MAHALAKSHMI ENGINEERING & CONSTRUCTION PVT.LTD.

Hazard Identification & Risk Assessment

Project:- MAHARASHRTA HOUSING DEVELOPMENT CORPORATION LIMITED, MUMBAI

Location:-

SOLAPUR

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure	•	ь	Severity	Probability	Risk score	Diek level	
					1	Α	B	S	Р	(AXBXSXP)	Risk level	
1	Survey of site	1.Animal & insect bite	Body injury	Y	Use of PPEs like helmet, safety	2	2	5	5	100	moderate	1.Use of stick & whistle. 2.Smok
		2.Facing climate	ill Health	N	shoes	1	2	3	2	12	Tolerable	communication. 5. Proper super
		3.Fall of person on same	Body injury	Y	1	2	2	3	3	36	moderate	instruction board. 8.Use of PPEs
		fire	Burn injury	Y	1	2	2	4	3	48	moderate	
		Sprain back pain	Body injury	N	1	1	1	2	1	2	Trival	
2	Security	Facing climate	ill Health	N		1	1	3	2	6	Trival	1)Provision of security check po
		Mob attack	Ear injury	N	1	1	1	2	1	2	Trival	Whistle. 4)Provision of torch. 5)
		Animal Bite	Body injury	N		2	1	3	2	12	Toleruble	regulaton, Emergency contact n supervision provided to control Use of PPEs
3	Excavation	Collapse of structure	injury, casualty	v	Mandatory ppesprovided, hard	2	2	5	3	60	moderate	1) Hard barrication provided 1 m
			Injury ,Major cuts, casualty	· ·	barricading, indication provided	2	2	5	2		1	1.5 m. 3)Proper excavation slope
		Fall of person		У	,					40		maintain clear. 6) permission tal
		Fall of vehicles	Injury ,Major cuts, casualty	Y		2	2	5	3	60		maintainance all vehicles & equi excavation work permit system.
		Failure of excavator	injury	N		1	1	2	2	4		supervision. 12) Trainined perso
		Electrocution	electric shok , ill health	Y		2	2	5	5	100	moderate	
		struck into	injury, casualty	N		2	2	5	3	60	moderate	
4	Loading of excavated material in	Flying of dust	eye injury	N	Instruction given to all driver	1	1	2	5	10	Tolerable	1.Walkway should be clear. 2.Pro
	dumper by excavator	Fall of Vehicle	major injury cause fatal	Y	1	2	2	5	2	40	moderate	drivers. 5.Follow of work permit
		Hitting by dumper/excav	body injury	N	1	1	1	3	2	6	Trival	horn. 7.Before starting of activit
		Noise	Ear injury	N		1	1	2	2	4		issued by safety team. 9.Proper communication between both d conducted to all drivers. 15.Use
5	Vehicular movement at site	Hit to person	Body injury	Y	Instruction displayed to gate	2	2	5	5	100	moderate	1.Vaild driver licence. 2.Medical
		Fall of material	Fracture	N	1	1	1	2	2	4	Trival	out provided to all vehicles. 5.Pr
		Break failure	Caught in between	N	1	1	1	2	5	10		use wheel chock for standing ve
		Fall of vehicle	Fatalality	Y		2	2	5	2	40	Inouerate	speed limit displayed at site. 9.A starting of work. 10.Proper supe
	Driving	Fall of material	Body injury	N	Use of helmet	1	1	2	2	4	Trival	1.Driver having valid licence. 2.P
6			, , ,					2	2			of reverse horn, head light, tail l
6	Driving	Hitting nerson	Body injury Fracture	N		1						
6	Driving	Hitting person	Body injury, Fracture	N	-	1	1		l			safety hand out issue by safety t
6		Hitting person Dashing to material Collapse of structre	Body injury, Fracture minor injury major injury	N N N	-	1 1 1	1 1 1	2 2 2	2 2 2	4	Trival	safety hand out issue by safety t of PPEs
	Shifting of material manually	Dashing to material	minor injury	N	Use of hand gloves	1	1	2	2	4	Trival Trival	of PPEs
	Shifting of material manually (Cement & other construction	Dashing to material Collapse of structre	minor injury major injury	N N	Use of hand gloves	1	1 1	2 2	2 2	4 4 6	Trival Trival Trival	of PPEs 1.Walkway should be clear. 2.di:
	Shifting of material manually	Dashing to material Collapse of structre Fall of person	minor injury major injury Major injury	N N Y	Use of hand gloves	1 1 1	1 1 1	2 2 3	2 2 2	4 4 6 4	Trival Trival Trival	of PPEs 1.Walkway should be clear. 2.dis
	Shifting of material manually (Cement & other construction	Dashing to material Collapse of structre Fall of person Fall of material	minor injury major injury Major injury Body injury	N N Y N	Use of hand gloves	1 1 1 1	1 1 1 1	2 2 3 2	2 2 2 2 2	4 4 6 4 5	Trival Trival Trival Trival	of PPEs 1.Walkway should be clear. 2.dis
7	Shifting of material manually (Cement & other construction	Dashing to material Collapse of structre Fall of person Fall of material Caught in between	minor injury major injury Major injury Body injury hand injury	N N Y N N	Use of hand gloves Use of hand gloves	1 1 1 1 1 1	1 1 1 1 1 1	2 2 3 2 1	2 2 2 2 2 5	4 4 6 4 5 5 5	Trival Trival Trival Trival Trival Trival	safety hand out issue by safety t of PPEs 1.Walkway should be clear. 2.dis to all engaged workers. 5.Use of 1)Proper housekeeping. 2)Prope
7	Shifting of material manually (Cement & other construction material handling)	Dashing to material Collapse of structre Fall of person Fall of material Caught in between Back pain, sprain	minor injury major injury Major injury Body injury hand injury shoulder injury	N N Y N N		1 1 1 1 1 1 1	1 1 1 1 1 1 1	2 2 3 2 1 1	2 2 2 2 5 5 5	4 4 6 4 5 5 5 10	Trival Trival Trival Trival Trival Trival Tolerable	of PPEs 1.Walkway should be clear. 2.dis to all engaged workers. 5.Use of

