



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

**SCHOOL OF BUILDING AND ENVIRONMENT
DEPARTMENT OF ARCHITECTURE
M. Arch (Building management)**

**PROFESSIONAL TRAINING (S84APT)
DEC 2021 - JAN 2022**

Name of the Student : POONILA.K

Semester :III

Reg No. : 40840012

Batch : 2020-2022



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VIVA-VOCE EXAMINATION

This is to certify that the Professional Training Report (S84APT) is the work of **POONILA.K** who had undergone training in **OCEAN LIFESPACES INDIA PVT.LTD.** and has been monitored by the continuous assessment during Dec 2021 to Jan 2022.

Dr. Devyani Gangopadhyay
HOD AND DEAN

Submitted for Viva voce Examination held on 01-02-2022

Internal Examiner
(Ar. SUKIRTHA SURESH)

External Examiner
(Ar. HENA DAMODHARAN)



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DECLARATION

I **POONILA.K** hereby declare that this Professional Training Report for the period of **30 days from 3rd Dec 2021 to 13th Jan 2022** done by me under the guidance of **PM. SREENIVASAN.K** is submitted in partial fulfillment of the requirements for the completion of practical training session.

DATE : 01.02.2022

PLACE : Chennai

A handwritten signature in blue ink, appearing to read 'Poonila.K', is written above the printed name.

SIGNATURE OF CANDIDATE

(**POONILA.K**)

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **SATHYABAMA INSTITUTE OF SCIENCE & TECHNOLOGY** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. Devyani Gangopadhyay Dean, School of building and Environment** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to **PM –SREENIVASAN.K** for his valuable guidance, suggestions and constant encouragement paved way for the successful completion of my Training.

I would also like to express my sincere thanks to Ar. Sukirtha Suresh (Internal Co-Ordinator) for her valuable guidance, during the entire Professional Training period.

I wish to express my thanks to all Teaching and Non-teaching staff members of the Department of Architecture who were helpful in many ways for the completion of the project.

Also I want to thank the managing director **MR.PETER** for giving me an opportunity to fulfill our training in **OCEAN LIFESPACES INDIA PVT.LTD.**(M1, industrial estate,CIPET hotel road, guindy, chennai - 600032)



CHENNAI
03-Dec-2021

TO

The Head of the Department
Department of Architecture, School of Building & Environment
Sathyabama Institute of Science and Technology (Deemed to be University)
Rajiv Gandhi Salai, Jeppiaar Nagar,
Chennai-600 119, Tamil Nadu.

SUBJECT: JOINING LETTER

Dear Sir/Mam,

This is to confirm that **Ms. Poonila. K (40840012)** doing her 3rd semester Master of Architecture, in Sathyabama Institute of Science & Technology - SIST, has joined in our firm for practical training (Internship) for a period of 30 days starts from **03rd DEC- 2021**.

Yours faithfully,

For Ocean Lifespaces India Private Limited

Authorized Signatory



CONSOLIDATED CERTIFICATE (Experience)

CHENNAI
10-Jan-2022

TO

The Head of the Department
Department of Architecture, School of Building & Environment
Sathyabama Institute of Science and Technology (Deemed to be University)
Rajiv Gandhi Salai, Jeppiaar Nagar,
Chennai-600 119, Tamil Nadu.

Sub : Completion Letter for Professional Training reg.

Dear Sir/Mam,

This is to Certify that **Ms. Poonila K (40840012)** doing her 3rd semester Master of Architecture, in Sathyabama Institute of Science & Technology - SIST, has successfully completed her practical training (Internship) over a period of 30 days.

Yours faithfully,

For Ocean Lifespaces India Private Limited

Authorized Signatory





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SCHOOL OF BUILDING & ENVIRONMENT, DEPARTMENT OF ARCHITECTURE

M. Arch (Building management) Batch 2020-2022

Continuous Assessment Report for Professional training

(Continuous progress report of the trainee architect/Project Manager for the period of 15 working days in the office to be submitted to HOD)

1. Name of the office / organization:	OCEAN LIFESPACES INDIA PVT. LTD
2. Address & Contact Number	: Mf 1, Industrial Estate, CIPET Hostel Road, Guindy, Chennai-600032. Contact Number: 044-6919 9999
3. Name of the student	: Poonila .K
4. Duration	: From 03.12.2021 To 31.12.2021
5. Total No. of days	: 22 days
6. Evaluation of Performance criteria shall be on	

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month;

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture	✓				
Skillsets related to project management		✓			
Design Management		✓			
Understanding the Triple Constraints		✓			
Observation during Site Visits	✓				
Understanding of construction details	✓				
Understanding of Construction sequences		✓			
Site Supervision / Discussion with clients		✓			
Adherence to Time schedule	✓				
Quantitative aptitude		✓			
Documentation skills		✓			
Coordination with other consultants		✓			

Overall Grading*

"A"

(A - 8.0, B - 7.0, C - 6.0, D - 5.5, E - 5.0, F - <5)

7. Any other Remarks

: Guide Learner

Approved By

8. Signature of the
Head of the Office /
Organization (With Seal)

: C.N. Karthikeyan

Associate Director-Civil Projects



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2. Address & Contact Number	: Mf 1, Industrial Estate, CIPET Hostel Road, Guindy, Chennai-600032. Contact Number: 044-6919 9999
3. Name of the student	: Poonila .K
4. Duration	: From 01.01.2022 To 10.01.2022
5. Total No. of days	: 8 days
6. Evaluation of Performance criteria shall be on	

* Note: Kindly grade the student as per his/her overall performance in the office during the assessment month;

Description of works	Excellent	Good	Fair	Poor	NA
Understanding of office culture	✓				
Skillsets related to project management		✓			
Design Management		✓			
Understanding the Triple Constraints		✓			
Observation during Site Visits	✓				
Understanding of construction details	✓				
Understanding of Construction sequences		✓			
Site Supervision / Discussion with clients		✓			
Adherence to Time schedule	✓				
Quantitative aptitude		✓			
Documentation skills		✓			
Coordination with other consultants		✓			

Overall Grading*

"A"

(A - 8.0, B - 7.0, C - 6.0, D - 5.5, E - 5.0, F - <5)

7. Any other Remarks

: Guide Learner

Approved By

8. Signature of the
Head of the Office /
Organization (With Seal)

: C.N. Karthikeyan

Associate Director-Civil Projects

WORK DIARY

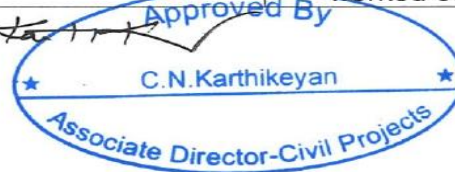
DAY	PROJECT NAME	WORK DONE	DAY	PROJECT NAME	WORK DONE
1	R&D Centre @ Sriperumbudur	- Safety aspects has been explained. Safety checklist and work permit has been monitored and involved in labor induction program. - Architectural and structural drawings were studied	16	R&D Centre @ Sriperumbudur	Site visit
2	R&D Centre @ Sriperumbudur	- Safety aspects has been explained. - Safety checklist and work permit has been monitored and involved in labor induction program. - Architectural and structural drawings were studied	17	R&D Centre @ Sriperumbudur	- Detailed explanation scheduling techniques and tracking of schedule were discussed. - Planning phase of project has been explained in detail along with method statement and checklist.
3	R&D Centre @ Sriperumbudur	Site visit	18	R&D Centre @ Sriperumbudur	- Involved in preparation of draft. - Detailed explanation scheduling techniques (in MSP) and tracking of schedule were discussed.
4	R&D Centre @ Sriperumbudur	- Quality checks for steel and concrete from third party and also from contractor side were explained. - Construction details regarding reinforcement has been explained on site	19	R&D Centre @ Sriperumbudur	- Executed works are observed and noted for Level 8 (To track on labor productivity). - And also, some of the construction details has been observed. - Participated in fire drill program. Resource allocation and Scheduling was done in MSP.
5	R&D Centre @ Sriperumbudur	A brief explanation on bar bending schedule has been given.	20	R&D Centre @ Sriperumbudur	- steel quantity calculation has been worked out. Site visit to Kone main block to have a look into external services. - A discussion on inventory management
6	R&D Centre @ Sriperumbudur	- A brief explanation on Alu- form work has been given by guide. Reinforcement and shuttering at level 8 have been observed and noted. - Safety checklist and work permit has been monitored and involved in labor induction program. Unsafe act and unsafe conditions at site are noted. - Checking of rod spacing at site with respect to Structural drawings	21	R&D Centre @ Sriperumbudur	Executed works are observed and noted for Level 8 (To track on labor productivity). And also, some of the construction details has been observed.
7	R&D Centre @ Sriperumbudur	- Defects in quality has been noted down for all the levels (From Level 1 - Level 7). - A brief explanation on Alu- form work has been given by guide. Reinforcement and shuttering at level 8 have been observed and noted. - Small discussion about Planning phase in construction	22	R&D Centre @ Sriperumbudur	- Involved in preparation of supporting document for the discussion with architect team. - Calculation of Shuttering material quantity and concrete quantity for all floors has been done.
8	R&D Centre @ Sriperumbudur	Concrete cube test monitoring.	23	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.

		- Components of Alu form work has been explained and BOQ for current project has been studied with reference. - Executed works are observed and noted for Level 8 (To track on labor productivity)			
9	R&D Centre @ Sriperumbudur	- Site activity: Concrete pour (Level 6-7 staircase) has been monitored and also the tests has been observed and monitored (Cube test and slump cone test). - A brief description about HIRA involved in project has been given. - Executed works are observed and noted for Level 8 (To track on labor productivity)	24	R&D Centre @ Sriperumbudur	Site visit
10	R&D Centre @ Sriperumbudur	Site visit	25	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.
11	R&D Centre @ Sriperumbudur	- Safety checklist and work permit has been monitored and the safety aspects for each equipment has been explained. - Safety factors were explained based on his experience on various projects. - Planning aspects involved in construction has been explained.	26	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.
12	R&D Centre @ Sriperumbudur	- Safety norms followed at site and some of the safety standards for construction projects has been explained. And also, the reference files have been shared. - Safety checklist for all the actives and site inspection for electrical panels has been explained.	27	R&D Centre @ Sriperumbudur	Site visit
13	R&D Centre @ Sriperumbudur	- Reference documents were studied (regarding the safety aspects). - Project schedule were studied and based on that detailed monthly schedule has been worked out.	28	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.
14	R&D Centre @ Sriperumbudur	- Reference documents were studied (regarding the safety aspects) and also checking of Electrical equipment were monitored along with the safety checklist. - Detailed schedule for level 8 has been worked out.	29	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.
15	R&D Centre @ Sriperumbudur	- Executed works are observed and noted for Level 8 (To track on labor productivity). And also, some of the construction details has been observed. - Detailed schedule for level 8 has been worked out.	30	R&D Centre @ Sriperumbudur	Calculation of Shuttering material quantity and concrete quantity for all floors has been worked out.

Chief Architect Signature:

C.N. Karthikeyan

Office seal:



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FIRM HISTORY

Established in 1996 under the visionary leadership of Mr. S.K. Peter, Ocean epitomizes skill speed, workmanship & punctuality over its 25 years of presence. Mr. S.K. Peter started as a procurement manager at an interior contracting company back in 1994. As a first-generation entrepreneur he started small but at an ambitious pace & delivered impeccable quality work. What started as a small ten-member team soon transformed, from working on ATM interiors to large banks, IT spaces & huge factories, & buildings. A turnover of few lakhs in 1996 grew to 500 crores in 2018 owing to his constant upgradation of all systems & processes in all ventures through dedication, speed, & complete transparency. Ocean has gradually grown into a family of over 400 staff members & 5000+ workers in the past two decades under the leadership of Mr. S.K. Peter. Over the past decade he has cemented Ocean's presence in the fields of Civil Construction & Infrastructure Development. His core strength in delivering projects on time with superior quality, steadily won projects of large magnitudes for Ocean- & it continues to pace forward into great success.

PHILOSOPHY

Enhancing client satisfaction & transcending quality standards by emphasising on quality excellence and timely completion. Creating exceptional interior design solutions and accumulating an expertise that is the best in the industry. At Ocean, we ensure the highest levels of quality standards are achieved at all levels across all ventures.

VISION

- Achieving success across all parallels to become synonymous with excellence in all our endeavours & beyond.

