof. S. W. MANJARWAL (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

"partial replacement of Fine aggregate with recycled plastic granules in Concrete."

#### ABSTRACT

Concrete is an ancient material of construction, first used during Roman Empire. Concrete is the second most consumed substance in the world after water. Plastic is a common material which finds its application in day today life. Lack of proper disposal methods for plastic waste is one of the main hazards faced by present the world. Plastic is of manmade material and is a stable polymer which is light in weight. The reduction of waste plastic is essential as it creates various environmental problems. This paper deals with the partial replacement of fine aggregate with plastic granules and using a fixed proportion of steel and polypropylene fibers. Experimental program includes two stages. In the first stage fine aggregate is replaced with 4%,8%,12% plastic granules in an M30 grade of concrete and its percentage was optimized. Strength parameters studied includes compressive strength, flexural strength, split tensile strength, residual strength.

**Keywords**— Compressive Strength, Split Tensile Strength, Plastic Granules, Steel Fiber, Polypropylene Fiber.



JES's Institute of Technology, Management and Research, Nashik.

### A PROJECT

#### **REPORT ON**

### "EXPERIMENTAL INVESTIGATION ON BASALT FIBER-REINFORCED CONCRETE"

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

#### SUBMITTED BY

RITZ RUMON MUTHDAM (72016349J) TEJAS SAHEBRAO BHAMARE (72011453F) NACHIKET VILAS NIKAM (72016350B) VAIBHAV AJINATH BELGE (72016338C)

#### **GUIDED BY**

Prof. S. D. NAGARE



DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

Civil Engineering Department



## DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

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have satisfactorily carried and completed the project work entitled "EXPERIMENTAL INVESTIGATION ON BASALT FIBER-

#### **REINFORCED CONCRETE"**

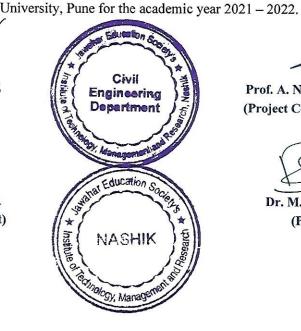
This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune



Prof. S. D. NAGARE (Project Guide)

Prof. A. N. SHUKLA

(Head of Department)



Prof. A. N. SHUKLA (Project Co-Ordinator)

Dr. M. V. BHATKAR (Principal)

#### ABSTRACT

Many industries are trying to find economical and eco-friendly construction material. There are numbers of various materials available and we chose one of those for our project "Basalt Chopped Fiber" we found that basalt fiber is obtain naturally from basalt rock from earth's crust.

After researching we found that in almost every state of India and in many different area's basalt fibers are available with varieties and so we ordered basalt chopped fiber from Mumbai. Then we made contact with Technocrete India Pvt. Ltd, Nashik for our project guidance. They allowed us to do project under their guidance. First of all, they used the proportion for making concrete cubes for ordinary Portland cement and beam cubes with basalt fiber. Under their guidance we are going to make 9 beam cubes of OPC and cubes with basalt chopped fiber of M25 grade for testing 7,14,21 days. And then we will place it for curing.

After placing Beams for curing, we took test on Flexural Test on respective day. Special attention will be paid before and during testing of the specimens. Before testing, calibration of the machines will be checked and the bearing surfaces of testing machines will be wiped clean and there will be no loose grits or other extraneous materials on the surface, which may be in contact with the specimen.



#### REPORT

#### ON

### "ANALYSIS OF PAVEMENT USING MODIFIED BITUMEN"

In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

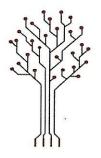
### SUBMITTED BY

Akash Uttam Bachhav Mrunal Ramesh Khare Rohan Sitaram Pawar Sachin Patil

71940872F 71656789L 72016354E

#### **GUIDED BY**

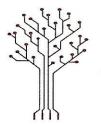
Prof. A. N. SHUKLA



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)





## DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that Akash Uttam Bachhav Mrunal Ramesh Khare Rohan Sitaram Pawar Sachin Patil

have satisfactorily carried and completed the project work entitled

### "ANALYSIS OF PAVEMENT USING MODIFIED BITUMEN"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

#### ABSTRACT

The utilization of Crumb Rubber i.e. the rubber obtained from the waste tires of vehicles in the construction of flexible pavement is gaining importance day by day. It is also significance mentioning that, the modifier raw-material has been sourced from disposed crumb rubber. This not only allows us to collect modifier raw material at very low cost, but also provides a solution towards ecological menace posed by increased use of rubber. In the present study, an attempt has been made to use Crumb Rubber, blended using wet process. Marshal method of Bituminous mix design was carried out for varying percentages i.e. 8%, 10%, 12% and 14% of Crumb Rubber to determine the different mix design characteristics. The Dense Bituminous Macadam (DBM) mix was prepared using Marshall Method of bituminous mix design. The DBM was prepared with conventional VG-30 grade bitumen, VG10 grade bitumen added with varying percentages of Crumb Rubber. Marshall's mix design was carried out by changing the modified bitumen content at constant optimum rubber content and subsequent tests have been performed to determine the different mix design characteristics and for conventional bitumen (VG-30). This has resulted in much improved characteristics when compared with straight run bitumen and improve the strength of the pavement Modified Bitumen is one of the important construction materials for construction of flexible pavements.



#### REPORT

#### ON

#### **"BASALT FIBER"**

In the partial fulfillment of the requirement for

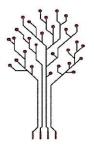
Bachelor Degree in Civil Engineering

#### SUBMITTED BY

### CHAITANYA ARVIND GUNJAL 71940883M SHAHID MUZAFFAR KOTWAL71940887J CHAUDHARI TAUKEER ALI KURBAN ALI71940876J SHAIKH ZIYA ARIF71940900E

#### **GUIDED BY**

Prof. A. N. SHUKLA



#### **DEPARTMENT OF CIVIL ENGINEERING**

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)



#### **DEPARTMENT OF CIVIL ENGINEERING**

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

CHAITANYA ARVIND GUNJAL SHAHID MUZAFFAR KOTWAL CHAUDHARI TAUKEER ALI KURBAN ALI SHAIKH ZIYA ARIF

have satisfactorily carried and completed the project work entitled

#### "BASALT FIBER"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

### **DEPARTMENT OF CIVIL ENGINEERING**

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Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

### Abstract

Many industries are trying to find economical and eco-friendly construction material. There are numbers of various materials available and we choice one of those for our project 'basalt chopped fiber' we found that basalt fiber is obtain from naturally basalt rock from earth's crust.

After researching we found that in almost every state of India and in many different varieties and so we ordered basalt chopped fiber from Mumbai. Then we made a contact with Ultra Tech RMC plant located at satpur, Nashik for our project guidance. They allowed us to do project under their guidance. First of they us the proportion for making concrete cubes for ordinary Portland cement and cubes with basalt fiber. Under their guidance we made 12 cubes of OPC and cubes with basalt chopped fiber of M30 grade for testing 3,7,21 and 28 days. And then we placed it for curing.

After placing cubes for curing we took test on Compressive Testing Machine (CTM) on respectively day. Special attention was paid before and during testing of the specimens. Before testing, calibration of the machines was checked and the bearing surfaces of testing machines were wiped clean and there were no loose grits or other extraneous materials on the surface, which may be in contact with the specimen.

The compressive strength of the cubes was determined according to the BS 1881 Part 116: 1983 standard using a compression testing machine of 3000 kN capacity. The compression test was performed at 3 kN/sec loading rate.