Control measure (tobe taken)

oking restricted near survey area.3.Proper concentration. 4.Proper ervision. 6.Training conducted to all engaged workers. 7.Displayed Es

bost/Shelter. 2)Provision of communication system. 3)Use of stick & 5)Trained person to do the work. 6)Displayed instruction, rule & : numbers & first aider numbers in security cabin. 7) Proper ol security or gate. 8) Various register maintained at security cabin. 9)

L meter away from excavation.2) Loose mateial not stacked with in ope maintained. 4) Emergency access provided. 5) All entry/ exit taken to local authority regrding undergrounded utility. 7) Regular quipement. 8) Health check up done involve workers. 9)Follow m. 10) Excavation instruction displyed in local language. 11) Proper son to do the work. 13) Use of PPEs

Proper housekeeping. 3. Valid driver licence. 4. Medical check to all nit system. 6. Use of head light, tail light, backward & forward, reverse vity check all devices of vehicles. 8. Follow up hand out instruction er ramp provided. 10. Hard barrication provided. 11. Proper a drivers. 12. Follow up speed limit. 13. Proper supervision. 14. Training se of PPEs.

al check up done. 3.PUC & Insurance copy check. 4.Instruction hand Provision of reverse horn, head light & tail light of vehicles.6.Always vehicles. 7.Always follow rules & regulation displyed at site. 8.Follow J.Always check all switch, gear, brake, horn & required switch before upervision. 11.Training to all drivers. 12.Use of PPEs

.Periodical medical checking. 3.Periodically maintannce. 4.Provision I light.5.Do not use nail for the purpose of key. 6.Always follow up y team.7.Proper supervision. 8.Training conducted to all drivers. 9.Use

disrtibution of same load.3.Proper supervision .4.Training conducted of PPEs

per communication. 3) Training provided before starting of activity. 4) 5) Instruction displyed on local languages. 6) Use of required PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure	^	В	Severity	Probability	Risk score	Risk level	1 (
						Α	В	S	Р	(AXBXSXP)	RISK level	
9	Bar cutting operation by use of	Contact with cutting	Hand injury	N	Use of handgloves	1	1	2	2	4	Trival	1.Regular maintaince of machine.
	cutting machine	part of the machine			4							4)ELCB/RCCB checking on regular
		Electrical shock	Electrocution, ill health	Y		2	2	5	5	100	moderate	supervision. 7) Trained person to o
10	Bar bending operation by use of	Contact with cutting	Hand injury		Use of handgloves							1.Regular maintaince of machine.
10	bending machine	part of the machine		N	Use of handgloves	1	1	2	2	4	Trival	4)ELCB/RCCB checking on regular
l		Electrical shock	Electrocution, ill health	Y	7	2	2	5	5	100	moderate	supervision. 7) Trained person to c
l		Sprain pain	Body injury	N	1	1	1	2	2	4	Trival	, , , , , , , , , , , , , , , , , , , ,
11	Scaffolding erection	Fall of material	Body injury	N	Use of safety harness	1	1	1	5	5	Trival	1.Good quality of material to be us
l		Fall of person	Major injury, causualty	Y	7	2	2	5	5	100	moderate	3.provide cross bracing ,side supp
l l		collapse of structure	major injury	Y]	1	2	5	2	20	Tolerable	5.Use of plank for erection time. 6
		Caught in between	Hand injury	N		1	1	2	2	4	Trival	competent person. 8.Follow up tag checked for engaged workers. 11.
												starting of activity. 13.Proper su
12	Scaffolding dismentling	Fall of material	Body injury	N	Use of safety harness, TBT	1	1	1	5	5	Trival	1.Remove of loose material, electr
l l		Fall of person	Major injury, causualty	Y	training to be conducted before	2	2	5	5	100	moderate	material handling. 3.Use of Plank f
l l		Collapse of structure	major injury	N	starting of activity	1	2	5	2	20	Tolerable	of activity. 5.Area barricaded. 6.Ta
l l		Caught in between	Hand injury	N	1	1	1	2	2	4	Trival	engaged workers. 8.Proper comm
		Electricusion	Electric shock, ill health	Y		2	2	5	5	100	moderate	11.Training to be conducted befor 13.Use of required PPEs
13	Shuttering	Fall of person	Injury ,Major cuts, casualty	Y	1.Use of safety harness	2	2	5	5	100	moderate	1)Use Safe working paltform .
		Fall of material	Injury ,Major cuts.	N	2.Proper supervision provided	1	1	1	2	2	Trival	2) Provided safety net
l				N		1	1	1	2	2	Trival	3.provided of shuttering support
		Collapse of structure	Injury ,Major cuts, casualty	Y		2	2	5	5	100	moderate	4) Provided life line & Use of prope
l		Electrical shock	Electrocution, ill health	Y		2	2	5	5	100	moderate	5)ELCB/RCCB provided to electrica
												5.Avoid to electrical cable passing
		Caught in between	Injury ,Major cuts,	N		1	1	2	2	4	Trival	6)walkways obstruction free
l												7) Medical check up done or heigh
l												8)Proper supervision provided
l												9)Trained people to do the work
												10) Follow work permit system
												11) Display of Instruction board in
<u> </u>									1	1		12)Use of PPE like Safety harness,
14	Deshuttering	Fall of person	Injury ,Major cuts, casualty	v	Use of safety harness,	2	2	5	5	100	moderate	1.Use of proper working platform. 4.Provided anchoragement for fixi
1		Fall of material	Injury ,Major cuts.	N	supervision provided, platform provided	1	1	1	2	2	Trival	6.Proper housekeepiong done. 7.E
l			Injury ,Major cuts, casualty			÷						provided to deshuttering area. 9.N
		Collapse of structure		Y	1	2	2	5	5	100	moderate	to do the work. 12.Height work sy
l		Electrical shock	Electrocution, ill health	Y		2	2	5	5	100	moderate	14.Use of PPEs
1												

ne. 2) Use of ELCB to bar cutting machine. 3)Proper Housekeeping. ar basis. 5)Guard should be provided for bar cutting area. 6)Proper to do the work. 8)Display instruction board. 9.Use of PPEs

ne. 2) Use of ELCB to bar cutting machine. 3)Proper Housekeeping. ar basis. 5)Guard should be provided for bar cutting area. 6)Proper to do the work. 8)Display instruction board. 9.Use of PPEs

e used for scaffold erection. 2.)select proper base for scaffold. pport & mid rail top rail. 4.Using nylon rope for material handling . e. 6.Proper communication. 7.scaffolding erect in presence of tag system. 9.Regular inspection of scaffodding. 10.Height test to be L1.Follow instruction displayed. 12.Training to be conducted before upervision. 14.Use of required PPEs.