MISSION

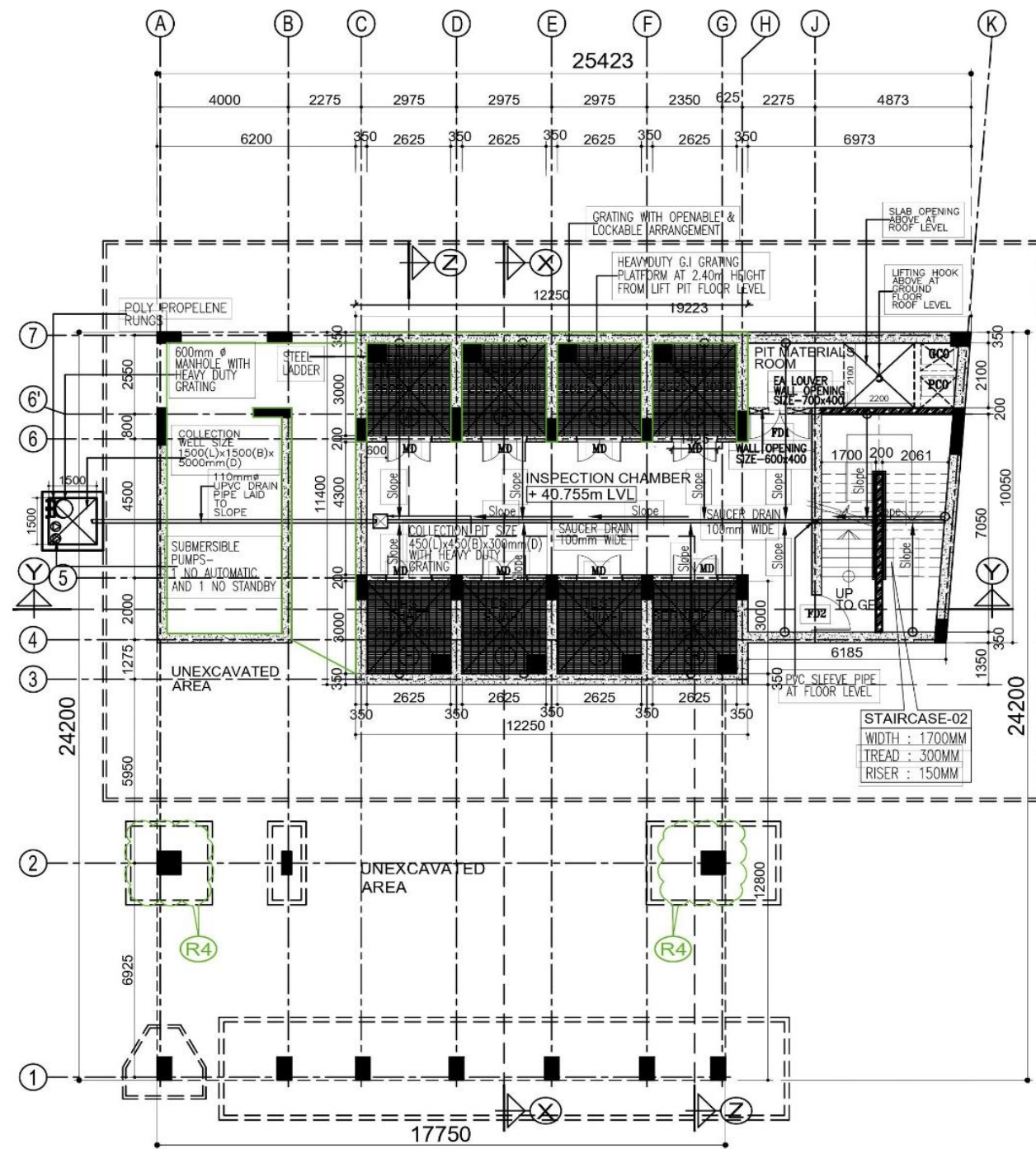
- We strive for the best by constantly upgrading our systems, processes, teams, & activities to ensure that we remain on top of our clients' present and future needs at all times.

AWARD OF EXCELLENCE

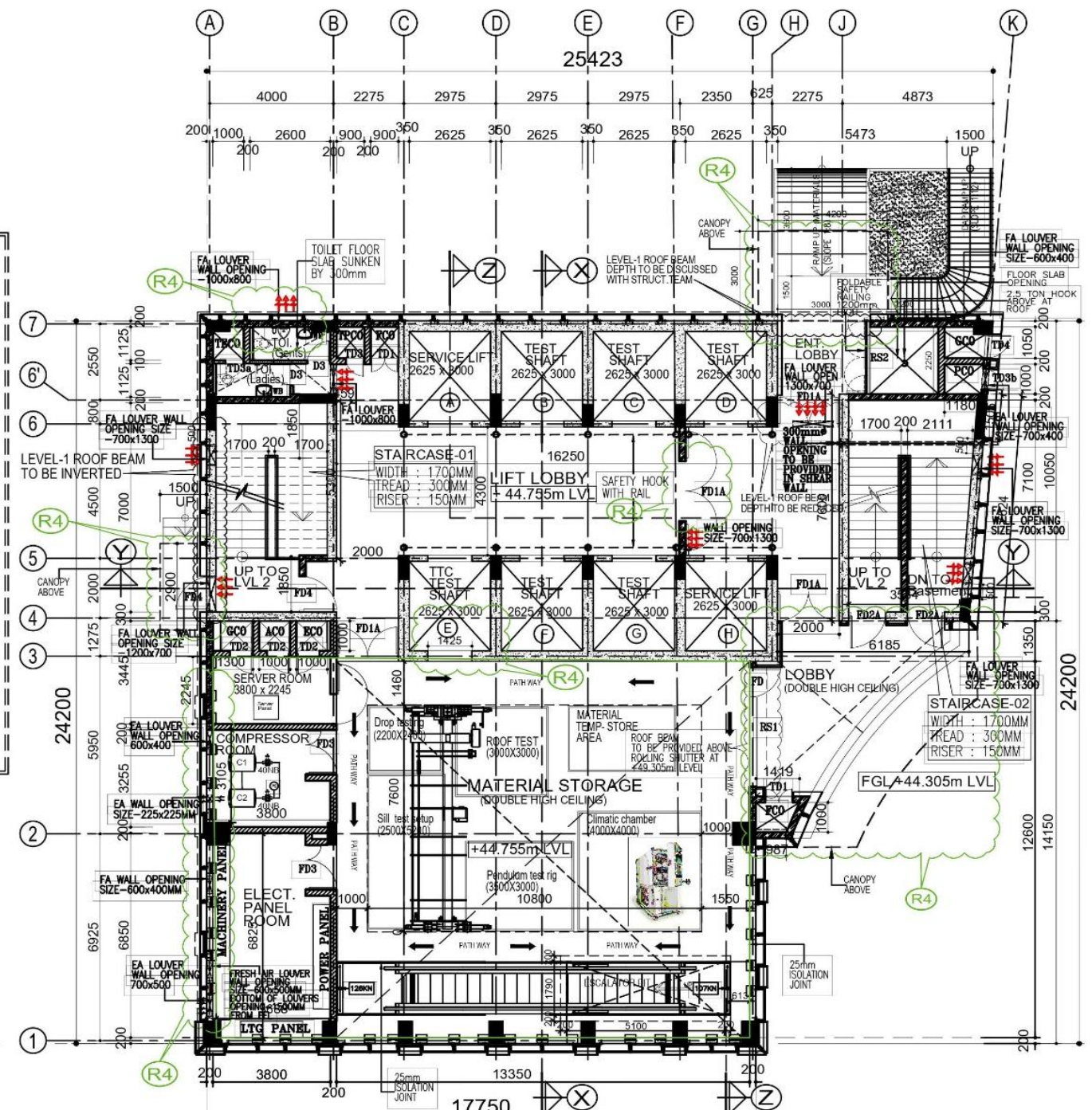
- Mega Interior Projects Excellence awarded by the Honourable Governor of Tamil Nadu

- GYPROC GRAND PRIX
- Winner of Best Interior Fit-out Space Workmanship
- GYPROC 2012
- Saint Gobain Award for Best Office Space Project executed by Ocean
- BEST PERFORMER
- Best Performer awarded by RBS
- SWISS RE - TEAM WORK AWARD
- TATA COMMUNICATION
- 2019 - KONE - CERTIFICATE OF APPRECIATION
- 2015 - CONSTRUCTION INDUSTRY AWARD
- 2014 - DANFOSS INDUSTRIES - ENGINEERS OF EXCELLENCE AWARD
- 2012 - GYPROC TROPHY - BEST OFFICE SPACE PROJECT
- 2009 - RBS AWARD - BEST PERFORMER

1.ARCHITECTURAL DRAWING



PLAN AT LIFT PIT LEVEL



LEVEL : 1 GROUND FLOOR PLAN

2.WORK PERMIT

GENERAL WORK PERMIT

Project: KONE R&D TEST POWER Permit SR.No: 508
Contractor Name: OCEAN LIFE SPACES Date: 11/12/2021
Location: POWER & NON-POWER

Permit Valid from _____ To _____, if Job supervisor changed then their signature should be incorporated in the format

Job Executor Name: K.B. Harathi Signature: [Signature]

Description of work: Staircase-2, Level 5 to 6 Height 8 landing concrete work
Staircase-2, Level 7 to 8 Reinforced concrete work, EARTH LIFT
shaft CPE firing work

Equipment No _____ Location _____

A. Action Taken by Executor: Please write Yes or No in the box provided.

Sr.No.	Hazard Identification	Yes/No	Remarks
1	Electrical	<u>Y</u>	
2	Confined area	<u>N</u>	
3	Height Work	<u>Y</u>	
4	Hot Work	<u>Y</u>	
5	Excavation work	<u>N</u>	
6	Mobile Crane	<u>N</u>	
7	Compressed Air	<u>N</u>	
8	Hydraulics	<u>N</u>	
9	Any Other	<u>N</u>	

B. PPE Required: Please write Yes or No in the box provided.

Sr.No.	PPE	Yes / No	Sr.No.	PPE	Yes / No
1	Full Body Harness	<u>Y</u>	5	Hand Gloves	<u>Y</u>
2	Ear Plug	<u>Y</u>	6	Apron & Leg Guard	<u>N</u>
3	Goggles / Face shield	<u>Y</u>	7	Heat Resistance suit	<u>N</u>
4	Dust Mask	<u>Y</u>	8	Any Other	<u>N</u>

C. Permits Required: Please write Yes or No in the box provided.

Sr.No.	Safety Checks for compliance	Yes/No	If Yes, Permit No.	Remarks
1	Is Electrical Work Permit Required?	<u>N</u>		
2	Is Confined area permit required?	<u>N</u>		
3	Is Height Work Permit Required?	<u>Y</u>	<u>508</u>	
4	Is Hot Work Permit Required?	<u>Y</u>	<u>426</u>	
5	Is Excavation work permit required?	<u>N</u>		
6	Is Process Isolation required? If YES, take clearance form process Dept.		Name of Concerned Process Engineer	Signature & Date

Permit Issuer Name: _____ Signature: [Signature] Date: 11/12/21 Time: 9:05

Accepted by: _____ Signature: _____ Date: _____ Time: _____

No work will be carried out other than the work authorized by this permit

Signature: [Signature] Date: 11/12/21 Time: 9AM

Extension / Transfer of permit: _____

Supervisor: _____ Date: _____ Signature: _____

Concerned Engr: _____ Date: _____ Signature: _____

Concerned SH: _____ Date: _____ Signature: _____

EHS: _____ Date: _____ Signature: _____

Completion: _____ Date: _____ Signature: _____

Note: 1. This permit Applies only to work in the location described.
2. This permit only applies to the person to whom it is issued. If work has to be continued by someone else, this permit must be returned to issuer for cancellation and another permit issued.

By: (1) Job Sup./Contractor (2) Safety Office, (3) Office Record (Retention Period 7 days)

SAFETY PERMIT FOR HEIGHT WORK

Project Name: KONE R&D TEST POWER Permit No: 508
Contractor Name: OCEAN LIFE SPACES Date: 11/12/2021
Sub-Cont. Name: ARCC Area/Location: Tower / Non tower
Job Description: Shuttering & Reinforcement concrete work Scaffolds/Roof Truss/Mobile Scaffolds: Scaffolds

SCAFFOLDING & RELATED PROTECTION

	YES	NO	N/A	REMARKS
1 Scaffolding good construction, adequate strength with 50 cm clear walk ways toe boards with wide screens.	<u>✓</u>			
2 Scaffold well secured with stair ways, hand rails. Should be wide enough to pass two persons at a time.	<u>✓</u>			
3 Maintained good Housekeeping at work Location / Site.	<u>X</u>			<u>no proper house keeping</u>

OVERHEAD CLEARANCE

	YES	NO	N/A	REMARKS
1 Required clearance available from all overhead electrical cables.	<u>✓</u>			

LADDERS

	YES	NO	N/A	REMARKS
1 Strong material, well maintained ladders.	<u>✓</u>			
2 Ladder not placed against loose boxes materials, sound objects, near electrical installation.	<u>✓</u>			
3 Ladder of sufficient height used, on top tied down and man positioned at the foot at ladder.	<u>✓</u>			
4 Ladder placed at an angle of 70 to 75 degrees.		<u>✓</u>		
5 Area of work barricaded so no person can walk under the ladder.	<u>✓</u>			

PERSONAL PROTECTION EQUIPMENT

	YES	NO	N/A	REMARKS
1 Safety harness provided and worn.	<u>✓</u>			
2 Safety Helmet, safety shoes and any other PPE required to perform the job at hand is provided and worn properly.	<u>✓</u>			<u>gloves and mask are not used properly</u>

A. Receipt:
I hereby declare that I accept the responsibility for carrying out the work as detailed on this permit and no attempt will be made by me or men under my control to carry out any other work.
Time 9:00 AM Date 11/12/2021 Signature of Person Receiving Permit [Signature]

B. Permission:
C. Permission granted from 9:30 to 18:00 Hrs. on 11/12/21
Time 9:30 Date 11/12/2021 Signature of permit issuing authority [Signature]

C. Clearance certificate:
Work completed by taking all precautionary steps as approved by permit issuing authority.
Time _____ Date _____ Signature of Person completing jobs _____

D. Cancellation: This permit to work is hereby cancelled.
Time _____ Date _____ Signature of permit issuing authority _____

Rev.0 Dtd. 27.07.2017 Page 1 of 1

3.SCREENING

SAFETY PERMIT FOR HOT WORK

Project Name	KONE R&D TEST TOWER	Permit No	426	
Contractor Name	OCEAN LIFE SPACES	Date	11/12/2021	
Sub-contractor	ARCC	Location	Tower Area	

A) Person taking permit/permittee to fill up:

1) Exact location where hot work is being planned: ETCH Lift shaft level 7 to 8

2) Approximate duration of work from: Date 11/12/21 Start Time 9 AM Finish Time 6 PM
 Revalidated To: Date _____ Start Time _____ Finish Time _____

3) Description of work: C.T.C. Fixing work in ECH shaft

4) Tools & Tackles used: Welding machine, cutting, Blanking

Points to be checked:

Sl.No	Details	Yes	No	N/A	Remarks
1	Has the area immediately below and adjacent to the work spot been cleared / removed of oil, grease and waste cotton etc.,	✓			
2	In case of Gas welding, proper hose pipes and pressure gauges are used?			✓	
3	Have fire extinguishers been kept handy at site?	✓			
4	Has tin sheet / wet gunny bag / fire retardant cloth / sheet been placed to prevent sparks from causing fire?		✓		no fire blanket
5	Have fire sand buckets been kept handy at site?		✓		no sand bucket
6	Whether cylinders are kept in upright positions?			✓	
7	Whether Proper PPE's are available?	✓			
8	In Electrical Welding whether proper Earthing is provided.	✓			

The above points have been complied with and conditions rendered safe / hazards innocuous to undertake the hot work.

Name of K. Bharathi Signature [Signature] Designation Site Engineer
 Permittee (Site Engineer)

Name & Signature of Safety Engineer Karthik Aditya [Signature]

B) The person giving permit (Issuing Authority) to fill up:

After checking all the above precautions the hot work can be carried out in the above area.