#### REPORT

ON

### "Investigation Of Mechanical Properties Of Paver Blocks With Partial Replacement Of Cement With Fly Ash"

In the partial fulfillment of the requirement for

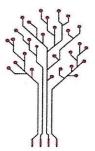
Bachelor Degree in Civil Engineering

#### SUBMITTED BY

PANKAJ RAVIDRA KAKULDE BHAVESH KHANDERAO PATIL SHUBHAM DAULATRAO MURKUTE AKASH MANIK AHIRRAO

### **GUIDED BY**

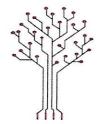
Prof. S.W.MANJARWAL



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)





# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

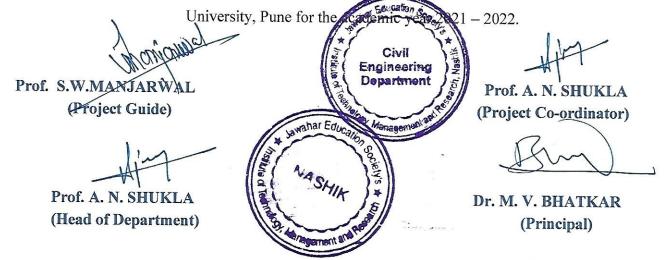
This is to Certified that

PANKAJ RAVIDRA KAKULDE BHAVESH KHANDERAO PATIL SHUBHAM DAULATRAO MURKUTE AKASH MANIK AHIRRAO

have satisfactorily carried and completed the project work entitled

### "Investigation Of Mechanical Properties Of Paver Blocks With Partial Replacement Of Cement With Fly Ash"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune



"Investigation of Mechanical Properties of Paver Blocks with Partial Replacement of Cement with Fly Ash"

5

### Abstract

Concrete paving blocks are ideal materials on the footpaths for easy laying, better look and finish. It was found that rapid deterioration occurred on new pavers and the blocks became unserviceable within three years. This was a matter of grave concern and there was need to identify the problem. The aim of this paper is to determine the properties of those blocks that deteriorated rapidly in contrast with those that had provided long-term satisfactory service, to identify test methods and specifications that will ensure that blocks are durabl

#### **KEYWORDS:**

Interlock Paves, Fly Ash, Sustainability, Compressive Strength, Mineral Admixture.



A

#### **PROJECT REPORT**

ON

# "ROAD ACCIDENT PREDICTION IN NASHIK CITY"

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

### SUBMITTED BY

CHAUDHARY PRANALI BHAGWAN (72011455B) PATIL SHARAD BHAUSAHEB (71940894G) WAGHCHAURE GAYATRI RAMESH (72011457J)

**GUIDED BY** 

Prof. S. B. KAJABE



DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PU

Engineering



DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

## CHAUDHARI PRANALI BHAGWAN (72011455B) PATIL SHARAD BHAUSAHEB (71940894G) WAGHCHAURE GAYATRI RAMESH (72011457J)

have satisfactorily carried and completed the project work entitled

"ROAD ACCIDENT PREDICTION IN NASHIK CITY"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune

Prof. S. B. Kajabe (Project Guide)

Prof. A. N. SHUKLA (Head of Department)

for the academic year 2021 - 2022.



External Examiner

Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

"Road Accident Prediction Modelling for Nashik City"

### ABSTRACT

Accidents are severe problem due to the increasing traffic in developing nations like India. The present study is carried out for the study of road accident analysis in Nashik region which is located in western part of country. The road accident data was analyzed with the time of day, location, month, age of driver and vehicle wise. Further, the accident prediction model was developed for Nashik city. The output of the present study will be used for accident forecastingand traffic mitigation in Nashik city.

The rapid increase in urbanization has led to a better lifestyle of people, but these advancements have created a burden on transportation facilities due to the increase in vehicle ownership. These have cause problems related to the increase in road traffic and thus the crashes which are the main cause of life and economic loss. Nowadays, road traffic accidents and their effects on the human being have been the largest cause of the fearfulness. The population of human and vehicles are one of the important causes of the accident (Balachandran, no date). Study revealed that the population of India is about 1.32 billion and the vehicular population was 230 million (Traffic, 2019). Hence, there is a basic requirement for assessing these accidents through the identification of the various causes that are responsible for their occurrence, analyse their dependency on those causes and also to recommend various remedial measures to alleviate losses due to these accidents is the main focus of the present study.

#### Keywords: Accident, Accident prediction, Model development, etc.



JES's Institute of Technology, Management and Research, Nashik.