ectrical cable before starting of dismentling. 2.Using nylon rope for nk for platform. 4.Dismentling inspection to be done before starting .Tag & instruction board displayed. 7.Height test to be checked for nmunication. 9.Proper housekeeping.10 proper supervision . fore starting of activity.12.Support to be removed step by step

ť

oper access

rical panel board

ng through the MS material

eight pass test done

l in local language

ss, Helmet & shoes

rm. 2.Provided safety net. 3.Use of rope for material support.
fixing of safety harness. 5.All emergency entry/ exist should be clear.
7.ELCB/RCCB provided to all electrical panel board. 8.Barrication
9.Medical check up done. 10.Supervision provided . 11.Train person system follow. 13.Display of instruction board in local language.

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure			Severity	Probability	Risk score		1
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					A	B	S	P	(AXBXSXP)	Risk level	
15	Reinforcement		Injury ,Major cuts, casualty		Use of safety harness,							1) Provided of lifeline as per IS 19
		Fall of person		Y	supervision provided, platform	2	2	5	5	100	moderate	at pheriphery of building. 4)Prope
		Fall of material	Injury ,Major cuts.	i	provided	1	1	1	2	2	Trival	7) ELCB/RCCB provided to all elect
		Collapse of structure	Injury ,Major cuts, casualty	Y		2	2	5	5	100	moderate	9.Barrication done on work place 12)Proper supervision provided. 1
		Electrical shock	Electrocution, ill health	Y		2	2	5	5	100	moderate	
		Caught in between	Injury ,Major cuts,	N		1	1	2	2	4	Trival	
16	Coloumn shuttering	Fall of person	Major injury	Y	TBT Training provided to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Prop
		Fall of material	Fracture	N	Workers	1	1	2	2	4	Trival	3.Anchoragement provided for fix
		Caught in between	Hand injury	N		1	1	2	2	4	Trival	barrication properly closed. 6.Pro 8.Trained person to do the work.9
17	Coloumn Reinforcement	Fall of person	Major injury	Y	TBT Training provided to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Prop
		Fall of Material	Fracture	N	Workers	1	1	2	2	4	Trival	3.Anchoragement provided for fix
		Caught in between	Hand injury	N		1	1	2	2	4	Trival	barrication provided. 6.Provisio person to do the work.9.Use of
18	Fixing of concrete pump	Fall of person from heigh	Major injury, causualty	Y	Use of PPEs like safety harness	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Use
			Body injury	N	1	1	1	1	5	5	Trival	the pipeline. 4. Proper joints of pu
			Body injury	N	1	1	1	2	2	4	Trival	6.Proper supervision. 7.Instruction
		Caught in between	Hand injury	N		1	1	2	5	10	Tolerable	conducted to all engaged workers
19	Coloumn Deshuttering	Fall of material	Fracture	N	Harness provided, training	1	1	2	5	10	Tolerable	1.Walkway should be clear. 2.Prop
_	5	Fall of Person	major injury	Y	conducted to all workers	2	2	5	5	100	moderate	3.Anchoragement provided for fix
		Electrocution	Electric shock, ill health	Y	1	2	2	5	2	40	moderate	barrication provided. 6. Provision of
		Caught in between	hand injury	N		1	1	2	5	10	Tolerable	material proper insulation provide of PPEs. 11.Tools should be prope
20	Concreting or Casting OF	Fall of person	Body injury,casualty	Y	Use of Safety harness &	2	2	5	5	100	moderate	1.Walkway free from Obstruction
	Coloumn & Slab	fall of material	Body injury	N	walkway clear	1	1	2	5	10	Tolerable	Provide Railing & netting. 4.Use o
		caught in between	Hand injury	N		1	1	1	2	2	Trival	ELCB/RCCB. 6. Work permit issue.
			Ear injury	N	-	1	1	1	5	5	Trival	should be closed. 9.Loose materia
			ill heath	N	-	1	1	1	2	2	Trival	instruction.11.Proper supervision
		Electrocution	Electric shock, ill health	Y	-	2	2	4	5	80		conducted to all engaged workers
21	fixing of concrete pump	Electrical shock	Major injury	Y	Connection through ELCB	2	2	5	5	100	moderate	1.Use of proper cable to connect t
		Health hazard due to vibr		N		1	1	3	2	6	Trival	floor. 3.Regular maintaince & insp 6.Use of PPEs.
22	Housekeeping	Fall of person	Body injury	Y	Material stacking propely	2	2	3	2	24	Tolerable	1. Walkway should be cleared 2.
		Caught in between	Hand injury	N		1	1	2	5	10	Tolerable	4.Proper training to all engaged w
l		contact with dust	heath injury	N	7	1	1	2	5	10	Tolerable	PPEs

1926.104. 2)Use of proper working platform. 3) Provided safety net oper access . 5) Proper housekeeping. 6) All entry & exist route clear. lectrical panel board. 8) Electrical cable passing through heighted. ce area. 10.Medical check up done. 11.Stagging support properly. d. 13) Train person to do the work. 14) Use of required PPEs

Proper stagging should be provided with proper working platform. fixing of safety harness. 4.All duct should be closed. 5.All edges Provision of safety net for outside coloumn. 7.Proper supervision. rk.9.Use of PPEs