Date: 11/12/21 Time: 9:05 Signature of CRN Safety Engineer [Signature]

C) Date: _____ Time: _____ at which the permit closed & filed.

SAFETY PERMIT FOR SUNDAY WORK

Name of the Project	KONE R&D TEST TOWER	Permit No	12/12/2021	
Contractor Name	OCEAN LIFE SPACES	Date	12/12/2021	
Working Hr's	From 6:00 AM to 2:00 PM	No. of persons working in Sunday	33	
Job Description	<u>Shutting and Reinforcement work from bottom Staging and</u>			
Activities scheduled for Sunday work with location:	<u>Shutting, stair-2 level 7-8 wall reinforcement work, EFGH casting channel fixing</u>			
Reason for conducting these activities at Sunday:	<u>Target achieves</u>			
Name of the Safety Supervisor available at Sunday:	<u>SURESH</u>			
Name of the Project Engineer / Site in charge available at Sunday:	<u>KANNADASAN</u>			
Name of the persons /contractor working at Sunday:				

Sl.#	Name	Contractor	Sl.#	Name	Contractor
1	Jitender	ARCC	16	monoj Barchha	ARCC
2	Rakesh	"	17	Bhikender	"
3	mukesh	"	18	Ram Kumar	"
4	Ram Yadav	"	19	Vittam	"
5	Jangaram	"	20	Rakesh	"
6	Praveen	"	21	Salimuri	"
7	Sachine	"	22	Rahul sharma	"
8	manoj yadav	"	23	nilesh yadav	"
9	Priy Singh	"	24	Sachine Thakur	"
10	unesh	"	25	Ravi Thakur	"
11	Sunil	"	26	Suryaman	"
12	Praveen	"	27	Raj Kumar	"
13	Kalan Kumar	"	28	Ravi Gupta	"
14	Sulhamangal	"	29	Sudip	"
15	Ravi Kumar	"	30	Rajesh	"

Area to be cleaned after work: YES / NO

Emergency vehicle available: YES / NO

Any other special precautions:

1. Name of electrician available at site: Sulhamangal - 7305320467

2. Work completed at: 2:00 PM

I agree to follow all labour regulations and safety regulations of Govt. and Contractor during Sunday work.

Signature: [Signature] Signature: [Signature] Signature: [Signature]
 Supervisor (Contractor) Project Engineer / Site in charge Safety Engineer (Contractor)

Signature: [Signature] Signature: _____
 Project Engineer / Site in charge (CRN) Safety Engineer (CRN)

Note: CONCERNED AGENCIES ARE RESPONSIBLE FOR ANY UNSAFE ACT / CONDITIONS

SAFETY PERMIT FOR NIGHT WORK

Name of the Project	KONE ROD TEST TOWER	Permit No	508
Contractor Name	OCEAN LIFE SPACES	Date	11/12/2021
Sub-Contractor Name	ARCC	No. of persons working in Night Shift	21 + 3 = 24
Job Description	Reinforcement & shuttering work		

Activities scheduled for night work with location: Staircase - 2 wall reinforcement
Level - 7 office area shuttering work

Reason for conducting these activities at night: Target Achieves

Name of the Safety Supervisor available at night shift: KARTHIK ADITHYAN.B

Name of the Project Engineer / Site in charge available at night shift: Bharathi

Note: No women are allowed to work in Night Shift.

Sl.#	Name of the persons working during Night Shift:
1	Amal Kumar
2	Munirathnam
3	Ram Jeyaram
4	Ram Jeyaram
5	Arjun
6	Ram Jeyaram
7	Munirathnam
8	Nilesh
9	Ram Jeyaram
10	Saravanan
11	Saravanan
12	Arjun
13	Ajith
14	Rajesh
15	Lolen Goudar
16	Munirathnam
17	Ravi Goudar
18	Shyam
19	Arjun
20	Ram Jeyaram
21	Ram Jeyaram

Sufficient lighting provided: YES / NO

Area to be cleaned after work: YES / NO

Emergency vehicle available: YES / NO

Any other special precautions: YES / NO

1. Name of electrician available at site: Siva - 9629404395

2. Work completed at: 11:00 PM.

Vehicle No: TN87A4502

Contact no: 8870853894

I agree to follow all labour regulations and safety regulations of Govt. and Contractor during Night Shift work

Signature: [Signature] Supervisor (Contractor)

Signature: [Signature] Project Engineer / Site in charge

Signature: [Signature] Safety Officer (Contractor)

Signature: [Signature] Safety Officer (CRN)

Note: **CONCERNED AGENCIES ARE RESPONSIBLE FOR ANY UNSAFE ACT / CONDITIONS**

Rev. 0 Dtd. 27.07.2017

EHS INDUCTION TRAINING REPORT

Project Name	Kone	Report No	
Contractor Name		Date	8-12-21
Induction Given By		Time	12:45 PM

The following points have been detailed, briefed and understood by us.

- General EHS rules.
- PPE's.
- Housekeeping and waste disposal.
- Height work precautions.
- Hot work Safety.
- First-aid and Accident Reporting.
- Lifting Practices.
- Fire Prevention.
- Emergency evacuation procedures.
- Electrical Safety.

Sl.#	Name of the workmen / Staff	Age	Contractor Name	Signature	Remarks
1	RAMESH KUMAR	41	Pri Builders		
2	MUNIRATHANAM	42	S. M. Builders		
3	RANJEN	26	RANJAN		
4	SONU	26	Sonu		
5	SUSIL	39	"		
6	AYTAI	30	"		
7	PENTU	26	Chitra		
8	Sanguri	28	"		
9	MOHU	22	MONU		
10	BESKASH	36	"		
11	SANAI	28	"		
12	Subesh	42	"		
13	Rajesh	31	"		
14	Amrith	18	"		
15	deepath	20	"		
16	yeduvanth	20	"		
17					
18					
19					
20					
21					
22					
23					
24					
25					

Note: This form is to be completed and signed by every worker after attending the EHS induction course.

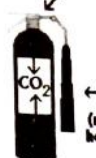
Submitted By: _____ Reviewed By: _____

Project Manager / Safety Engineer (Contractor) _____ CRN Safety Engineer _____

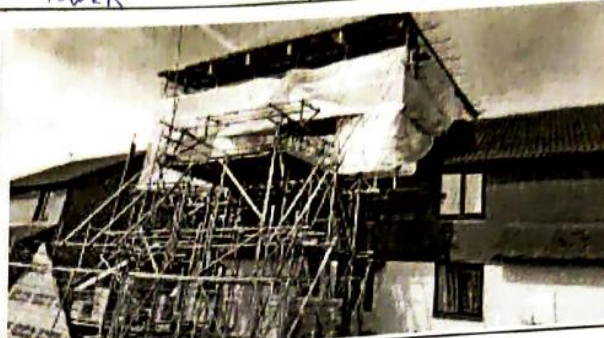
Rev-0 Dtd 27.07.2017 Page 1 of 1

4.SAFETY CHECKLIST

		SAFETY REPORT FOR - SCREENING PROFORMA OF WORKERS		Doc. No.: CRN/EHS/RPT:01A	
PROJECT NAME:		ID NUMBER:		Client Logo	
NAME OF THE CONTRACTOR: (OR)					
NAME OF THE SUB CONTRACTOR: (OR)					
FULL NAME OF THE WORKER:		Subhash Singh			
FATHER / HUSBANDS NAME:		Laxman Singh			
PERMANENT ADDRESS :					
PRESENT ADDRESS :					
DATE OF BIRTH	DATE:	MONTH:	YEAR:	AGE:	
(If in doubt, Please obtain photocopy of birth certificate issued either by village panchayat or school)					
Married/ Single/ Widow/ widower		No Of Children:		6	
In case of emergency person to be contacted with Address & Telephone number :		7358024564			
Vision	Normal	normal		If not normal specify the problem	
Health condition	Normal	normal			
Blood group					
EDUCATIONAL DETAILS					
Examination passed	Year	School / Board			
Declaration By the worker					
The above information given by me is correct to be best of my knowledge					
Signature / Thumb impression of the worker for identification		Subhash Singh			
Declaration By the Sub contractor / Contractor					
We declare that the employee will be working for us in this site. He / She shall follow all the site safety requirement. We take responsibility for His / Her safety in this site.					
Signature of the contractor					
Safety induction & Trade work procedure briefing report					
Safety requirement was briefed to the worker in his / her understanding language					
Signature of the SAFETY ENGINEER / SAFETY OFFICER					
Note : No workers below 18 years of Age will allowed inside site premises					

		SAFETY CHECKLIST FOR FIRE EXTINGUISHER MAINTENANCE		Doc. No.: CRN/ EHS/CL:11A	
Project Name:		KONE R&D TEST TOWER		Issued Date: 6/12/2021	
Contractor Name:		OCEAN LIFE SPACES		Checklist SL.No.:	
 Will have gauge  No Gauge ← Hard Horn (may be on end of hose in larger sizes)  Will have gauge ← May have hose					
Sl.No	PARTICULARS	YES	NO	REMARKS	
1	Is condition of Fire Extinguishers?	✓			
2	Is clear approach to all the Fire Extinguishers?	✓			
3	Are conditions of Pressure Gauges?	✓			
4	Is condition of Nozzle?	✓			
5	Check the Validity & Maintenance records updates in stickers?	✓			
6	Is Buckets are filled with Water / Sand?		✓		
7	Are provided displaying of NO SMOKING stickers?		✓		
8	Are conditions of safety tags / pin?	✓			
9	Is any Leakage in the Fire Extinguishers?		✓		
10	Are conditions of hoses?	✓			
11	Are provided Lighting illumination at night?	✓			
12	Fire Extinguisher is fixed in required heights?		✓		
13	Are Fire Extinguisher identified and contents?		✓		
14	Are the Flammable materials away from the Fire Sources?	✓			
Sl. No	Fire Extinguisher Location	Type of Fire Extinguisher	Capacity	Refilling date	
5.	LEVEL - 6	ABC	4.5 Kg	14/12/2021	
6.	LEVEL - 2	ABC	4.5 Kg	14/12/2021	
7.	Steel yard	CO2	5 Kg	14/12/2021	
8.	LEVEL - 3	CO2	5 Kg	14/12/2021	
Checking Date		6/12/2021	Next Checking Date	13/12/2021	
Prepared by Contractor Supervisor		Name KARTHIKA ADITHYAN	Signature	Date 6/12/2021	
Verified by Contractor Safety In charge					
Approved by CRN EHS Engineer/PMC					

CRN C. R. NARAYANA RAO		SAFETY CHECKLIST FOR FIRE EXTINGUISHER MAINTENANCE		Doc. No.: CRN/ EHS/CL:11A	
Project Name:		KONE R&D TEST TOWER		Issued Date: 6/12/2021	
Contractor Name:		OCEAN AIRLIFE SPACES		Checklist SL.No.:	
 Will have gauge  Carbon Dioxide Extinguisher No Gauge ← Hard Horn (may be on end of hose in larger sizes)  Dry Chemical Extinguisher (ABC) Will have gauge ← May have hose					
Sl.No	PARTICULARS		YES	NO	REMARKS
1	Is condition of Fire Extinguishers?		✓		
2	Is clear approach to all the Fire Extinguishers?		✓		
3	Are conditions of Pressure Gauges?		✓		
4	Is condition of Nozzle?		✓		
5	Check the Validity & Maintenance records updates in stickers?		✓		
6	Is Buckets are filled with Water / Sand?			✓	
7	Are provided displaying of NO SMOKING stickers?			✓	
8	Are conditions of safety tags / pin?		✓		
9	Is any Leakage in the Fire Extinguishers?			✓	
10	Are conditions of hoses?		✓		
11	Are provided Lighting illumination at night?		✓		
12	Fire Extinguisher is fixed in required heights?			✓	
13	Are Fire Extinguisher identified and contents?			✓	
14	Are the Flammable materials away from the Fire Sources?		✓		
Sl. No	Fire Extinguisher Location	Type of Fire Extinguisher	Capacity	Refilling date	
1.	D.G. yard	CO2	4.5 Kg	14/12/2021	
2.	Diesel yard	FOAM	9 liters	14/12/2021	
3.	First Aid Room	ABC	4.5 Kg	14/12/2021	
4.	Office Area	ABC	4.5 Kg	14/12/2021	
Checking Date		6/12/2021	Next Checking Date	13/12/2021	
Prepared by Contractor Supervisor		Name KARTHIK ADITHYAN	Signature 	Date 6/12/2021	
Verified by Contractor Safety In charge					
Approved by CRN EHS Engineer/PMC					

CRN C. R. NARAYANA RAO		SAFETY CHECKLIST FOR (GENERAL) SCAFFOLDING		Doc. No.: CRN/ EHS/ CL:07B	
		Issued date: 6/12/2021		Checklist Sl. No.:	
Name of the Project:		KONE R&D TEST TOWER		Permit No.:	
 General Scaffolding Requirements				Part II	
Name of the Contractor:		OCEAN LIFE SPACE		Scaffold Sl.No.	
Sub-Contractor Name:		ARCC			
SL.NO.	DESCRIPTION	Observation			REMARKS
		OK	NOT OK	N/A	
1	Does the site have a practice of providing suitable and sufficient scaffolds so that the work could be safely done at a height?	✓			
2	Is site engaging suitable / properly trained / experienced workmen for constructing / dismantling / shifting scaffolding works?	✓			
3	Are scaffold platforms designed / constructed with a minimum safety factor of four?		✓		
4	Is there a safe means of access to the working platform?		✓		
5	Are scaffold structures on a solid base avoiding pavements & manhole covers?	✓			
6	Is the scaffolding structure free from Excavation pit / proper distance is maintained?	✓			
7	Is verticality of the structure being properly maintained?	✓			
8	Are ties for scaffold structure proper maintained (vertical as well as horizontal position)?	✓			
9	Is there a provision of toe boards / guard rails and are they secured?	✓			
10	Whether planks used for working platforms are wooden / metallic?	✓			
11	If wooden plank, whether thickness is maintained as per standard or not, viz.			✓	
	a. For 1.5 M span --- 1.5" thick				
	b. For 2.6 M span --- 2.0" thick				
12	Is there a system of inspecting scaffolds by a competent person at least once a week and also after every prolonged interruption in the work?	✓			
13	Is there a system of inspecting materials of scaffolds on each occasion before erection?	✓			
14	Is there a system of inspecting scaffolds at every spell of Bad weather / heavy wind condition?		✓		