#### REPORT On

### "ANALYSIS ON RESIDENTIAL PROJECTS AND IMPACT OF SUPPLY MANAGEMENT SYSTEM"

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

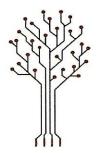
#### SUBMITTED BY

Pratik Abasaheb Deore Deepmol Keshsav Deore Nirav Ramesh Chotaliya Mahendra Malaji Deore 71656770k 72011456L 71727705E 71656769F

Anag

#### **GUIDED BY**

Prof. A. N. SHUKLA



DEPARTMENT OF CIVIL ENGINEERING JAWAHAREDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE (2021-2022)

### DEPARTMENT OF CIVIL ENGINEERING

## JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that **Pratik Abasaheb Deore Deepmol Keshsav Deore Nirav Ramesh Chotaliya Mahendra Malaji Deore** 

have satisfactorily carried and completed the project work entitled

### "Analysis On Residential Projects And Impact of Supply Management System"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

Materials management is a process for planning, executing and controlling field and office activities in construction. The goal of materials management is ensuring that construction materials are available at their point of use when needed. The materials management system attempts ensure that the right quality and quantity of materials are appropriately selected, purchased, delivered and handled on site in a timely manner and at a reasonable cost. Materials management is the system for planning and controlling all of the efforts necessary to ensure that the correct quality and quantity of materials are properly specified in a timely manner, are obtained at a reasonable cost and most importantly are available at the point of use when required. Thus, Materials management is an important element in project management. Materials represent a major expense in construction, so minimizing procurement costs improves opportunities for reducing the overall project costs.

Poor materials management can result in increased costs during construction. Efficient management of materials can result in substantial savings in project costs. If materials are purchased too early, capital may be held up and interest charges incurred on the excess inventory of materials. Materials may deteriorate during storage or get stolen unless special care is taken. Delays and extras expenses may be incurred if materials required for particular activities are unavailable. Ensuring a timely flow of materials is an important concern of material management. For effectively managing and controlling materials, the performance of materials management should be measured. A performance measure calculates the effective working of a function. These performance measures may differ from system to system. The measures divide the materials management system in parts and make the working of the system more efficient. When joined, the measures make the complete materials management system.



REPORT

ON

### **"INVESTIGATION OF VARIOUS BITUMINOUS MIXES USING PLASTIC WASTE"**

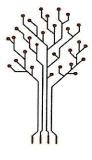
In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### SUBMITTED BY

Khushal Govind Valvi 71940905F Bhavana Pandurang Chavan 71940877G Swapnil Sheshrao Khedkar 71656790D Sayali Ravindra Gurav 71806819L

### **GUIDED BY**

Prof. S. W. MANJARWAL



### DEPARTMENT OF CIVIL ENGINEERING

### JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)



### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that Khushal Govind Valvi Bhavana Pandurang Chavan Swapnil Sheshrao Khedkar Sayali Ravindra Gurav have satisfactorily carried and completed the project work entitled

### **"INVESTIGATION OF VARIOUS BITUMINOUS MIXES USING PLASTIC WASTE**

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

MWOLIO Macy

Prof. S. W.MANJARWAL (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

The rapid rate of urbanization in India has led to increasing plastic waste generation. This increase has resulted in a large amount of plastic waste, particularly plastic bags and PET bottles, being littered on the landscape of India. In this context, research has been carried out to contribute to the development of efficient policy approaches on plastic waste in India. Few policies have been enforced by the government to address the acute problem of littering in the country. The strengths, weakness and missing links of the existing policies were identified. The analysis has revealed that the existing policies on plastic waste have not been able to address the issue of littering, primarily because these have not attempted to provide a long-term solution to the problem. In the case of PET the lack of legislation to manage the rising

Consumption has been identified as the key problem. Based on the analysis a few policy recommendations have been made that could assist decision makers in their efforts to develop a Comprehensive plan of action for plastic waste management. The purpose of this project is to investigate the possibility of using Polyethylene Terephthalate as polymer additives in Bituminous Mix. The characteristics of PET-modified bituminous mix isobtained by fix

Mixing temperature, was investigated. The binders were prepared by mixing the PET in 2%, 4%, 6%, 8% and 10% (by the weight of optimum bitumen) with 80/100 penetration grade bitumen at temperature of 200-220 °C. It may be inferred that PET modified bituminous binders provide better stability when compared to conventional binders. Using PET-modified bituminous mix also contribute to the recirculation of plastic waste, as well as to the protection of the environment.