Proper stagging should be provided with proper working platform. r fixing of safety harness. 4.All duct should be closed. 5.All edges on of safety net for outside coloumn. 7.Proper supervision. 8.Trained f PPEs

Use of nylon rope for matrrail handling. 3.use of scaffold for guideing pump (using clamp for using safety pins). 5.Proper communication. tion should be followed. 8.Area barricaded.9.Training should be kers. 10.Use of PPEs

Proper stagging should be provided with proper working platform. r fixing of safety harness. 4.All duct should be closed. 5.All edges on of safety net for outside coloumn.7.Electrical cable not lying on ms vided.8.Proper supervision. 9.Trained person to do the work.10.Use oper tied with rope & body.

ion. 2.Provide Safe Working Platform & proper shuttering support. 3. e of pheriphery Lifeline. 5.Electrical equipment goes through sue.7.Use of good quality material.8.All duct opening, lift pit opening erial not stacked on pheriphery of building. 10.Displayed site ion. 12.Toolbox training. 13.Use of PPEs. 13.Height pass test ters.

ct through ELCB/RCCB.. 2.ELCB cable should be proper placed not on nspection done. 4.Proper supervision. 5.Training given to all workers.

2. stacking the material away from edges. 3. Proper supervision. d workers. 5. Instruction displyed in local language. 6. Use of required

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure			Severity	Probability	Risk score	Dials laural	1
						Α	В	S	Р	(AXBXSXP)	Risk level	
23	, ,	Electrocution	Electric shock, ill health	Y	Use of goggle & ear plug	2	2	4	2	24	Tolerable	1. Use Good quality and standard
	cutting machine	Wheel break	body injury	N	1	1	1	2	2	4	Trival	IS standard moving wheel Only an
		Fly partical	eye injury	N		1	1	2	5	10	Tolerable	cutting wheel. 4.Select proper bas ELCB/ RCCB for electrical connect
		Contact with hand	Hand injury	N		1	1	2	2	4	Trival	of required PPEs.
24	Erection of winch	Fall of person	Major injury, causualty	Y	Use of Safety harness &	2	2	5	5	100	moderate	1.Erect scaffold on firm base and I
		fall of material	Body injury	N	required PPEs	1	1	2	5	10	Tolerable	3.Proper bracing . 4.Proper suppo
		caught in between	Hand injury	N		1	1	2	5	10	Tolerable	communication. 7.Use of nylon ro person to do the work. 10 Use of i
25	Winch operation	Fall of person	Major injury, causualty	Y	Trained operator provided	2	2	5	5	100	moderate	1. Use proper platform for materi
		fall of material	fracture	N		1	1	2	2	4	Trival	barricaded. 4. Regular inspection of
		Caught in between	Hand injury	N		1	1	2	2	4	Trival	numbers displyed in local languge 8.Medical check up to be done. 9.
		Electricusion	Electric shock, ill health	Y		2	2	5	2	40	moderate	engaged in activity. 11.Use of requ
26	Dismentling of winch machine	Fall of Person	Major injury	Y	Training provided to all workers	2	2	5	5	100	moderate	1. Work permit must be issued be
		Fall of material	Fracture	N		1	1	2	2	4	Trival	be given to the persons before sta
		Caught in between	hand injury	N		1	1	2	2	4	Trival	Aid material should be available at
		Sprain, pain or hiiting to p		N	-	1	1	2	2	4	Trival	work.6.Proper Communication sys & mast etc. 8.Remove of all Electr
												Nylon rope for shifting of mast.10
27	Electrical panel board				Competent electrician provided							1.Walkway should be clear. 2.Rem
		Eiro	loss of property, burn injury	Y	at site	2	2	4	5	80	moderate	3.Provided earth pit. 4.Regular cho
		Fire Electrocution	Electric shock, ill health	Y	-	2	2	5	5	100	moderate	6.Proper shed provided. 6.All pan rubber mats as per IS. 8.Dont use
						-	_			100		cable in panel board & Proper insu pass through heighted. 10.Display treatment chart in local languages with regular inspection done & dis displayed at panel board. 14.Imple
28	Working at height	Fall of person	Major injury, causulity	Y	Harness provided, training	2	2	5	5	100	moderate	1.Walkway clear. 2.Proper housek
		Fall of material	Fracture	N	conducted to all workers	1	1	2	2	4	Trival	edges protection should be provid
		Electrocution	Electric shock, ill health	Y		2	2	5	5	100	moderate	falling object. 7.Staircase railing p building & work place. 9.Proper so
		Collapse of structure	major injury	Y		2	2	5	5	100	moderate	line provided & fixed with MS pipe remove from steel material. 12.Al 14.Training to be provided. 15.Use

ard machine (RPM not less than 5000 & more than 7000 rpm).2.Use and ensure not to use after expirary date. 3.guard provided to base for plywood. 5.Area barricaded. 6.Proper housekeeping. 7.use ection .8.Proper supervision. 9.Trained person to do the work. 10.Use

nd level of ground. 2.Use of good quality & good condition material. oport required to all floor wise. 5.Proper working platform. 6.Proper n rope for handling of material. 8.Proper supervision. 9.Trained of required PPEs.

terial unloading. 2.Machine connect to ELCB/RCCB. 3.Area on done. 5.Third party inspection to be done. 6.SWL & equipement uge near winch machine. 7.Shed provided for resting the workers. e. 9.Proper supervision. 10.Training to be conducted for all workers required PPEs

I before starting of work, with proper information.2.Tool Box talk to e starting of the work.3. Trained persons must be on the job.4.First le at the work place.5.Strict Supervision required during the a system provided.7.Spray Oil or Diesel on all Joints, Nut & Bolts, Pins ectrical wire going to winch machine.9 Area barricaded.10.Use of :.10.Use of appropriate PPEs

Removing flammable & non flammable material from panel side. The checking for earth pit resistance.5. Provision of fire extinguisher. Danel board connect with ELCB/RCCB. 7. Provided industrial socket & use electrical wire without pin plug.9. Do not overloaded electrical insulation should be provided to all electrical cable & always cable play 440 volt signages & instruction board in local languages & shock ages. 11. Training conducted to all electrician. 12. Proper supervision & displayed at panel board. 13. Name, mobile numbers of electrician nplement of LOTO system 15. Use of PPEs.