NO.	DESCRIPTION	Observation			REMARKS
		OK	NOT OK	N/A	
15	Is over hang of the working platform restricted to less than 50 mm / four times the thickness of the board?	✓			
16	Is their awareness among workmen on the importance of load distribution on a given working platform?	✓			
17	Is there a check for the condition and correct usage of fittings for scaffolds?	✓			
18	Is the width of a working platform properly maintained according to usage, viz? a) Minimum 600 mm for footing and not for deposit of materials. b) Minimum 800 mm for footing and not for deposit of materials. c) Minimum 1050 mm when used for heavier loads or to support higher platforms.	✓			
19	Are all the materials stored on the platforms properly secured or not?	✓			
20	Whether planks are tied using proper binding wires?	✓			
21	Are openings working platforms kept safely covered / fenced?	✓			
22	Are the scaffolds being erected on firm and level surface?	✓			
23	Does the height of mobile scaffolds exceed four times the smaller base dimension?	✓			
24	Are all materials stocked on platform properly secured while in motion?	✓			
25	Is the safety Rule: Not to ride on a scaffold while in motion, violated.	✓			
26	Is there a system of checking for obstructions before the tower is moved?	✓			
27	Are suitable / correct lifting tackles (wire rope / chains / shackles) selected for suspension & used?	✓			
28	Are all the suspension gears correctly spaced and connected?	✓			
29	Is there a system of using manila rope / coir rope for suspension at any place where such rope would be liable to damage by heat / flames / sharp edges etc.	✓			
30	Are all precautionary measures taken to prevent contact between arc welding apparatus and suspension ropes?	✓			
31	Is there a provision of guardrails and toe boards?	✓			
32	Is hanging platform secured?	✓			
33	Is there a provision of anchoring safety belts lanyards to be tied to guy ropes?	✓			
Prepared by Block In-charge / Engineer		Name	Signature & Date	Date of Inspection:	
Verified by Contractor EHS Engineer					
Approved by CRN EHS Engineer					

Note: Check list to be submitted to the CRN well in advance after checking the above points by the Contractor.

SAFETY CHECKLIST FOR LADDER		Doc. No.: CRN /EHS/CL:07D	
PROJECT:- R&D TEST TOWER		Issued Date: 6/12/2021	
		Checklist Sl. No.:	
CONTRACTOR NAME : OCEAN LIFE SPACE Date: 6/12/2021			
SL NO	DESCRIPTION	Day	Day-1 Day-2 Day-3 Day-4 Day-5 Day-6 Day-7
1	All the rungs, cleats, or steps are in good condition (Broken, missing, bend rungs)	✓	
2	Side rails is intact without any cracks, bends, or breaks.	✓	
3	The rungs, cleats, or steps is fit into the side rails without damage.	✓	
4	Ladder is free from corrosion.	✓	
5	Side rails and steps are free of oil or grease.	✓	
6	Rungs are placed at regular intervals (30 cm gap between two rungs)	✓	
7	Projection of loose nails, screws, bolts, or other metal parts	✓	
8	At the time of using, the ladder should be placed at 65-75 degree angle (1:4 ratio)	✓	
9	Ladder is extended at least 1 m above the landing platform (3 Rungs)	✓	
10	Ladder is secured either at top or at the bottom	✓	
11	Ladder rungs should not be painted.	✓	
12	Reinforcement rod should not be used as ladder rungs	✓	
13	The surface of the rungs should not be smooth	✓	
14	Rubber feet for firm grip (in case of Aluminum ladder)	✓	
EXTENSION LADDER			
15	Loose, missing or broken extension locks		
16	Defective locks which do not seat properly when ladder is extended		
17	loose hinges		
18	Ensure stopper without damage		
STEP LADDER			
19	Step ladder height not to exceed by 20 feet and width by		N/A
20	Loose hinges		
21	Loose or bent hinge spreaders		
22	Ensure spreader without damage and locking mechanism.		
Prepared by Job leader		Name	Signature
Verified by contractor Safety Engineer		KARTHIK ADITHYAN	K...
Approved by CRN EHS Engineer			
			Date:



CRN
C. R. NARAYANA RAO

SAFETY CHECKLIST FOR GENERATOR (Daily)

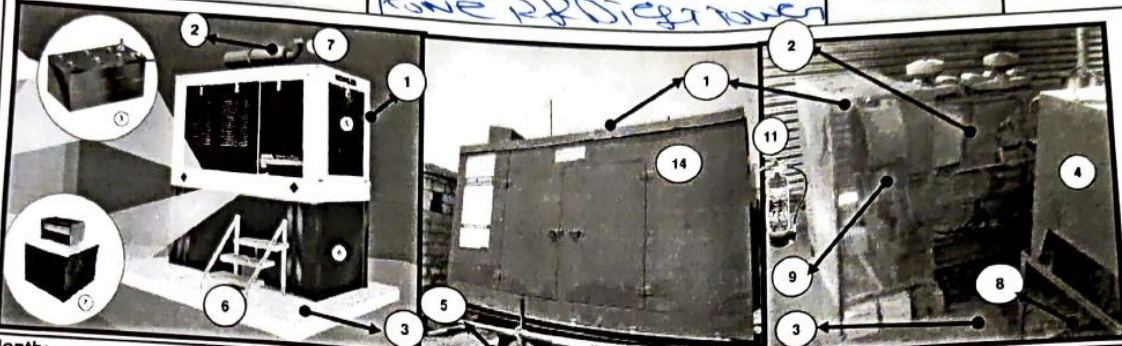
Doc. No : CRN / EHS / CL : 09A

Contractor:- Ocean life space

PROJECT:- Kune R & D Diesel Tower

Issued Date: 6.12.21

Checklist Sl. No.:



Month: 12 Dec

Week: 1 week

Date: 06.12.2021

SL NO	DESCRIPTION	Day	Week						
			Day-1 Mon	Day-2 Tue	Day-3 Wed	Day-4 Thu	Day-5 Fri	Day-6 Sat	Day-7 Sun
1	Guard provided for any rotating parts.		OK	OK	OK	OK			
2	Hot surface is provided with guard.		OK	OK	OK	OK			
3	Rubber mat is provided in operator standing area. (around the D.G)		OK	OK	OK	OK			
4	No oil leakage from the oil tank & other parts of the m/c.		OK	OK	OK	OK			
5	Wheel stopper in case of vehicle mounted D.G		No	No	No	No			
6	Proper access to the D.G control panel		OK	OK	OK	OK			
7	Exhaust smoke pipe faced upwards & outside of D.G shelter.		N/A	N/A	N/A	N/A			
8	Dip tray for any oil leakage.		OK	OK	OK	OK			
9	Drive belt is in good condition (any cut, dent or damage)		OK	OK	OK	OK			
10	Adequate ventilation in case of indoor generator		OK	OK	OK	OK			
11	Presence of fire extinguisher (ABC type)		OK	OK	OK	OK			
12	Presence of damage free operating switch, Voltage and temperature meter, circuit breaker, Oil level indicator, Emergency switch		OK	OK	OK	OK			
13	Earthing is provided with standard earthing pit.		OK	OK	OK	OK			
14	In case of mobile gen set, confirmation of inbuilt acoustic system. (If sound is more than 85 dbi)		OK	OK	OK	OK			

Prepared by Operator

Verified by contractor Safety Engineer

Approved by CRN EHS Engineer

Name: G. Siva Prasad

Signature: [Signature]

Date: 6.12.21



CRN
C. R. NARAYANA RAO

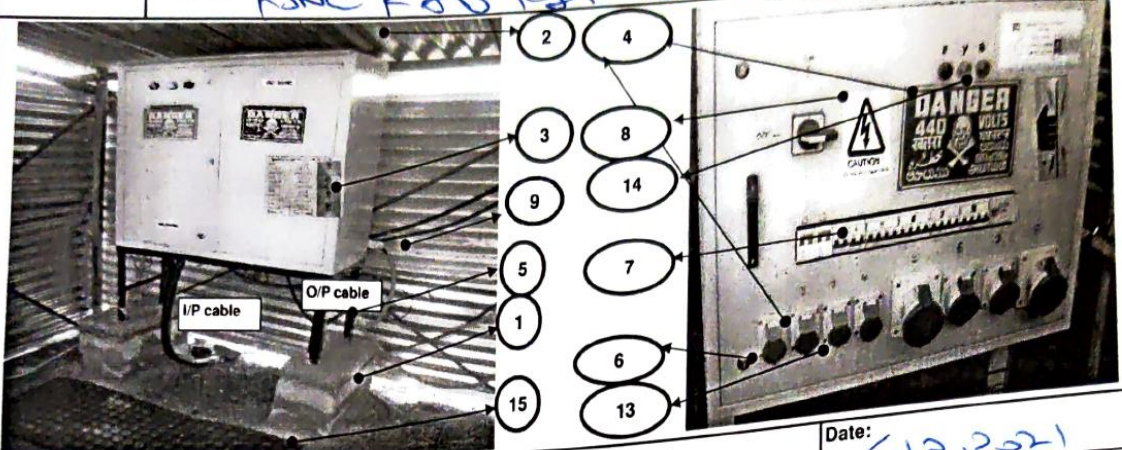
SAFETY CHECKLIST FOR MAIN DISTRIBUTION BOARD/ PANEL BOARD

Doc. No. : CRN / EHS / CL: 09B

PROJECT:- Kune R & D Diesel Tower

Issued date: 6.12.21

Checklist Sl. No.:



Month: 12 Dec

Week: 1 week

Date: 06.12.2021

CONTRACTOR NAME: Ocean life space

PHOTOS

Y/N

SL NO	CHECK ITEM	PHOTOS	Y/N	SL NO	CHECK ITEM	PHOTOS	Y/N
1	Firm Base with grouting & Easily accessible panel (height of the leg is equal to 1m)		Y	2	The Housing & connections of D.B is weather proof. (minimum of IP 44 type)		Y
3	Authorized Operator Name Photo, Contact No. on DB panel (Confirmation)		No	4	Visualization of voltage, current and type of tools to be used in the socket & Panel.		Y
5	Identification of input and output cables		Y	6	Confirmation of LOTO availability		N/A
7	Separate MCB for every socket		Y	8	Safety sign / isolate flammable Fire Hazard		Y
9	Double Earthing System of MDB / DB panel with Std earthing pit		Y	10	Separate ELCB with tripping current of 30 mA & in working condition.		Y
11	Hylen sheet to be provided over live bus bars		Y	12	Presence & Condition of Bus bar/ Terminal		Y
13	Condition of Cable, Power Socket and Plug without damage		Y	14	Color coding to be followed (RYB) for all cables/wires		Y
15	Presence of rubber mat in front of the D.B (Operator standing Location)		No	16	Plug-Socket should be Industrial type (IP 44 type)		Y

Prepared by Contractor Safety/ Electrical Engineer

Checked / Approved by CRN EHS Engineer

Name: G. Siva Prasad

Signature: [Signature]

Date: 6.12.2021

	SAFETY CHECKLIST FOR TOWERCRANE		Doc. No. : CRN/ EHS/ CL:06B					
	PROJECT: <u>KONE R&D TEST TOWER</u>		Issued date : <u>6/12/2021</u>					
Model Number / Serial Number <u>4501</u>		Contractor / Agency <u>ARCC</u>						
Crane Location <u>KONE R&D TEST TOWER</u>		Operator / Inspector <u>Palmeshwar</u>						
Check All Items Indicated: Inspected as Indicated & note condition								
PRELIMINARY		S	U	NA	UPPER / MACHINERY	S	U	NA
Foundation / Anchors (Visual Only)		✓			Unusual Noises	✓		
Tower Bolts (Random check)		✓			Reaving	✓		
Ladders		✓			Hoist	✓		
Landings		✓			Trolley	✓		
Lacings		✓			Luffing	✓		
Tie-Ins		✓			Brakes	✓		
Gear Box leaks		✓			Hoist	✓		
Reaving		✓			Trolley	✓		
Hook		✓			Luffing	✓		
Hook Block		✓			Lubrication	✓		
OPERATIONAL		S	U	NA	Ropes	✓		
Horn		✓			Sheaves	✓		
E-Stop		✓			Sleaving Gear	✓		
Wind Speed Indicator		✓			Drive Attachments	✓		
Radius Indicator		✓			Lights		✓	
Load Indicator		✓			Fire Extinguisher		✓	
Hoisting					Comments:-			
Up Slowdown Limit		✓						
Up Final Limit		✓						
Down Final Limit		✓						
Trolley								
In Final Limit		✓						
In Slowdown Limit		✓						
Out Slowdown Limit		✓						
Out Final Limit		✓						
Luffing								
Up Final Limit		✓						
Up Slowdown Limit		✓						
Down Slowdown Limit		✓						
Down Final Limit		✓						
Slewing								
Left Limit		✓						
Right Limit		✓						
Operator's Signature		Supervisor's Signature						

	SAFETY CHECKLIST FOR CHIPPING MACHINE		Doc. No. : CRN / EHS / CL:10					
	Project Name: <u>KONE R&D TEST TOWER</u>		Issued date: <u>6/12/2021</u>					
Model Number / Serial Number <u>4501</u>		Contractor / Agency <u>ARCC</u>						
Crane Location <u>KONE R&D TEST TOWER</u>		Operator / Inspector <u>Palmeshwar</u>						
Check All Items Indicated: Inspected as Indicated & note condition								
PRELIMINARY		S	U	NA	UPPER / MACHINERY	S	U	NA
Foundation / Anchors (Visual Only)		✓			Unusual Noises	✓		
Tower Bolts (Random check)		✓			Reaving	✓		
Ladders		✓			Hoist	✓		
Landings		✓			Trolley	✓		
Lacings		✓			Luffing	✓		
Tie-Ins		✓			Brakes	✓		
Gear Box leaks		✓			Hoist	✓		
Reaving		✓			Trolley	✓		
Hook		✓			Luffing	✓		
Hook Block		✓			Lubrication	✓		
OPERATIONAL		S	U	NA	Ropes	✓		
Horn		✓			Sheaves	✓		
E-Stop		✓			Sleaving Gear	✓		
Wind Speed Indicator		✓			Drive Attachments	✓		
Radius Indicator		✓			Lights		✓	
Load Indicator		✓			Fire Extinguisher		✓	
Hoisting					Comments:-			
Up Slowdown Limit		✓						
Up Final Limit		✓						
Down Final Limit		✓						
Trolley								
In Final Limit		✓						
In Slowdown Limit		✓						
Out Slowdown Limit		✓						
Out Final Limit		✓						
Luffing								
Up Final Limit		✓						
Up Slowdown Limit		✓						
Down Slowdown Limit		✓						
Down Final Limit		✓						
Slewing								
Left Limit		✓						
Right Limit		✓						
Operator's Signature		Supervisor's Signature						

OCN-001

CRN
C. R. NARAYANA RAO

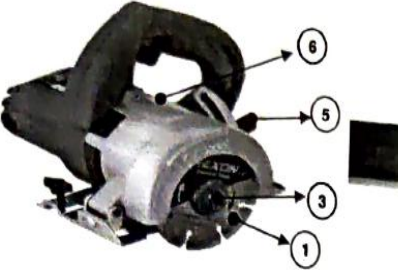
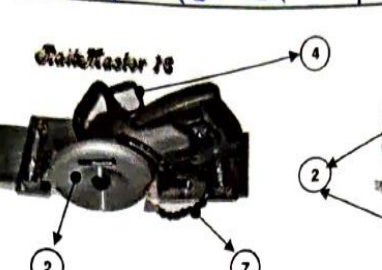
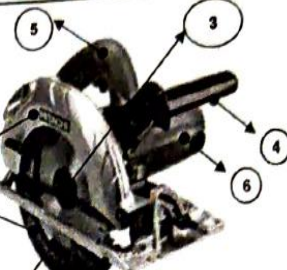
**SAFETY CHECKLIST FOR
TILE/ WOOD CUTTING MACHINE**

Project Name: KONE R80787 Tower

Doc. No.: CRN/ EHS/ CL:10C

Issued Date: 6.12.2021

Checklist SI.No.:

Name of the Contractor: Ocean life store Eqpt.SL.No.