#### Key Words:

Waste Plastic, Aggregate, Bitumen, Plastic-Bitumen- Aggregate mix, Plastic modified bitumen and Plastic Modified Aggregate.



REPORT

### ON

## "ANALYSIS OF EFFECT OF SIZE OF AGGREGATE ON PROPERTIES OF CONCRETE"

In the partial fulfillment of the requirement for

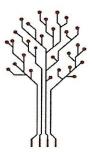
Bachelor Degree in Civil Engineering

### SUBMITTED BY

### BHUSHAN SANJAY BATTASE (72016337E) SHREYAS RAVINDRA GORTE(72016357K) PRATHAMESH SHASHIKANT AHIRRAO (72016335J) ADITYA BHAGWAN SONAS (72016358H)

### **GUIDED BY**

Prof. A. N. SHUKLA



### DEPARTMENT OF CIVIL ENGINEERING

# JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021-2022)

Civil Engineering

### DEPARTMENT OF CIVIL ENGINEERING

## JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

BHUSHAN SANJAY BATTASE SHREYAS RAVINDRA GORTE PRATHAMESH SHASHIKANT AHIRRAO ADITYA BHAGWAN SONAS

Have satisfactorily carried and completed the project work entitled

## "ANALYSIS OF EFFECT OF SIZE OF AGGREGATE ON PROPERTIES OF CONCRETE"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

#### Abstract

Concrete is a versatile widely used construction material. Ever since concrete has been accepted as a material for construction, researchers have been trying to improve its quality and enhance its performance. Recent changes in construction industry demand improved durability of structures. There is a methodological shift in the concrete design from a strength based concept to a performance based design. At present there is a large emphasis on performance aspect of concrete. One such thought has lead to the development of Self Compacting Concrete (SCC). It is considered as "the most revolutionary development in concrete construction". SCC is a new kind of High Performance Concrete (HPC) with excellent deformability and segregation resistance. It can flow through and fill the gaps of reinforcement and corners of moulds without any need for vibration and compaction during the placing process.

The guiding principle behind self-compaction is that "the sedimentation velocity of a particle is inversely proportional to the viscosity of the floating medium in which the particle exists". The other features of mix proportion of SCC include low water to cementitious material ratio, high volume of powder, high paste to aggregate ratio and less amount of coarse aggregate. The original contribution in the field of SCC is attributed to the pioneering work of Nan Su etal; who have developed a simple mix design methodology for Self Compacting Concrete. In this method, the amount of aggregate required is determined first, based on Packing Factor (PF). This will ensure that the concrete obtained has good flowability, self-compacting ability and other desired SCC properties. The European Federation of Producers and Applicators of Specialist Products for Structures (EFNARC) [2005] have also laid down certain guidelines for fresh properties of SCC.

The present investigation is aimed at developing high strength Self Compacting Concrete of M70 Grade. The parameters of study include grade of concrete and effect of size of aggregate. The existing Nan Su [2001] method of mix design was based on packing factor for a particular grade of concrete, obtained on the basis of experimental investigation. SCC characteristics such as flowability, passing ability and segregation resistance have been verified using slump flow, L box and V funnel tests.



### REPORT

### **"IMPACT OF QUALITY ON CONSTRUCTION AND COST"**

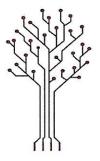
In the partial fulfillment of the requirement for Bachelor Degree in Civil Engineering

### **SUBMITTED BY**

Sameer Kailas Binnar 72011454D Saurabh Nitin Bhadakwade72016339M Tejas Balasaheb Pagare72011462E Aakanksha Gulabrao Salunke720111468D

### **GUIDED BY**

Prof. A. N. SHUKLA



### DEPARTMENT OF CIVIL ENGINEERINGJAWAHAR

### **EDUCATION SOCIETY'S**

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE



### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that Sameer Kailas Binnar Saurabh Nitin Bhadakwade Tejas Balasaheb Pagare Aakanksha Gulabrao Salunke have satisfactorily carried and completed the project work entitled

### "IMPACT OF QUALITY ON CONSTRUCTION AND COST"

This work is being submitted for the award of Bachelor of Engineering. It is submitted in the partial fulfillment of the prescribed syllabus of Savitribai Phule Pune University, Pune for the academic year 2021 – 2022.

Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)





Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

It is rightly said that "You get what you Inspect, not what you Expect". A careful inspection at each stage of construction leads to minimization of error which results in improvement in the quality of construction. If we are talking about construction industry many times contractor didn't bother about the quality of construction and he didn't want to appoint the required engineers and lab staff. Main focus is always on Time and Cost whereas Quality is first factor that comes into focus for adjustment. Though it seems like it doesn't make significant impact but fact is adjustment with quality leads to serious damage technically. Now a days, many of the organization appoint quality control consultant to keep a watch on quality of construction. This is really having good impact on improvement in the quality. But whether this additional cost is justified?

In view of this, present research work is carried out in order to understand malpractices during R.C.C. activities, impact of poor quality on construction cost, impact on builders, contractors and customers, relationship between quality and degree of control. For study purpose multi-storeyed building at 'Amaltas Pvt. Ltd.' residential scheme, Nashik is taken into account.

For methodology of research, Checklists are prepared which gives idea about base facts of various sub activities of Reinforced cement concrete (R.C.C.). Furthermore Non-conformities/Defects are identified with the help of checklists and final Master sheet is prepared which highlights total Non-conformities/defects, root-causes, impact of Non-conformities/defects on quality and what actions are taken to recover that Non-conformities/defect.

After detailed analysis of data, it is mainly observed that Non-conformities/defects go on increasing floor wise. Severity of Non-conformities/Defects also goes on increasing floor wise. From all this it is concluded that major factor for this is degree of control. It shows inverse relation with Quality cost .i.e. as degree of quality control increase, construction cost decreases as maintenance and rework cost related with quality decreases. Quality damage makes negative impact on customers as problems like spalling of concrete, seepage, leakages, cracks, bad aesthetic view etc. which ultimately hampers the reputation of builder and contractor in market and that ultimately causes the failure of upcoming projects.

To overcome these problems and to achieve desired quality few recommendations like daily quality assessment report (it includes laboratory testing of the concrete and materials sample also taken into account), training programs for labours etc.



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### REPORT

ON

### "WASTE POLYMERIC PACKAGING MATERIAL USE IN BITUMINOUS ROADS "

In the partial fulfillment of the requirement for

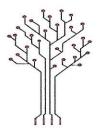
Bachelor Degree in Civil Engineering

### SUBMITTED BY

### ROHIT PRAKASH RAUNDAL (72016356M)

### **GUIDED BY**

Prof. A. N. SHUKLA



### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S

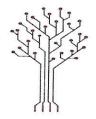
INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH,

GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE



(2021-2022)



## DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# **CERTIFICATE**

This is to Certified that

### ROHIT PRAKASH RAUNDAL (72016356M)

have satisfactorily carried and completed the project work entitled

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Prof. A. N. SHUKLA (Project Guide)

Prof. A. N.

(Head of Department)



**External Examiner** 

Prof. A.N. SHUKLA

(Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

The quantum of plastic waste in municipal solid waste (MSW) is increasing due to increase in population, urbanization, development activities and changes in life style which leading widespread littering on the landscape. Thus, disposal of waste plastic is a menace and become a serious problem globally due to their non-biodegradability and anaesthetic view. Since these are not disposed scientifically & possibility to create ground and water pollution.

Rutting is caused by accumulation of permanent deformations caused by repeated applications of traffic loads and it is a stress controlled cyclic loading phenomenon. The process of deformation of bituminous surfacing is accelerated by increase of pavement temperature, reduction in stiffness of mix and increase in traffic loads. The aim of this project is to report findings of study on increase in stiffness modulus of bituminous mixes by incorporation of waste polymeric packaging material (WPPM) to enhance pavement performance as well as to protect environment

Keywords: Plastic Waste, Non-Biodegradability, Bitumen mix roads, Waste Polymeric Packaging material, Rutting.