sekeeping. 3.Provide safety net. 4.All duct should be closed. 5.All ovided. 6. All lift shaft should be fixed with GI sheet for protection of g provided. 8.Loose material removed from the pheriphery of er scaffolding or work station provided with proper support. 10.Life pipe for good strength. 11.Provide proper electical cable layout & 2.All cable should connect to ELCB/RCCB. 13.Proper supervision. .Use of PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard		(Y/N)	Existing control Measure			Severity	Probability	Risk score	B	1 .
						A	B	S	Р	(AXBXSXP)	Risk level	
29	Store (General store)	Fall of person	Body injury	Y	Material issue & receive record	2	2	4	2	32	moderate	1)Use of Firm Stands. 2) Remove f
					maintained & Flammable				_	10		separate away from 5 meter to ge
		Fall of material	loss of property, body injury		material store separately	1	1	2	5	10	Tolerable	not protruding out. 5)Use of ladde
		Fire	loss of property, body injury	Y	-	2	2	4	2	32	moderate	system. 8)Trained person for fire f
		Collapse of structure Caught in between	major injury minor cut injury	N N	-	1	1	2	5	10 10	Tolerable Tolerable	local language. 11) Use of required
						1		2	5	10	TOIETADIE	
30	Flammable storage area	Fire	loss of property, burn injury	Y	Separate store provided	2	2	5	5	100	moderate	1.Walkway should clear. 2.Area sh
		Contact with diesal	eye injury	N	1	1	1	2	1	2	Trival	general store. 4.separate material 6.Proper slope maintain for collec
		Electricusion	Electric shock, ill health	Y		2	2	4	2	32	moderate	provided.9.List of quantity display conducted to engaged workers. 12 14.Provision of fire blanket. 15. En
31	Canteen	Fire	loss of property, body injury	Y	Only canteen identification	2	2	4	5	80	moderate	1)Separate flammble material in c
		contact with hot object	Bun injury	N	board diplayed	1	1	3	5	15	Tolerable	illumination, 4) Proper Ventillation
		contact with sharp object	minor cut injury	N	1	1	1	2	2	4	Trival	7)Proper housekeeping. 8) Provide
		Dust & fumes	Health injury	N		1	1	2	5	10	Tolerable	cleaning of collection water tar language 13)Use of required Pf cylinder
32	Welding	UV /IR radiation	eye injury	N	Use of face sheild	1	1	3	5	15	Tolerable	1.All Flammable & inflammable m
		Contact with hot object	hand arm injury	N	1	1	1	3	5	15	Tolerable	water / sand buckets/ portable fire
		Electrocution	Electric shock, ill health	Y	-	2	2	4	5	80	moderate	Welder should watch the fire after
		Fire	Burn injury	Y		2	2	4	2	32	moderate	if any welding required to be carry slag should be shielded from fallin Combustible material. 6. Job shou followed strictly.7. If possible scre- working in that area.8. Use ELCB fo 11.Trained person to do the work.
33	Gas cutting	UV /IR radiation	eye injury	N	Training conducted to engaged	1	1	3	5	15	Tolerable	1.All Flammable & inflammable m
		Contact with hot object		N	workers	1	1	3	5	15	Tolerable	water / sand buckets/ portable fire
		· · ·	Health injury	Y	4	1 2	2	5	2	40	moderate	Welder should watch the fire after
			Burn injury	Y		2	2	5	2	40	moderate	if any gas cutting required to be ca should be constantly supervised a shall be used to avoid health hazar back arrestor, NRV to gas cutting s 10.Medical should be check. 11.Pr
34	Storage & handling of gas cylinder		Burn injury may be fatal	Y	Separate yard provided	2	2	5	5	100	moderate	1.Separate yard provided. 2.Prope
			fracture	N	-	1	1	3	2	6	Trival	cylinder kept verticaly tied with ch cylinder trolly provided for handlir
		Caught in between	hand injury	N		1	1	2	2	4	Trival	6 meter). 8.Do not stack empty & stacked mixed cylinder. 10.Always 12.Proper supervision. 13.Regular identification & instruction board

ve flammable material like paint,oil, diesel & chemical & store o general store. 3)Heavy material to stack at lower level. 4)Material dder. 6)Provision of suitable fire extinguisher. 7)Provision of tag re fighting. 9) Proper supervision. 10)Instruction board displyed in ired PPEs

should be segregate. 3.Separate store away from 5 meter to rial should be stacked & tag should be displayed.5.MSDS displayed. lection of spillage oil. 7.Fire extinguisher provided. 8.Proper ramp layed. 10.Identification & instruction displayed. 11.Training . 12.Proper supervision. 13.Provision of flame proof light. Emergency contact numbers displyed.16.Use of required PPEs.

in canteen,2)Use of proper system to carry,hold hot objects, 3)Proper tion, 5)Use of Industrial LPG, 6)Provision of suitable fire extinguisher. vided train person for fire fighting. 9)Proper supervision. 10)Regular nk. 11)Train person to dothe work. 12) Instruction displayed in local PES. 14)Medical check up done to cooker. 15) Use of industrial LPG

e material from the area should be removed.2. Sufficient number of fire extinguishers etc should be kept in the area of welding. 3. fter 30 minutes of completion of job. 4. Special care should be taken arrying out on diesel /chemical paint tanks or pipe lines. 5.welding illing down in case Overhead welding and should be sealed with nonnould be constantly supervised and all precautions should be creen shall be used to avoid health hazard of the persons who are CB for Ele.connection. 9.Proper lug used. 10.Provided Earthling. prk. 12.Medical should be check. 13.Proper supervision. Use of PPEs.