SL. NO.	DESCRIPTION	OK	NOT OK	N/A	REMARKS
1	Condition of the of the Cutting Wheel (Crack & Damage) and having ISI mark on it	ok			
2	Presence of Cutting plate guard	ok			
3	Presence of locking system for the wheel	ok			
4	Presence of handle and its condition	ok			
5	Cable condition (Any cut, wear etc) and presence of wire top plug (Industrial)	ok			
6	Is motor properly guarded	ok			
7	Presence of water lubricant system for wheel cooling	ok			

Prepared by
Operator

Verified by
Contractor EHS Engineer

Approved by
CRN EHS Engineer

Name: G. S. Narasimha

Signature: [Signature]

Date: 6.12.21

Date of Inspection.

6.12.2021

OCN-002

CRN
C. R. NARAYANA RAO

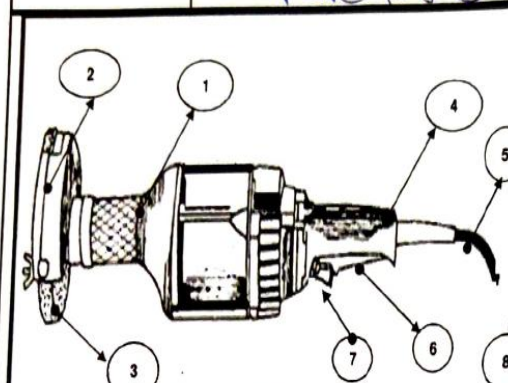
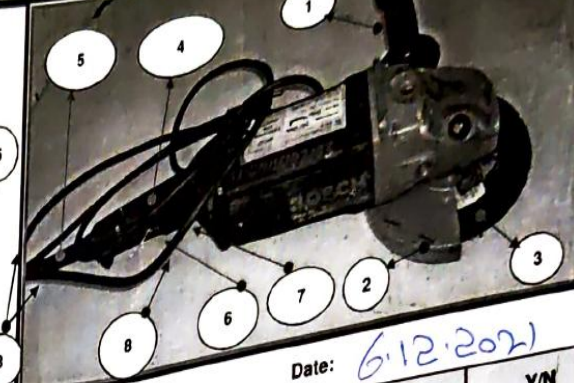
**SAFETYCHECK LIST FOR
PORTABLE GRINDING MACHINE**

PROJECT: KONE R80787 Tower

Doc. No.: CRN/EHS/CL:02B

Issued date: 6.12.2021

Checklist S.No.:

Date: 6.12.2021

CONTRACTOR NAME: Ocean life store

SL NO	CHECK ITEM	PHOTOS	Y/N	SL NO	CHECK ITEM	PHOTOS	Y/N
1	Fore handle without damage.		Y	2	Wheel guard (covering 3/4th area).		Y
3	Grinding wheel without any crack.		Y	4	Rear handle without any damage.		Y
5	Presence of Cord strain reliever (glands).		Y	6	Trigger switch without damage.		Y
7	Presence of Switch lock.		Y	8	Electric wire without cuts and joints.		Y

Checked by
Contractor safety in charge

Approved by
CRN EHS Engineer

Name: G. S. Narasimha

Signature: [Signature]

Date: 6.12.2021

CRN		SAFETY CHECK LIST FOR ARC WELDING MACHINE		Doc. no.: CRN / EHS / CL:03A	
Name of the Project		KONE R&D TEST TOWER		Checklist S.No.:	
Name of the Contractor		OCEAN LIFE SPACE		Location: Tower area	
Checking Date		6.12.2021		Welding M/C Type: ARC	
Next Checking Date		13.12.2021		Issued date: 6.12.21	

Welding machine AC or DC power source and controls

Stud welding machine

ARC WELDING MACHINE

Sl. No.	Check Points	Yes	No	Remarks
1	Condition of welding Machine (good / Not-good)	✓		
2	Is body earthing provided?	✓		
3	All the open terminals are covered	✓		
4	Sufficient PPE provided. like Aprons, welding shield, Hand gloves, etc.,	✓		
5	All combustible materials are removed from Hot work area.	✓		
6	Proper fire extinguishers are provided. Type of fire extinguisher: _____	✓		
7	Is it Air cooled machine?	✓		
8	Is proper rating of ELCB / RCCB provided?	✓		
9	Machine protected from Rain and Hot sun.	✓		
10	Lugs provided for all out put terminals	✓		

Prepared by Contractor P&M In charge	Name	Signature	Date
Verified by Contractor Safety In charge			
Approved by CRN EHS Engineer			

Observations:

CRN		SAFETY CHECKLIST FOR BAR BENDING MACHINE		Doc. No.: CRN / EHS / CL:08A	
Project Name:		KONE R&D TEST TOWER		Issued date: 6.12.2021	
Name of the Contractor:		OCEAN LIFE SPACE		Checklist Sl. No.:	

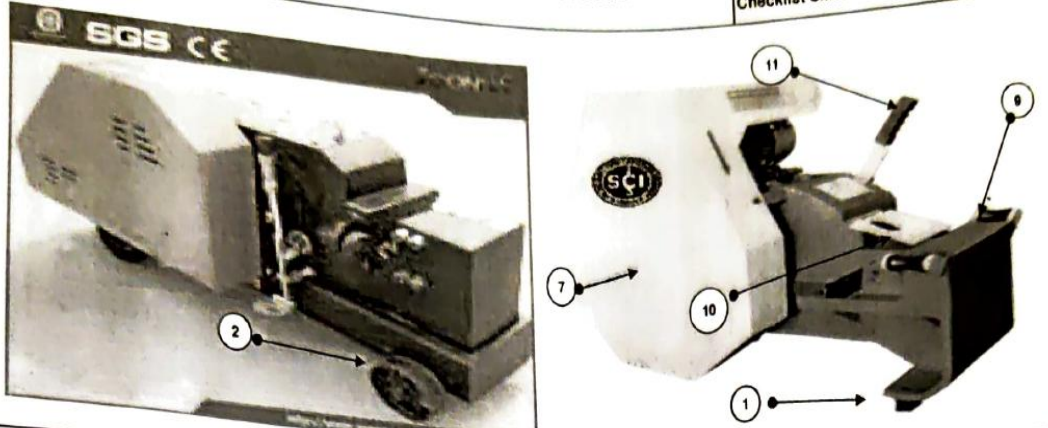
Back side of the m/c

Front side of

SL NO	DESCRIPTION	OK	NOT OK	N/A	REMARKS
1	Erected in a firm base concrete platform.		N/K		
2	Machine is grouted properly/ Base wheel stopper provided			N/A	
3	Body Earthing is provided	OK			
4	D.B box connected with the machine is equipped with MCB and ELCB (30mA Sensitivity)	OK			
5	Emergency switch is available in working condition (Front side and back side of the m/c)	OK			
6	Power on & off switch with indicator light are available in working condition.	OK			
7	Belt and other internal moving parts are covered/Guarded.	OK			
8	No oil leakage	OK			
9	Both side hand guard is available.	OK			
10	Limit switch (Both Side, below the job plate) are in working condition	OK			
11	Availability of standard limit switch pin.(Usage of nail & other material is not good to instead of)	OK			

Prepared by Supervisor	Name	Signature	Date of Inspection:
Verified by Contractor EHS Engineer			
Approved by CRN EHS Engineer			

Observations:

	SAFETY CHECKLIST FOR BAR CUTTING MACHINE	Doc. No. : CRN / EHS / CL:08B Issued date: 6.12.2021 Checklist Sl.No.:				
						
Name of the Contractor: <u>ocean life space</u>						
SL NO	DESCRIPTION	Eqpt.Sl.No.	OK	NOT OK	N/A	REMARKS
1	Erected in a firm base concrete platform.		OK			
2	Machine is grouted properly/ Base wheel stopper provided		OK		N/A	
3	Body Earthing is provided		OK			
4	D.B box connected with the machine is equipped with MCB and ELCB (30mA Sensitivity)		OK			
5	Emergency switch is available in working condition (Front side and back side of the m/c)		OK			push button fixing
6	Power on & off switch with indicator light are available in working condition.				N/A	
7	Belt and other internal moving parts are covered/Guarded.		OK			
8	No oil leakage		OK			
9	Both side hand guard is available.		OK			
10	Limit switch (Both Side, below the job plate) are in working condition		OK			
11	Operating switch & levers are in good condition		OK			
12	Power cables are in good condition, free from damages		OK			
13	SOP followed & members were trained		OK			
		Name	Signature & Date		Date of Inspection:	
Prepared by P&M In-charge		G. Siva Prasad	[Signature] 6.12.21		6.12.2021	
Verified by Contractor EHS Engineer						
Approved by CRN EHS Engineer						

5.MIVAN ACTIVITY – HIRA

Section :- Project Execution and Control		
Probability Rating 1 = Very unlikely Rating 2 = Unlikely Rating 3 = Likely Rating 4 = Very likely Rating 5 = Almost certain	Severity Rating 1 = First aid injury or illness or property damage. Rating 2 = Minor injury or illness, MTC Rating 3 = Disabling injury or Lost time injury or illness Rating 4 = Reportable lost time, Major injury or illness Rating 5 = Fatality, permanent disabling injury, etc.	

											Re- Assessment of Risk level after implementation of Control measures				
No	Activity	Hazards	Risk	Se ver ity (S)	Prob abil ity (P)	S x P	L e g a l	Ris k Le v el	Controls to be Introduced to Reduce the Risk/s	Sev erity (S)	Pro babi lity (P)	S x P	Leg al	Risk Leve l	Additional Controls
1	Loading and Unloading of Mivan Material	Activity Based													
		Slippery Ground	Person may slip and material may fall on him, injury to body parts, fatality	3	4	12	No	H	1. Material should be unloaded/loaded in a dry area 2. Sufficient manpower should be engaged 3. Proper lifting or unloading devices	1	3	3	No	L	Even surface for material stacking & material handling training
		Heavy and oversize material. Awkward postures, wrong lifting techniques.	Person may slip and material may fall on him, injury to body parts, fatality	3	4	12	No	H	Material stacking height is 5 feet	1	3	3	No	L	Material stacking height is 4 feet
		Listening to music, attending mobile phone during work	Material may slip from hand or shoulder at site, injury to body parts, fatality	3	4	12	No	H	Workers to be trained on lifting techniques. Avoid lifting excessive load. Adult maximum 50 kg. Refer BOCW Rule 38. Mobiles not be allowed while work.	1	3	3	No	L	
		Worker under influence of alcohol	Material may slip from hand or shoulder at site, injury to body parts, fatality	3	3	9	Yes	H	1. Surprise checkups to be carried out using alcohol detector. 2. Work permits\ SMARRT to be in place.	1	3	3	Yes	L	
		Overconfidence	Material may slip from hand or shoulder at site, injury to body parts, fatality	4	2	8	No	H	Ensure proper supervision.	1	3	3	no	L	
2	Bracket fixing	Fixing the bracket undyingly	Fall of bracket to the lower balcony or different level may injure the personnel or property damage.	4	2	8	yes	H	Bracket shall be tied Clamp and fixed with rigid support Ensure the bracket is secured with check nuts before untying the clamp Dedicated foreman shall supervise the task Place the horizontal railing.						
3	Working platform placing	Improper handling of working jali	Fall of bracket to the lower balcony or different level may injure the personnel or property damage.	4	2	8	yes	H	Ensure the MS grating has been placed on bracket properly and tie immediately after placing. Select only the suitable jalis which should not exceed the cantilever portion more than 150mm.						