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### REPORT

ON

### **"INCREASING PROPERTIES** OF STRUCTURES WITH ENGINEERED CEMENTATIONS MATERIAL"

In the partial fulfillment of the requirement for

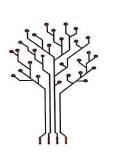
Bachelor Degree in Civil Engineering

### SUBMITTED BY

NAMDEV DHENUPAL JADHAV KAMLESH RAMDASGIRI GOSAVI ROHIT ASHOK PANDIT RAHUL SUNATILAL CHAVAN 72016345F 72016344H 72016351L 72011466H

### **GUIDED BY**

Prof. A. N. SHUKLA





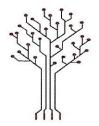
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(2021-2022)



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KAMLESH RAMDASGIRI GOSAVI

ROHIT ASHOK PANDIT

RAHUL SUNATILAL CHAVAN

have satisfactorily carried and completed the project work entitled **"INCREASING PROPERTIES** 

**OF STRUCTURES WITH ENGINEERED CEMENTATIONS** 

### **MATERIAL** "

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Prof. A. N. SHUKLA

(Project Guide)

Prof. A. N. SHUKLA (Head of Department)



**External Examiner** 

Prof. A. N. SHUKLA (Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

Engineered Cementations Composites (ECC) developed for economical utilization of fibres in retrofitting of masonry structures have been focused herein. The performance of beam-like masonry specimens subjected to their out of plane forces are experimentally and numerically investigated in this report. Twelve beams like specimens were cast and retrofitted with polyvinyl alcohol engineered cementations composites (PVA-ECC) for the purpose. The casting of retrofitting layer was done by varying percentages of PVA fibres that is 1%, 1.5% and 2% addition by the total volume of mortar. Performance in out of plane direction is investigated trough static two-point loading the specimens at constant load increment of 0.1mm per second. Work was conducted to simulate the ultimate cracking loads, maximum tension/deflection and load to deflection relationships of retrofitted and non-retrofitted specimens. Experimental results revealed that the maximum load carrying capacity with retrofitted samples increased by 11.8, 10.15 & 11.13 % for 1%, 1.5%, and 2% fibre addition respectively. Simultaneously deflection before complete collapse increases 5, 8 & 10% for 1%, 1.5% and 2% fibre additions. Numerical analysis was done under finite element based analysing software ANSYS. Comparison of experimental and numerical results showed clear similarity allowing us to blindly account PVA-ECC as retrofitting material as an economic and easy method available.

*Keywords:* Engineered cementitious composites; economical; retrofitting; masonry; out of plane; fibres.



A REPORT ON

#### "ANALYSIS OF AN SUPPLY CHAIN CONCEPT IN COMMERCIAL PROJECTS"

In the partial fulfillment of the requirement for

Bachelor Degree in Civil Engineering

### SUBMITTED BY

SANTOSH KISHOR DEORE[71940881E]PAVAN SANJAY KHAIRNAR[71940885H]NILESH JAYWANT BACHHAV[71940873D]GAURAV BARKU TARVATE[71940902M]

#### **GUIDED BY**

Prof. A. N. SHUKLA



#### DEPARTMENT OF CIVIL ENGINEERING

JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

(2021 - 2022)



## DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

### CERTIFICATE

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have satisfactorily carried and completed the project work entitled

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University, Pune for the academic year 2021 - 2022.

Prof. A. N. SHUKLA

(Project Guide)

Prof. A. N. SHUKLA

(Head of Department)



(Project Co-coordinator)

Prof. A. N. SHUKLA

Dr. M. V. BHATKAR

(Principal)

In last few decades Supply Chain management has brought the revolution in the Residential Projects and helped many companies to increase their performance in terms of increase in profits, reduction in lead time and inventories. It has helped the process industries to overcome the competition in today's globalize world by providing an edge over the other competitors.