e material from the area should be removed.2. Sufficient number of fire extinguishers etc should be kept in the area of welding. 3. fter 30 minutes of completion of job. 4. Special care should be taken e carrying out on diesel /chemical paint tanks or pipe lines. 5. Job d and all precautions should be followed strictly.6. If possible screen azard of the persons who are working in that area.7. Use trolley, flash ng set. 8.Do not play the cylinder. 9.Trained person to do the work. ..Proper supervision. Use of PPEs.

oper housekeeping. 3.Adequate ventillation in storage area. 4.Gas oper housekeeping. 3.Adequate ventillation in storage area. 4.Gas oper housekeeping cylinder. 5.Provision of Fire Extinguisher. 6.Gas dling & transfering cylinder. 7.Storage area away from hot work (min & full cylinder, always stacked separate 3 meter distance. 9.Do not ays stack 3 meter distance both. 11.Use flash back arrestor, NRV. lar monitoring. 14.Trained person to do the work. 15.Displayed rd in local language. 16.Use of PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure	•		Severity	Probability	Risk score	Risk level	1
						A	B	S	Р	(AXBXSXP)	RISK IEVEI	
35	Masonary or Block work	Fall of person	major injury	Y	Safety harness provided to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Area
		Fall of Material	fracture	N	workers	1	1	3	5	15	Tolerable	person. 4.Use of fully planked. 5.D
		Electrocution	Electric shock, ill health	Y		2	2	5	2	40	moderate	net. 7. Provision of safety belt and
		caught in between	Hand injury	N		1	1	2	5	10	Tolerable	building. 9. Remove of all electrica of instruction board in local langua of PPEs
36	Internal & External Plaster	Fall of person	Major injury	Y	Use of safety harness	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Area
		Fall of material	Fracture	N		1	1	3	5	15	Tolerable	person. 4. Use of fully planked. 5. D
		Contact with chemical, co		N	-	1	1	2	2	4	Trival	net (vertical as well as horizantal i
		Electrocution	Electric shock, ill health	Y	-	2	2	5	2	40	moderate	not store loose material in pherip
			Hand injury	N		1	1	2	5	10	Tolerable	scaffolding.10.Proper supervisi languages. 12.Training to be co
37	Dewatering (in excavation &	Fall of Pump	major injury	N	TBT Training provided to all	1	1	2	5	10	Tolerable	1.Walkway should be clear. 2.All p
	required area)	Electrocution	Electric shock, ill health	Y	Workers	2	2	5	5	100	moderate	Pump Handling.4.Area should be I
		Pipe Jonits Open	Respiratory problem	N		1	1	2	2	4	Trival	7.Training conducted to all worker
		Fall of Person	major injury	Y		2	2	4	2	32	moderate	
38	Loading of excavated material in	Flying of dust	eye injury	N	Instruction given to all driver	1	1	2	5	10	Tolerable	
	dumper by excavator	Fall of Vehicle	major injury cause fatal	Y	1	2	2	5	2	40	moderate	1
		Hitting by dumper/excave	body injury	N	1	1	1	3	2	6	Trival	1
		Noise	Ear injury	N		1	1	2	2	4	Trival	1.Walkway should be clear. 2.Prop drivers. 5.Follow of work permit s horn. 7.Before starting of activity issued by safety team. 9.Proper ra communication between both driv conducted to all drivers. 15.Use of
39	Painting	Inhalation of paint fumes	Health injury	N	TBT Training provided to all	1	1	2	2	4	Trival	1.Away from hot flames. 2.Walkw
	(External & Internal)	Flying of paint	Eye Injury	N	Workers	1	1	2	5	10	Tolerable	scaffold with fully platform inspec
			Hand Injury	N	-	1	1	2	2	4	Trival	permit system.8.Height test to be 11.Use of required PPEs.
		Fall of person	major injury	Y	-	2	2	5	5	100	moderate	11.0se of required PPEs.
		Fall of material Fire	Any part of body injury Burn injury	N Y	-	1 2	1 2	2 5	2	4 60	Trival moderate	
40	Drilling	Contact with drill nip	Hand injury	N	TBT Training provided to all	1	1	3	2	6	Trival	1. Wear tight clothes .2. Use good
		Electrical Shock	Body injury may be fatal	Y	Workers	2	2	5	5	100	moderate	surface. 5. Always wear Safety har
		Trapping of finger in between plate & base of	Finger injury	N]	1	1	2	2	4	Trival	person to do the work. 8.Use of P
		Contact with hot surface	Burn injury	N	1	1	1	3	2	6	Trival	1
		Flying of particules	eye injury	N	1	1	1	2	2	4	Trival	1
41	Grinding	Contact with moving part	Hand injury	N	TBT Training provided to all	1	1	3	2	6	Trival	1. Use IS standard moving wheel (
		Flying of particules	eye injury	N	Workers	1	1	2	2	4	Trival	to grinding wheel. 3. Use ELCB for
		Electrical Shock	body injury may be fatal	Y		2	2	5	5	100	moderate	6.Regular inspection done. 7.Train
		Wheel break	Body injury	N		1	1	3	2	6	Trival	checked before installation by ring
		Noise	Hearing loss	N		1	1	2	5	10	Tolerable	

Area cordon off. 3.Use of Proper safe scaffold inspected by competent 5.Do not stacked brick or other material to platform. 6.Use of safety anchoragement. 8.Do not store loose material in pheriphery of crical cable passing to scaffolding.10.Proper supervision. 11.Displayed nguages. 12.Training to be conducted to all engaged workers. 13.Use

Area cordon off. 3.Use of Proper safe scaffold inspected by competent 5.Do not stacked heavy & loose material at platform. 6.Use of safety tal inside of stagging). 7.Provision of safety belt anchoragement. 8.Do eriphery of building. 9. Remove of all electrical cable passing to ion. 11.Displayed of work instruction & MSDS with COSHH in local ponducted to all engaged workers. 13.Use of PPEs

All pump should be connect to ELCB/RCCB. 3.Use of Nylon Rope for be barricate. 5.Proper supervision. 6.Danger board displayed. rkers. 8.Use of PPEs.