No	Activity	Hazards	Risk	Sev erity (S)	Prob ability (P)	S x P	L e g a l	Ris k Lev el	Controls to be Introduced to Reduce the Risk/s	Sev erity (S)	Pro babi lity (P)	S x P	Legal	Risk Leve l	Additional Controls
4	Horizontal safety net fixing	1.Person working without full body harness	Pipe may fall on below level personnel or properties	4	2	8	yes	H	1A. Before start of activity work permit opening of temporary barricades shall be obtained 1B. Job specific TBT shall be given to the work force 1C. Prop jack shall be fixed before removing the temporary barricades. Ensure props are tightened properly to bare the load 1D. While removing the temporary barricades full body harness shall be worn 1E. Ensure continuous supervision till end of the task						
		2.Poor Housekeeping	Slip and trip fall at same level or different level may lead to personnel injury	4	2	8	yes	H	2A. Keep all the access obstruction free. 2B. Housekeeping should be done at work location before start of the activity and end of the activity.						
		3.Slippage of supporting PIPES/hand tools pipe while material handling	Pipe may fall on below level personnel or properties	4	2	8	yes	H	3A. Pipe shall be adjusted according to required length with sewed coupler and it tightened once it reaches the required length 3B. Use rubber gripped hand gloves(EN 4343) to avoid slippage of material. 3C. Sufficient man power shall be deployed to execute the work 3D. If hand tools are used at the edges of the building it shall be tied to hand with the help of rope.						
		4. Horse play	Personnel injury/ Fall from Height may lead to permanent or partial disability	4	2	8	yes	H	4A. Continuous supervision shall be maintained 4B. Job specific PPE and BBS training shall be provided to working crews.						

No	Activity	Hazards	Risk	Sev erity (S)	Prob ability (P)	S x P	L e g a l	Ris k Lev el	Controls to be Introduced to Reduce the Risk/s	Sev erity (S)	Pro babi lity (P)	S x P	Legal	Risk Leve l	Additional Controls
5	mivan shuttering fixing	1.Person working without full body harness	Fall from Height may lead to permanent or partial disability	4	2	8	yes	H	1A.Job specific TBT shall be given to the work force 1B . Hook shall be anchored to railing						
		2. Slippage of mivan materials and hand tools	materials may fall on below level or different level may lead to personnel injury or property damage.	4	2	8	yes	H	2A .materials shall be stack 1m away from the floor edge 2B Use rubber gripped hand gloves to avoid slippage of materials 2C .Hand tools should be secured with rope						
	Mivan de - shuttering	1.Person working without full body harness	Fall from Height may lead to permanent or partial disability	4	2	8	yes	H	1A.Job specific TBT shall be given to the work force 1B . Hook shall be anchored to platform.) 1 D .De shuttering shall be carried out under the supervision of competent supervisor. 1E. . Concrete slurry, plumb stones, tie rods, tie pins, shall be removed before lifting the mivan work.						

No	Activity	Hazards	Risk	Sev erity (S)	Prob ability (P)	S x P	L e g a l	Ris k Lev el	Controls to be Introduced to Reduce the Risk/s	Sev erity (S)	Pro babi lity (P)	S x P	Legal	Risk Leve l	Additional Controls
6	Mivan de shuttering														
	Mivan de - shuttering	2. Slippage of mivan materials	materials may fall on below level or different level may lead to personnel injury or property damage.	4	2	8	yes	H	2A .materials shall be stack 1m away from the floor edge 2B Use rubber gripped hand gloves (EN4343) to avoid slippage of materials						
7	Mivan materials cleaning manually	Improper using of cleaning tools	May lead to cut injury or eye injury	3	2	6	yes	M	1A.To be used the putty blade for the cloning of the mivan shuttering materials 1.B To be used PPE like hand gloves goggles						
8	Maivan Foam work	Physical hazards Sharp edges,Metal chips, savings,propelled objects, noise, fall of oily boards. Electrical hazards using power tools. Human behaviour, Peer pressure, over confidence, improper housekeeping, slip&trips, Working at heights. Over time works. Heat stroke hot sun. Fall from height	Injuries, fatalities, Hearing deficiency, shocks, burns,Frustration, fatigue,Nervous breakdown, haedaches.	4	4	16	Y	H	Fall protections to be provided .Life lines, safety nets in multiple levels. PFS to be provided and its usage to be monitored. Work Permits to be signed off after inspecting work place. HIRA to bw communicated to workers through SMART. Sufficient drinking water and adequate rest\ breaks to be given to workers Handling of maivan panels care to be taken , secure them to avoid fall, take help of co workers, corden below area, no parallel activity . Ear plugs to be provided if exposed to noise. No work to be carried out without poper supervision. Scheduling of work timings for workers. ladders to be secured on top and bottom . No cut outs,pits to be left open. Below area to be cordened off and ensure no man movement while bracket removal or material shifting. No defective power tools and without guards. Housekepping and access to be user friendly. working platforms to be tied\secured properly.	2	2	4	Y	M	SOP has been defined for material and bracket shifting to be adhered. Job specific trainings to given.

6.BEAM SHUTTERING AND CONCRETING QUANTITY

S.NO	DESCRIPTION	SIZE	BREADTH	DEPTH	LENGTH	AREA	VOLUME	SHUTTERING (QUANTITY)
1	LEVEL 1	350 X 600	0.35	0.60	21.50	7.53	4.52	26.88
		200 X 750	0.20	0.75	2.35	0.47	0.35	3.29
		300 X 750	0.30	0.75	10.34	3.10	2.33	15.52
		200 X 450	0.20	0.45	1.08	0.22	0.10	0.86
		300 X 450	0.30	0.45	2.15	0.65	0.29	1.94
		300 X 600	0.30	0.60	4.16	1.25	0.75	4.99
	LEVEL 2	350 X 500	0.35	0.50	12.90	4.52	2.26	13.55
		300 X 450	0.30	0.45	19.93	5.98	2.69	17.93
		300 X 300	0.30	0.30	6.48	1.94	0.58	3.89
		200 X 300	0.20	0.30	13.27	2.65	0.80	6.63
		300 X 750	0.30	0.75	27.82	8.35	6.26	41.74
		350X500	0.35	0.50	2.00	0.70	0.35	2.10
		200X750	0.20	0.75	4.11	0.82	0.62	5.76
		200X600	0.20	0.60	3.45	0.69	0.41	3.80
		450X750	0.45	0.75	23.95	10.78	8.08	39.52
	LEVEL 3	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		450X1000	0.45	1.00	5.40	2.43	2.43	11.61
		300X750	0.30	0.75	25.96	7.79	5.84	38.93
		450X750	0.45	0.75	12.65	5.69	4.27	20.87
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	8.99	3.15	2.36	13.93
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	10.13	3.04	1.37	9.11
	LEVEL 4	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	25.96	7.79	5.84	38.93
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63

		350X750	0.35	0.75	8.99	3.15	2.36	13.93
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	6.35	1.91	0.86	5.72
		200X500	0.20	0.50	4.00	0.80	0.40	3.60
S.NO	DESCRIPTION	SIZE	BREADTH	DEPTH	LENGTH	AREA	VOLUME	SHUTTERING (QUANTITY)
	LEVEL 5	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	13.77	4.13	1.86	12.39
	LEVEL 6	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	13.77	4.13	1.86	12.39
	LEVEL 7	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90

		300X450	0.30	0.45	6.35	1.91	0.86	5.72
	LEVEL 8	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	6.35	1.91	0.86	5.72

S.NO	DESCRIPTION	SIZE	BREADTH	DEPTH	LENGTH	AREA	VOLUME	SHUTTERING (QUANTITY)
9	LEVEL 9	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	6.35	1.91	0.86	5.72
10	LEVEL 10	450X900	0.45	0.90	90.56	40.75	36.68	176.59
		300X750	0.30	0.75	29.61	8.88	6.66	44.42
		450X750	0.45	0.75	18.05	8.12	6.09	29.78
		200X600	0.20	0.60	3.30	0.66	0.40	3.63
		350X750	0.35	0.75	10.99	3.85	2.88	17.03
		350X500	0.35	0.50	14.90	5.22	2.61	15.65
		200X300	0.20	0.30	11.71	2.34	0.70	5.85
		450X800	0.45	0.80	1.09	0.49	0.39	1.90
		300X450	0.30	0.45	6.35	1.91	0.86	5.72
11	LEVEL 11	200X300	0.20	0.30	6.30	1.26	0.38	3.15

		300X600	0.30	0.60	27.18	8.15	4.89	32.61
		200X700	0.20	0.70	4.00	0.80	0.56	5.20
		350X500	0.35	0.50	8.60	3.01	1.51	9.03
12	LEVEL 12					0.00	0.00	0.00
13	LEVEL 13	200X300	0.20	0.30	6.30	1.26	0.38	3.15
		350X500	0.35	0.50	8.60	3.01	1.51	9.03
		200X700	0.20	0.70	15.55	3.11	2.18	20.22
		300 X 350	0.30	0.35	4.30	1.29	0.45	3.01
		300X600	0.30	0.60	27.18	8.15	4.89	32.61
14	LEVEL 14	200X300	0.20	0.30	6.30	1.26	0.38	3.15
		350X500	0.35	0.50	20.80	7.28	3.64	21.84
		200X700	0.20	0.70	15.55	3.11	2.18	20.22
		300 x 500	0.30	0.50	12.20	3.66	1.83	12.20
		300X600	0.30	0.60	27.18	8.15	4.89	32.61
15	LEVEL 15	200X300	0.20	0.30	6.30	1.26	0.38	3.15
		350X500	0.35	0.50	20.80	7.28	3.64	21.84
		200X700	0.20	0.70	15.55	3.11	2.18	20.22
		300X600	0.30	0.60	27.18	8.15	4.89	32.61
16	LEVEL 16	200X300	0.20	0.30	6.30	1.26	0.38	3.15
		350X500	0.35	0.50	20.80	7.28	3.64	21.84
		200X700	0.20	0.70	15.55	3.11	2.18	20.22
		300X600	0.30	0.60	27.18	8.15	4.89	32.61
TOTAL							541.20	2962.50

7.SLAB SHUTTERING AND CONCRETING QUANTITY

S.NO	DESCRIPTION	DEPTH	AREA	VOLUME
1	LEVEL 1	0.15	56.15	8.42
		0.18	7.60	1.33
2	LEVEL 2	0.15	41.19	6.18
		0.18	11.29	1.98
		0.16	42.45	6.79
		0.23	4.31	0.97
		0.20	36.87	7.37

3	LEVEL 3	0.15	197.83	29.67
		0.20	36.87	7.37
		0.18	51.50	9.01
4	LEVEL 4	0.15	177.44	26.62
		0.20	36.87	7.37
		0.18	819.29	143.38
5	LEVEL 5	0.15	197.83	29.67
		0.20	36.87	7.37
		0.18	51.46	9.01
6	LEVEL 6	0.15	237.94	35.69
		0.20	36.87	7.37
		0.18	11.29	1.98
7	LEVEL 7	0.15	237.94	35.69
		0.20	36.87	7.37
		0.18	11.29	1.98
8	LEVEL 8	0.15	237.94	35.69
		0.20	36.87	7.37
		0.18	11.29	1.98
9	LEVEL 9	0.15	237.94	35.69
		0.20	36.87	7.37
		0.18	11.29	1.98
10	LEVEL 10	0.15	204.44	30.67
		0.20	36.87	7.37
		0.18	51.46	9.01
11	LEVEL 11	0.15	35.05	5.26
		0.20	49.66	9.93
12	LEVEL 12	0.15	0.00	0.00
		0.20	0.00	0.00
13	LEVEL 13	0.15	35.05	5.26
		0.18	48.37	8.71
14	LEVEL 14	0.15	63.57	9.54
		0.20	49.66	9.93
15	LEVEL 15	0.15	66.55	9.98
		0.20	49.66	9.93

16	LEVEL 16	0.15	66.55	9.98
		0.20	49.66	9.93
TOTAL			3756.79	618.19

8.SHEAR WALL CONCRETING QUANTITY

S.No	Description		Height(M)	Area	Volume(cu.m)	Deduction				Total quantity(cu.m)
						area(sq.m)	height(m)	volume(cu.m)	Total volume(cu.m)	
1	Level 1	Shear wall	3.625	35.530930547	128.799623232875	4.368650202	2.5	10.921625505	11.758825505	117.040797727875
						0.644	1.3	0.8372		
2	Level 2	Shear wall	3.625	35.968430547	130.385560732875	4.368650202	2.5	10.921625505	11.758825505	118.626735227875
						0.644	1.3	0.8372		
3	Level 3	Shear wall	4.800	35.530930547	170.5484666256	4.008650202	2.5	10.021625505	10.858825505	159.6896411206
						0.644	1.3	0.8372		
4	Level 4	Shear wall	4.500	35.530930547	159.8891874615	4.008650202	2.5	10.021625505	10.858825505	149.0303619565
						0.644	1.3	0.8372		
5	Level 5	Shear wall	4.500	35.530930547	159.8891874615	4.008650202	2.5	10.021625505	10.858825505	149.0303619565
						0.644	1.3	0.8372		
6	Level 6	Shear wall	3.950	35.530930547	140.34717566065	4.008650202	2.5	10.021625505	10.858825505	129.48835015565
						0.644	1.3	0.8372		
7	Level 7	Shear wall	3.750	35.530930547	133.24098955125	4.008650202	2.5	10.021625505	10.858825505	122.38216404625
						0.644	1.3	0.8372		
8	Level 8	Shear wall	3.750	35.530930547	133.24098955125	4.008650202	2.5	10.021625505	10.858825505	122.38216404625
						0.644	1.3	0.8372		
9	Level 9	Shear wall	3.750	35.530930547	133.24098955125	4.008650202	2.5	10.021625505	10.858825505	122.38216404625
						0.644	1.3	0.8372		
10	Level 10	Shear wall	3.200	35.968430547	115.0989777504	4.008650202	2.5	10.021625505	10.858825505	104.2401522454
						0.644	1.3	0.8372		
11	Level 11	Shear wall	3.200	35.968430547	115.0989777504	4.008650202	2.5	10.021625505	10.858825505	104.2401522454
						0.644	1.3	0.8372		
12	Level 12	Shear wall	3.200	29.030832317	92.8986634144	0.72	2.5	1.8	2.6372	90.2614634144
						0.644	1.3	0.8372		

13	Level 13	Shear wall	3.200	29.030832317	92.8986634144	0.72	2.5	1.8	2.6372	90.2614634144
						0.644	1.3	0.8372		
14	Level 14	Shear wall	3.200	25.670833622	82.1466675904	0.72	2.5	1.8	2.6372	79.5094675904
						0.644	1.3	0.8372		
15	Level 15	Shear wall	3.200	25.670833622	82.1466675904	0.72	2.5	1.8	2.6372	79.5094675904
						0.644	1.3	0.8372		
16	Level 16	Shear wall	3.200	25.670833622	82.1466675904	0.72	2.5	1.8	2.6372	79.5094675904
						0.644	1.3	0.8372		
17	Level 17	Shear wall	3.200	25.670833622	82.1466675904	0.72	2.5	1.8	2.6372	79.5094675904
						0.644	1.3	0.8372		
18	Level 18	Shear wall	6.500	22.827180547	148.3766735555	0.99	2.5	2.475	3.3122	145.0644735555
						0.644	1.3	0.8372		
19	Level 19	Shear wall	3.200	22.827180547	73.0469777504	0.36	2.5	0.9	1.7372	71.3097777504
						0.644	1.3	0.8372		
						TOTAL				2113.46809327085