'In line with above scenario in mega project and review of literature on Project supply Chain management, we found sufficient paucity of research to undertake study to understand the need of execution of supply chain management practices in residential projects. Therefore, we endeavour this study to explore and understand the nature of supply chain management in case of residential project. The challenges and complexity of project management is extensive in fast track residential project and magnitude of supply chain initiative is more demanding in residential project. In this regard, we undertaken a survey study and captured the responses of industry Practioners involved in planning, Procurement and execution of residential projects.

The survey study encompasses the role of various supply chain players such as Clients, consultants, contractors and subcontractors with special reference to residential projects. The survey study has resulted into dimensions and factors, which have direct implications for practicing managers involved in residential projects.



IV

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### REPORT

ON

### "WASTE POLYMERIC PACKAGING MATERIAL USE IN BITUMINOUS ROADS "

In the partial fulfillment of the requirement for

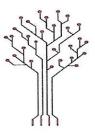
Bachelor Degree in Civil Engineering

### SUBMITTED BY

### ROHIT PRAKASH RAUNDAL (72016356M)

### **GUIDED BY**

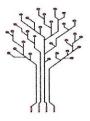
Prof. A. N. SHUKLA



# DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222 SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

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Prof. A. N.'SHUKLA (Head of Department)



**External Examiner** 

Prof. A. N. SHUKLA

(Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

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#### REPORT

ON

## **"EXPERIMENTAL STUDY ON PAPERCRETE: A SUSTAINABLE BUILDING MATERIAL"**

In the partial fulfillment of the

requirement forBachelor Degree

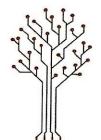
in Civil Engineering

### SUBMITTED BY

YASH RAJENDRA WAGH 72011471D SHUBHAM SANJAY NAGARE 72011460J ANKUSH JAYRAM PURKAR 72016355C AKSHAY GHUGE

### **GUIDED BY**

Prof. A. N. SHUKLA

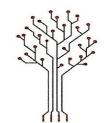




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### JAWAHAR EDUCATION SOCIETY'S

INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK- 422 222



### SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

## DEPARTMENT OF CIVIL ENGINEERING JAWAHAR EDUCATION SOCIETY'S INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, GOWARDHAN, GANGAPUR ROAD, NASHIK - 422 222

# CERTIFICATE

This is to Certified that

YASH RAJENDRA WAGH SHUBHAM SANJAY NAGARE ANKUSH JAYRAM PURKAR AKSHAY GHUGE

Have satisfactorily carried and completed the project work entitled

**"EXPERIMENTAL STUDY ON PAPERCRETE: A SUSTAINABLE** 

### **BUILDING MATERIAL**"

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Prof. A. N. SHUKLA (Project Guide)

Prof. A. N. SHUKLA (Head of Department)



Prof. A. N. SHUKLA

(Project Co-ordinator)

Dr. M. V. BHATKAR (Principal)

ii

### Abstract

Concrete is a versatile widely used construction material. Ever since concrete has been accepted as a material for construction, researchers have been trying to improve its quality and enhance its performance. Recent changes in construction industry demand improved durability of structures. There is a methodological shift in the concrete design from a strength based concept to a performance based design. At present there is a large emphasis on performance aspect of concrete. One such thought has lead to the development of Self Compacting Concrete (SCC). It is considered as "the most revolutionary development in concrete construction". SCC is a new kind of High Performance Concrete (HPC) with excellent deformability and segregation resistance. It can flow through and fill the gaps of reinforcement and corners of moulds without any need for vibration and compaction during the placing process.

The guiding principle behind self-compaction is that "the sedimentation velocity of a particle is inversely proportional to the viscosity of the floating medium in which the particle exists". The other features of mix proportion of SCC include low water to cementitious material ratio, high volume of powder, high paste to aggregate ratio and less amount of coarse aggregate. The original contribution in the field of SCC is attributed to the pioneering work of Nan Su etal; who have developed a simple mix design methodology for Self Compacting Concrete. In this method, the amount of aggregate required is determined first, based on Packing Factor (PF). This will ensure that the concrete obtained has good flowability, self-compacting ability and other desired SCC properties. The European Federation of Producers and Applicators of Specialist Products for Structures (EFNARC) [2005] have also laid down certain guidelines for fresh properties of SCC.