Proper housekeeping. 3.Valid driver licence. 4.Medical check to all hit system. 6.Use of head light, tail light, backward & forward, reverse rity check all devices of vehicles. 8.Follow up hand out instruction er ramp provided. 10. Hard barrication provided. 11. Proper drivers. 12.Follow up speed limit. 13.Proper supervision. 14.Training e of PPEs.

Ikway clear. 3.Barrication done. 4.Paint tin tied to body. 5.Use of safe pected by competent person. 6.Provided safety net. 7.Follow work be checked. 9.Trained person to do the work. 10.Proper supervision.

ood quality tools .3. Use ELCB . 4.Use water cooling tool & hot harness for working at height. 6.Provision of supervision. 7.Trained f PPEs.

eel Only and ensure not to use after expirary date. 2.guard provided for ele.connection. 4.Do not use joint cable. 5.Proper supervision. rained person to do the work. 8.Use of PPEs.9.Cracks should be ring test.

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure			Severity	Probability	Risk score	Disk laural	1
						A	B	S	Р	(AXBXSXP)	Risk level	
42	Manual backfilling	Fall of person	Major injury	Y	TBT Training provided to all	2	2	5	5	100	moderate	1.Use life line or nylon rope for ar
		fall of material	fracture	N	Workers	1	1	2	2	4	Trival	off. 4. Proper housekeeping. 5. Pro
		collapse of soil	Body injury	N	1	1	1	2	2	4	Trival	workers.7.Use of required PPEs
		Back Pain ,sprain	shoulder injury	N		1	1	2	2	4	Trival]
43	Fixing of safety net	Fall of person	major injury	Y	Training conducted to engaged	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Area
		Fall of material	fracture	N	workers, Safety harness	1	1	2	5	10	Tolerable	communication. 5.Pheripheral ha
		Caught in between	hand injury	N	provided, Anchoragement of	1	1	2	5	10	Tolerable	supervision. 8.Use of PPEs
		Electrocution	Electric shock, ill health	Y	safety harness provided.	2	2	4	2	32	moderate]
44	Hard Barrication	Fall of Person	Major injury	Y	Training conducted to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Anc
		Fall of Material	fracture	N	engaged workers.	1	1	2	2	4	Trival	material near pheripheral area. 4.
		Caught in between	hand injury	N	1	1	1	2	2	4	Trival	PPEs.
		Electrocution	Electric shock, ill health	Y	1	2	2	2	2	16	Tolerable	1
45	Duct closing	Fall of Person	Major injury	Y	Training conducted to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Anc
	_	Fall of Material	fracture	N	engaged workers.	1	1	2	2	4	Trival	material near pheripheral area. 4.
		Caught in between	hand injury	N	1	1	1	2	2	4	Trival	PPEs.
		Electrocution	Electric shock, ill health	Y		2	2	2	2	16	Tolerable	
46	Fixing of lifeline	Fall of Person	Major injury	Y	Training conducted to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Anc
		Fall of Material	fracture	N	engaged workers.	1	1	2	2	4	Trival	material near pheripheral area. 4.
		Caught in between	hand injury	N	1	1	1	2	2	4	Trival	engaged workers.7.Proper superv
		Electrocution	Electric shock, ill health	Y	-	2	2	2	2	16	Tolerable	PPEs.10.Provided safety net.
47	Unloading of Pipe material	Fall of Person	Major injury	Y	Provided handgloves.	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Prop
	(Mannually)	Fall of Material	Fracture	N	1	1	1	2	5	10	Tolerable	shold be provided. 5.Material not
		Caught in between	hand injury	N	1	1	1	2	5	10	Tolerable	supervision. 8. Training provided to
			Body injury	N	1	1	1	2	2	4	Trival	PPEs.
		Sprain, pain or hiiting to p	Body injury	N		1	1	3	5	15	Tolerable]
48	Wall chasing work by use of	Fall of person	major injury	Y	Providing safety goggles &	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Prop
	grinding machine	Fall of Material	fracture	N	Safety Harness	1	1	2	2	4	Trival	electricla cable connect to ELCB/R
		Fly particles	eye injury	N	1	1	1	2	5	10	Tolerable	stacked at working platform. 7.Pro
		Electrocution	Electrical shock	Y	1	2	2	5	2	40	moderate	workers. 8.Follow instruction. 9.U
		Heath hazard	Body injury	N		1	1	2	5	10	Tolerable	ensure not to use after expirary d cable.
49	Pipe support fixing work by use of	Contact with drill nip	Hand injury	N	Training conducted to engaged	1	1	3	2	6	Trival	1. Wear tight clothes .2. Use good
	drill machine		Electric shock, ill health	Y	workers	2	2	5	5	100	moderate	working at height. 5.Walkway sho
			Finger injury	N		1	1	2	2	4	Trival	provided.8.Provision of supervisio
		Contact with hot surfac	Burn iniury	N	1	1	1	3	2	6	Trival	-
			eye injury	N	1	1	1	2	2	4	Trival	1
		Fall of person	major injury	Y	1	2	2	4	5	80	moderate	1
		Fall of Material	fracture	N	1	1	1	2	2	4	Trival	1
50		Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Prop
		Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	4.Inspection done on regular basis
			Body injuruy	N	1	1	1	2	2	4	Trival	supervision provided. 8.Training p required PPEs.

r anchoring of Safety harness. 2.Walkway should clear. 3.Area cordon Proper supervision. 6.Training conducted to all engaged

Area codon off. 3.Remove of all electrical cable. 4.Proper hard barrication required. 6.Duct properly closed. 7.Proper

Anchoragement provided for fixing of safety harness. 3. Remove loose . 4. Proper supervision. 5. Training conducted to all workers. 6. Use of

Anchoragement provided for fixing of safety harness. 3.Remove loose a. 4.Proper supervision. 5.Training conducted to all workers. 6.Use of

Anchoragement provided for fixing of safety harness. 3.Remove loose a. 4.Hard barrication . 5.Duct properly closing. 6.Medical check for all vervision. 8.Training conducted to all workers. 9.Use of

Proper housekeeping. 3.Area should be designated. 4.Proper base not stacking above 5 feet height. 6.Proper communication. 7.Proper ed to all engaged workers. 9.Follow instruction. 10.Use of Required

Proper housekeeping. 3.Proper working platform provided. 4.All B/RCCB. 5.Inspection done on regular basis. 6.Heavy material not .Proper supervision provided. 8.Training provided to all engaged 9.Use of required PPEs. 9. Use IS standard moving wheel Only and y date. 10.guard provided to grinding wheel. 11.Do not use joint

bod quality tools .3. Use ELCB . 4.Always wear Safety harness for should be clear. 6.Proper housekeeping. 7.Proper working platform rision. 9.Trained person to do the work. 10.Use of PPEs.