9.SHEAR WALL SHUTTERING QUANTITY

SHEAR WALL SHUTTERING					DEDUCTION				
S.No	Description	Height	Length	Area	Length	Height	Area	Total area	Total shuttering
1	Level 1	3.625	231.440458	838.97166025	23.461	2.5	58.6525	65.9325	773.03916025
					5.6	1.3	7.28		
2	Level 2	3.625	193.2	700.35	19.864142	2.5	49.660355	56.940355	643.409645
					5.6	1.3	7.28		
3	Level 3	4.800	231.440458	1110.9141984	20.462175	2.5	51.1554375	58.4354375	1052.4787609
					5.6	1.3	7.28		
4	Level 4	4.500	231.440458	1041.482061	20.462175	2.5	51.1554375	58.4354375	983.0466235
					5.6	1.3	7.28		
5	Level 5	4.500	231.440458	1041.482061	20.462175	2.5	51.1554375	58.4354375	983.0466235
					5.6	1.3	7.28		
6	Level 6	3.950	231.440458	914.1898091	20.462175	2.5	51.1554375	58.4354375	855.7543716

					5.6	1.3	7.28		
7	Level 7	3.750	231.440458	867.9017175	20.462175	2.5	51.1554375	58.4354375	809.46628
					5.6	1.3	7.28		
8	Level 8	3.750	231.440458	867.9017175	20.462175	2.5	51.1554375	58.4354375	809.46628
					5.6	1.3	7.28		
9	Level 9	3.750	231.440458	867.9017175	20.462175	2.5	51.1554375	58.4354375	809.46628
					5.6	1.3	7.28		
10	Level 10	3.200	231.440458	740.6094656	16.912175	2.5	42.2804375	49.5604375	691.0490281
					5.6	1.3	7.28		
11	Level 11	3.200	133.8	428.16	7.162175	2.5	17.9054375	25.1854375	402.9745625
					5.6	1.3	7.28		
12	Level 12	3.200	204.090958	653.0910656	7.162175	2.5	17.9054375	25.1854375	627.9056281
					5.6	1.3	7.28		
13	Level 13	3.200	204.090958	653.0910656	3.912175	2.5	9.7804375	17.0604375	636.0306281
					5.6	1.3	7.28		
14	Level 14	3.200	180.040458	576.1294656	3.912175	2.5	9.7804375	17.0604375	559.0690281
					5.6	1.3	7.28		
15	Level 15	3.200	180.040458	576.1294656	3.912175	2.5	9.7804375	17.0604375	559.0690281
					5.6	1.3	7.28		
16	Level 16	3.200	180.040458	576.1294656	3.912175	2.5	9.7804375	17.0604375	559.0690281
					5.6	1.3	7.28		
17	Level 17	3.200	160.990458	515.1694656	6.000008	2.5	15.00002	22.28002	492.8894456
					5.6	1.3	7.28		
18	Level 18	6.500	147.840458	960.962977	6.000008	2.5	15.00002	22.28002	938.682957
					5.6	1.3	7.28		
19	Level 19	3.200	147.840458	473.0894656	6.000008	2.5	15.00002	22.28002	450.8094456
					5.6	1.3	7.28		
						TOTAL			13636.72280405

10.COLUMN CONCRETING QUANTITY

S.No	Description	Floor height	L	B	H	Nos	Volume(Cu.m)
1	Level 1	3625	750	450	2875	7	0.970
		3625	750	750	2725	2	1.533
		3625	750	300	3025	1	0.681
		3625	750	350	2875	2	0.755
		3625	635	450	2875	1	0.822
2	Level 2	3625	750	450	2875	7	0.970
		3625	750	750	2725	2	1.533
		3625	750	350	2875	2	0.755
		3625	635	450	2875	1	0.822
3	Level 3	4800	750	450	4050	7	1.367
		4800	750	750	3900	2	2.194
		4800	750	350	4050	2	1.063
		4800	635	450	4050	1	1.157
4	Level 4	4500	750	450	3750	7	1.266
		4500	750	750	3600	2	2.025
		4500	750	350	3750	2	0.984
		4500	635	450	3750	1	1.072
5	Level 5	4500	750	450	3750	7	1.266
		4500	750	750	3600	2	2.025
		4500	750	350	3750	2	0.984
		4500	635	450	3750	1	1.072
6	Level 6	3950	750	450	3200	7	1.080
		3950	750	750	3050	2	1.716
		3950	750	350	3200	2	0.840
		3950	635	450	3200	1	0.914
7	Level 7	3750	750	450	3000	7	1.013
		3750	750	750	2850	2	1.603
		3750	750	350	3000	2	0.788
		3750	635	450	3000	1	0.857

S.No	Description	Floor height	L	B	H	Nos	Volume(Cu.m)
8	Level 8	3750	750	450	3000	7	1.013
		3750	750	750	2850	2	1.603
		3750	750	350	3000	2	0.788
		3750	635	450	3000	1	0.857
9	Level 9	3750	750	450	3000	7	1.013
		3750	750	750	2850	2	1.603
		3750	750	350	3000	2	0.788
		3750	635	450	3000	1	0.857
10	Level 10	3200	750	450	2450	7	0.827
		3200	750	750	2300	2	1.294
		3200	750	350	2450	2	0.643
		3200	635	450	2450	1	0.700
11	Level 11	3200	750	350	2600	1	0.683
12	Level 12	3200	750	350	2600	1	0.683
13	Level 13	3200	750	350	2600	1	0.683
14	Level 14	3200	750	350	2600	1	0.683
15	Level 15	3200	750	350	2600	1	0.683
16	Level 16	3200	750	350	2600	1	0.683
17	Level 17	3200	750	350	2600	1	0.683
		3200	800	300	2600	5	0.624
18	Level 18	6500	750	350	5900	1	1.549
		6500	800	300	5900	5	1.416
19	Level 19	3200	750	350	2600	1	0.683
		3200	800	300	2600	5	0.624
TOTAL							55.781

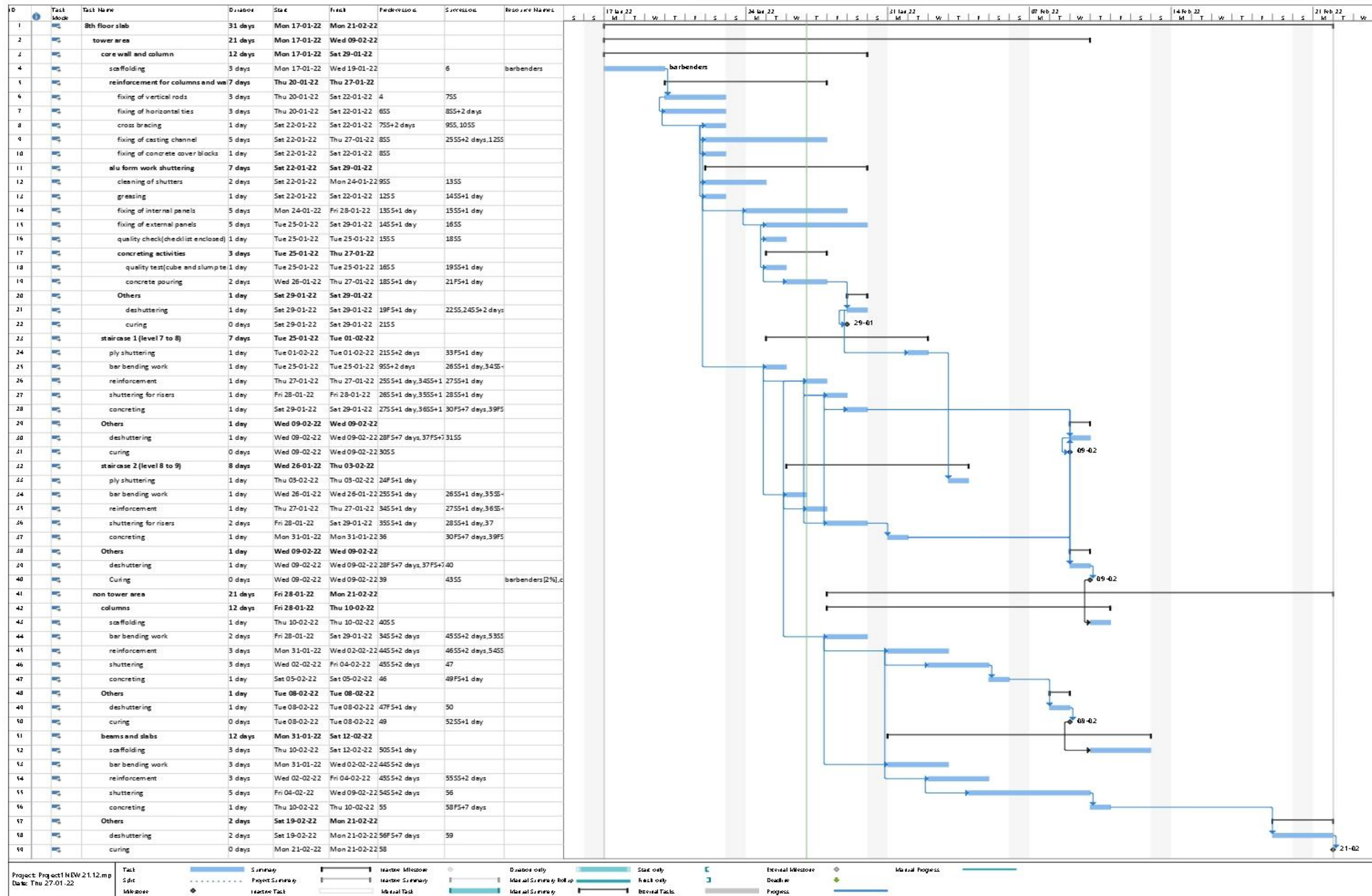
11.COLUMN SHUTTERING QUANTITY

S.No	Description	Floor height	L	B	H	Nos	Perimeter	Area	Total quantity
1	Level 1	3625	750	450	2875	7	2400	6.900	48.300
		3625	750	750	2725	2	3000	8.175	16.350
		3625	750	300	3025	1	2100	6.353	6.353
		3625	750	350	2875	2	2200	6.325	12.650
		3625	635	450	2875	1	2170	6.239	6.239
2	Level 2	3625	750	450	2875	7	2400	6.900	48.300
		3625	750	750	2725	2	3000	8.175	16.350
		3625	750	350	2875	2	2200	6.325	12.650
		3625	635	450	2875	1	2170	6.239	6.239
3	Level 3	4800	750	450	4050	7	2400	9.720	68.040
		4800	750	750	3900	2	3000	11.700	23.400
		4800	750	350	4050	2	2200	8.910	17.820
		4800	635	450	4050	1	2170	8.789	8.789
4	Level 4	4500	750	450	3750	7	2400	9.000	63.000
		4500	750	750	3600	2	3000	10.800	21.600
		4500	750	350	3750	2	2200	8.250	16.500
		4500	635	450	3750	1	2170	8.138	8.138
5	Level 5	4500	750	450	3750	7	2400	9.000	63.000
		4500	750	750	3600	2	3000	10.800	21.600
		4500	750	350	3750	2	2200	8.250	16.500
		4500	635	450	3750	1	2170	8.138	8.138
6	Level 6	3950	750	450	3200	7	2400	7.680	53.760
		3950	750	750	3050	2	3000	9.150	18.300
		3950	750	350	3200	2	2200	7.040	14.080
		3950	635	450	3200	1	2170	6.944	6.944
7	Level 7	3750	750	450	3000	7	2400	7.200	50.400
		3750	750	750	2850	2	3000	8.550	17.100
		3750	750	350	3000	2	2200	6.600	13.200
		3750	635	450	3000	1	2170	6.510	6.510
8	Level 8	3750	750	450	3000	7	2400	7.200	50.400
		3750	750	750	2850	2	3000	8.550	17.100

		3750	750	350	3000	2	2200	6.600	13.200
		3750	635	450	3000	1	2170	6.510	6.510
9	Level 9	3750	750	450	3000	7	2400	7.200	50.400
		3750	750	750	2850	2	3000	8.550	17.100
		3750	750	350	3000	2	2200	6.600	13.200
		3750	635	450	3000	1	2170	6.510	6.510
10	Level 10	3200	750	450	2450	7	2400	5.880	41.160
		3200	750	750	2300	2	3000	6.900	13.800
		3200	750	350	2450	2	2200	5.390	10.780
		3200	635	450	2450	1	2170	5.317	5.317
11	Level 11	3200	750	350	2600	1	2200	5.720	5.720
12	Level 12	3200	750	350	2600	1	2200	5.720	5.720
13	Level 13	3200	750	350	2600	1	2200	5.720	5.720
14	Level 14	3200	750	350	2600	1	2200	5.720	5.720
15	Level 15	3200	750	350	2600	1	2200	5.720	5.720
16	Level 16	3200	750	350	2600	1	2200	5.720	5.720
17	Level 17	3200	750	350	2600	1	2200	5.720	5.720
		3200	800	300	2600	5	2200	5.720	28.600
18	Level 18	6500	750	350	5900	1	2200	12.980	12.980
		6500	800	300	5900	5	2200	12.980	64.900
19	Level 19	3200	750	350	2600	1	2200	5.720	5.720
		3200	800	300	2600	5	2200	5.720	28.600
TOTAL									1116.564

ABSTRACT - QUANTITY (SHUTTERING & REINFORCEMENT)					
S.No	Description	Concreting quantity	Unit	Shuttering quantity	Unit
1	Column	55.7812125	Cu.m	1116.564	Sq.m
2	Beam	541.20	Cu.m	2962.50	Sq.m
3	Slab	618.19	Cu.m	3756.79	Sq.m
4	Core wall (RCC wall)	2113.46809327085	Cu.m	13636.72280405	Sq.m
	TOTAL	3328.63694767444	Cu.m	21472.580421786	Sq.m

12.DETAILED MSP FOR 8TH FLOOR



13.QUALITY OBSERVATION REPORT

Sl.No	Observation	Location	Before Photos	Status	Identified on	Target date	Completed date	Remarks									
1	grinding work	E shaft north side wall		open	10-Dec-21	Immediate			8	chipping work	Staircase 1 landing slab		open	10-Dec-21	Immediate		
									9	grinding works	Staircase 1 landing slab		open	10-Dec-21	Immediate		
									10	chipping work	Staircase 1 cut out opening		open	10-Dec-21	Immediate		
									11	grouting work	Staircase 1 east side wall		open	10-Dec-21	Immediate		
2	grinding work	c1 and c4 column grinding work		open	10-Dec-21	Immediate											
3	grinding work	Stair 1 north side wall		open	10-Dec-21	Immediate											
4	chipping work	double height area cutout		open	10-Dec-21	Immediate			12	grouting work	Staircase 1 north side wall		open	10-Dec-21	Immediate		
5	chipping work	Staircase 2 west side beam		open	10-Dec-21	Immediate			13	grouting work	E,F,G,H east and south side wall		open	10-Dec-21	Immediate		
6	grinding work	non tower area column grid a1 to g1		open	10-Dec-21	Immediate			14	grinding work	E1 grid c4 column		open	10-Dec-21	Immediate		
7	tie rod cutting	E,F,G,H wall east side		open	10-Dec-21	Immediate			15	grinding work	c1 and c4 column		open	10-Dec-21	Immediate		

16	chipping and grinding work	Staircase 2 east side wall		open	10-Dec-21	Immediate		
17	foam removal	Staircase 2 beam wall junction		open	10-Dec-21	Immediate		
18	grinding and grouting work	ABCD east side wall		open	10-Dec-21	Immediate		
19	grinding and grouting work	EFGH west side wall		open	10-Dec-21	Immediate		
20	grinding and creeping work	Staircase 2 east side wall		open	10-Dec-21	Immediate		
21	foam sheet removal	Staircase 1 east side wall		open	10-Dec-21	Immediate		
22	grinding work	EFGH east side wall		open	10-Dec-21	Immediate		
23	grouting work	EFGH west side wall		open	10-Dec-21	Immediate		
24	rectification	Sstaircase 2 south side wall floor beam to wall junction rectification work		open	10-Dec-21	Immediate		
25	plywood removal	Staircase 2 south side wall		open	10-Dec-21	Immediate		
26	plywood removal	non tower area south side periphery beam grouting work		open	10-Dec-21	Immediate		
27	thermocoal removal	6FB74 beam bottom		open	10-Dec-21	Immediate		
28	chipping work	Staircase 2 cut out openings		open	10-Dec-21	Immediate		
29	chipping work	Staircase 2 cut out openings		open	10-Dec-21	Immediate		
30	grouting work	Staircase 1		open	10-Dec-21	Immediate		

14.AREA STATEMENT

	Description	Units	Overall area	Shaft area	double height	entrance steps	ramp	Area (after deduction of shaft area)
1	Basement	Sq.mm	205768435.63	63000000.00				142768435.6
2	Level 1	Sq.mm	533276051.78	73030639.2		5519364.282	26608586.75	465764776.9
3	Level 2	Sq.mm	527756687.49	72932211.41	162664168.6			292160307.5
4	Level 3	Sq.mm	527756687.49	72932211.41				454824476.1
5	Level 4	Sq.mm	527756687.49	72932211.41				454824476.1
6	Level 5	Sq.mm	527756687.49	72932211.41				454824476.1
7	Level 6	Sq.mm	527756687.49	72932211.41				454824476.1
8	Level 7	Sq.mm	527756687.49	72932211.41				454824476.1
9	Level 8	Sq.mm	527756687.49	72932211.41				454824476.1
10	Level 9	Sq.mm	527756687.49	72932211.41				454824476.1
11	Level 10	Sq.mm	277659488.95	74434763.08				203224725.9
12	Level 11	Sq.mm	269208144.68	73395131.26				195813013.4
13	Level 12	Sq.mm	252740328.70	69770213.64				182970115.1
14	Level 13	Sq.mm	252740328.70	69770213.64				182970115.1
15	Level 14	Sq.mm	252740328.70	35784193.4				216956135.3
16	Level 15	Sq.mm	252740328.70	36589463.37				216150865.3
17	Level 16	Sq.mm	252740328.70	36589463.37				216150865.3
18	Level 17	Sq.mm	252740328.70	36589463.37				216150865.3
19	Level 18	Sq.mm	325356525.12	36589463.37				288767061.8
20	Level 19	Sq.mm	325356525.12	240100671.02				85255854.1
TOTAL		Sq.mm	7675120643.42	1429101370.02	162664168.6	5519364.282	26608586.75	6088874469

15.SCHEDULE VS ACTUAL

Schedule Vs Actual								Status up to: 18-10-2021		
Description	Unit	Total Qty	As on date completed	Balance to be completed	As per Schedule start date	Actual start date	Target date	As per Schedule (to be achieved/ day)	Actual achieved up to date	Status
LEVEL 6 TO LEVEL 7										
EFGH SHAFT REINFORCEMENT 1ST LIFT	MT	7.90	7.90	0.00	08-10-21	08-10-21	11-10-21	0.00	0.00	Completed
EFGH SHAFT BEAM REINFORCEMENT	MT	2.00	2.00	0.00	12-10-21	11-10-21	13-10-21	0.00	0.00	Completed

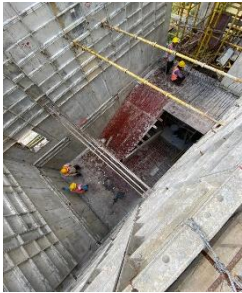
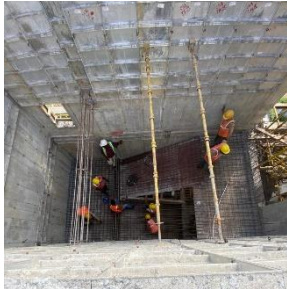
EFGH CASTING CHANNEL FIXING 1ST LIFT	RMT	157.00	154.20	2.80	14-10-21	08-10-21	18-10-21	2.80	15.42	Ahead the schedule
EFGH WALL SHUTTERING 1ST LIFT	SQM	292.00	225.00	67.00	19-10-21	14-10-21	22-10-21	0.00	56.25	Ahead the schedule
EFGH WALL CONCRETING 1ST LIFT	CUM	44.00	0.00	44.00	23-10-21		23-10-21	0.00	0.00	As per the schedule
CORE WALL ABCD										
ABCD SHAFT WALL REINFORCEMENT 1ST LIFT	MT	7.90	1.50	6.40	14-10-21	17-10-21	17-10-21	6.40	1.50	Behind the schedule
ABCD SHAFT BEAM REINFORCEMENT	MT	2.00	0.00	2.00	18-10-21		19-10-21	0.00	FALSE	Ahead the schedule
ABCD WALL CASTING CHANNEL FIXING 1ST LIFT	RMT	157.00	0.00	157.00	20-10-21		24-10-21	0.00	0.00	As per the schedule
ABCD WALL SHUTTERING 1ST LIFT	SQM	292.00	0.00	292.00	23-10-21		26-10-21	0.00	0.00	As per the schedule
ABCD WALL CONCRETING 1ST LIFT	CUM	44.00	0.00	44.00	27-10-21		27-10-21	0.00	0.00	As per the schedule
STAIRCASE 1 WALL										
STAIR 1 WALL REINFORCEMENT 1ST LIFT	MT	4.00	4.00	0.00	11-10-21	08-10-21	14-10-21	0.00	0.00	Completed
STAIR 1 WALL SHUTTERING 1ST LIFT	SQM	150.97	150.97	0.00	14-10-21	12-10-21	16-10-21	0.00	0.00	Completed
STAIR 1 WALL CONCRETING 1ST LIFT	CUM	18.00	18.00	0.00	17-10-21	16-10-21	17-10-21	0.00	0.00	Completed
STAIRCASE 2										
STAIR 2 WALL REINFORCEMENT 1ST LIFT	MT	4.00	0.00	4.00	20-10-21		23-10-21	0.00	0.00	As per the schedule
STAIR 2 WALL SHUTTERING 1ST LIFT	SQM	146.48	0.00	146.48	24-10-21		27-10-21	0.00	0.00	As per the schedule
STAIR 2 WALL CONCRETING 1ST LIFT	CUM	20.91	0.00	20.91	28-10-21		28-10-21	0.00	0.00	As per the schedule
STAIRCASE 2										
FLIGHT-1 & 2										
STAIR 2 LEVEL 4 TO LEVEL 5 SHUTTERING	SQM	46.67	46.67	0.00	08-10-21	11-10-21	10-10-21	0.00	0.00	Completed
STAIR 2 LEVEL 4 TO LEVEL 5 REINFORCEMENT	MT	0.80	0.80	0.00	11-10-21	13-10-21	12-10-21	0.00	0.00	Completed
STAIR 2 LEVEL 4 TO LEVEL 5 CONCRETING	CUM	6.67	6.67	0.00	13-10-21	16-10-21	13-10-21	0.00	0.00	Completed
STAIRCASE 2										
FLIGHT-3 & 4										
STAIR 2 LEVEL 5 TO LEVEL 6 SHUTTERING	SQM	46.67	0.00	46.67	14-10-21		16-10-21	46.67	0.00	Behind the schedule
STAIR 2 LEVEL 5 TO LEVEL 6 REINFORCEMENT	MT	0.80	0.00	1.10	17-10-21		18-10-21	1.10	0.00	Behind the schedule
STAIR 2 LEVEL 5 TO LEVEL 6 CONCRETING	CUM	6.67	0.00	6.67	19-10-21		19-10-21	0.00	0.00	As per the schedule
STAIRCASE 1										
FLIGHT-1 & 2										
STAIR 1 LEVEL 4 TO LEVEL 5 SHUTTERING	SQM	40.00	0.00	40.00	18-10-21		20-10-21	0.00	FALSE	Ahead the schedule
STAIR 1 LEVEL 4 TO LEVEL 5 REINFORCEMENT	MT	0.80	0.00	0.80	21-10-21		22-10-21	0.00	0.00	As per the schedule
STAIR 1 LEVEL 4 TO LEVEL 5 CONCRETING	CUM	6.67	0.00	6.67	23-10-21		23-10-21	0.00	0.00	As per the schedule
STAIRCASE 1										
FLIGHT-3 & 4										
STAIR 1 LEVEL 5 TO LEVEL 6 SHUTTERING	SQM	40.00	0.00	40.00	24-10-21		26-10-21	0.00	0.00	As per the schedule

STAIR 1 LEVEL 5 TO LEVEL 6 REINFORCEMENT	MT	0.80	0.00	0.80	27-10-21		28-10-21	0.00	0.00	As per the schedule
STAIR 1 LEVEL 5 TO LEVEL 6 CONCRETING	CUM	6.67	0.00	6.67	29-10-21		29-10-21			As per the schedule
STAIRCASE 1										
FLIGHT-5 & 6										
STAIR 1 LEVEL 5 TO LEVEL 6 SHUTTERING	SQM	40.00	0.00	40.00	30-10-21		01-11-21	0.00	0.00	As per the schedule
STAIR 1 LEVEL 5 TO LEVEL 6 REINFORCEMENT	MT	0.80	0.00	0.80	02-11-21		03-11-21	0.00	0.00	As per the schedule
STAIR 1 LEVEL 5 TO LEVEL 6 CONCRETING	CUM	6.67	0.00	6.67	04-11-21		05-11-21			As per the schedule
COLUMN										
COLUMN REINFORCEMENT	MT	13.40	0.00	13.40	11-10-21		17-10-21	13.40	0.00	Behind the schedule
COLUMN SHUTTERING	SQM	106.00	0.00	106.00	15-10-21		20-10-21			As per the schedule
COLUMN CONCRETING	CUM	17.00	0.00	17.00	19-10-21		23-10-21	0.00	0.00	As per the schedule
Slab and Beam										
LEVEL 7 SLAB SHUTTERING	SQM	627.00	0.00	627.00	24-10-21		02-11-21	0.00	0.00	As per the schedule
LEVEL 7 SLAB REINFORCEMENT	MT	20.26	0.00	20.26	20-09-21		07-11-21			As per the schedule
LEVEL 7 SLAB CONCRETE	CUM	102.00	0.00	102.00	09-11-21		09-11-21	0.00	0.00	As per the schedule

<u>Manpower requirement for Balance activity</u>	<u>Unit</u>	<u>Required</u>	<u>Available</u>	<u>Excess (+) / Shortfall (-)</u>
Carpenter + Helper	Nos	15.00	31.00	16.00
Barbender + Helper	Nos	321.00	48.00	-273.00
Unskilled Mason + Helper	Nos	0.00	5.00	5.00
Welder	Nos	2.00	4.00	-2.00

16.SITE OBSERVATIONS

1	REINFORCEMENT	EFGH CORE WALL	
2	REINFORCEMENT	EFGH CORE WALL	
3	REINFORCEMENT	EFGH CORE WALL	
4	SCAFFOLDING AND REINFORCEMENT	ABCD CORE WALL	
5	FIXING OF CASTING CHANNEL	EFGH CORE WALL	

6	REINFORCEMENT & ALU FORM WORK	EFGH CORE WALL	
7	REINFORCEMENT WORK LEVEL 6 TO 7	STAIRCASE 1	
8	SCAFFOLDING AND REINFORCEMENT	STAIRCASE 1	
9	CONCRETING AT LEVEL 6 TO 7	STAIRCASE 1	
10	SCAFFOLDING AND REINFORCEMENT	NON TOWER AREA & ABCD CORE WALL	

11	REINFORCEMENT AND ALU FORMWORK	NON TOWER AREA & ABCD CORE WALL	
12	REINFORCEMENT AND ALU FORMWORK	NON TOWER AREA ,STAIRCASE 2 WALL & ABCD CORE WALL	
13	REINFORCEMENT , AL FORMWORK AND FIXING OF CASTING CHANNEL	NON TOWER AREA & ABCD CORE WALL	
14	REINFORCEMENT , ALU FORMWORK AND FIXING OF CASTING CHANNEL	NON TOWER AREA & ABCD CORE WALL	