Proper housekeeping. 3. Proper working platform provided. Nasis. 5. Heavy material not stacked at working platform. 6. Proper Ng provided to all engaged workers. 7. Follow instruction. 8. Use of

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure		_	Severity	Probability	Risk score		1
					1 -	A	В	S	P	(AXBXSXP)	Risk level	
51	Marking of floor	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Use
		Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	implement.5.Training conducted
												7.Use of appropriate PPEs.
52	Wall cutting by use of wheel	Contact with cutting whe		N	Before starting of activity all	1	1	3	2	6	Trival	1. Wear tight clothes .2. Use good
	cutting machine & drilling	Electrocution	Electric shock, ill health	Y	cutting tools inspection	2	2	5	5	100	moderate	working at height. 5. Walkway sho
	machine	Trapping of finger in between plate & base of	Finger injury	N		1	1	2	2	4	Trival	provided.8.Provision of supervisio
		Contact with hot surface	Burn injury	N		1	1	3	2	6	Trival	
		Flying of particules	eye injury	N		1	1	2	2	4	Trival	
		Fall of person	major injury	Y		2	2	4	5	80	moderate	
		Fall of Material	fracture	Ν		1	1	2	2	4	Trival	
53		Slip trip	Body injury	N	Training conducted to all	t	1	2	2	4	Trival	1.walkway should be clear.2.Befor
	conduit by use of manual pipe bending machine	Sprain, pain or hiiting to p	Body injury	N	engaged workers.	1	1	2	2	4	Trival	3.Proper supervision. 3.Train pers Appropriate PPES.
54	Conduit pipe fixing work manually	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Prop
	at celling & duct	Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	4.Inspection done on regular basis
		Pain ,sprain	Body injuruy	N	1	1	1	2	2	4	Trival	supervision provided. 8. Training p
												required PPEs.
55	Labour colony	Electrocution	Electric shock, ill health	Y	Provision of good accomadation	2	2	5	5	100	moderate	1.Proper barrication done to labor
		Fire	Burn injury	Y	to all workers.	2	2	5	5	100	moderate	4.All electrical connection through
		Fall of material	fracture	N		1	1	2	2	4	Trival	room. 6. Proper drainage provided
		Collapse of colony	Body injury	Ν		1	1	4	2	6	Trival	drinking water tank, non drinking
		Spread of communcable	ill heath injury, diseases	Y		2	2	3	5	60	moderate	spraying of insecticides, fogging & interval. 11.Provision of dust bin.
		snake bite	ill health, fatal	Y		2	2	5	2	40	moderate	13.Provision of first aid box. 14.En inspection should be done. 16.Dou 18.Various topic of training covere related to health. 20.Use of PPEs
56	Stacking of material	Fall of material	1) Fracture	N	TBT Training provided to all	1	1	3	5	15	Tolerable	1.Walkway should be clear. 2.Sepa
			2) Body/leg injury	N	Workers	1	1	2	2		Trival	material & adequate access. 4.Ma
			, , , , , , , ,									4082:1996. 5.Good Tools use for I 8.Trained person to do the work.
57	Working with computer	Electrocution	Electric shock, ill health	Y	Earthling provided to main	2	2	2	2	16	Tolerable	1) proper Work station arrangmer
		& joint	joint pain, eye stress,	N	supply	1	1	3	5	15	Tolerable	excerses for eyes and body after o
		loss of data	work daily	N		1	1	1	2	2	Trival	7)Training conducted to all compu
58	Plinth beam shuttering	Fall of person	Body injury	N	Training conducted to all	1	1	1	2	2	Trival	1.Walkway should be clear.2.Prop
		Fall of material	minor injury	N	engaged workers.	1	1	1	2	2	Trival	workers.4.All electrical cable shou
		Electricution	Electric shock, ill health	Y]	2	2	2	2	16	Tolerable]
		Health hazard	Body injury	N]	1	1	1	2	2	Trival]
59	Plint beam casting	Fall of person	Body injury	N	Training conducted to all	1	1	1	2	2	Trival	1.Walkway should be clear. 2Pro
		Fall of material	minor injury	N	engaged workers.	1	1	1	2	2	Trival	ELCB/RCCB.4.All electrical cable sh
		Electricution	Electric shock, ill health	Y]	2	2	2	2	16	Tolerable	do the work. 7Displayed & follwee
		Health hazard	Body injury	N		1	1	1	2	2	Trival	

Jse of mobile scaffold, 3.Proper supervision.4.Wheel lock system ed to all engaged workers.6.Scaffold inspection signages displyed.

bod quality tools .3. Use ELCB . 4.Always wear Safety harness for should be clear. 6.Proper housekeeping. 7.Proper working platform ision. 9.Trained person to do the work. 10.Use of PPEs.

fore starting of activity pipe bending m/c inspection on daily basis. erson to do the work. 4.Dispayed of work instruction 5.Use of

Proper housekeeping. 3. Proper working platform provided. Nasis. 5. Heavy material not stacked at working platform. 6. Proper Ng provided to all engaged workers. 7. Follow instruction. 8. Use of

abour colony. 2.Security arrangement. 3.Provision of fire extinguisher. hugh proper ELCB/RCCB. 5.Do not put the material in roof of the ded. 7.All room should be easily identified. 8.Regular cleaning of ing water tank, toilet & record should be maintained. 9.Regular g & record should be maintained. 10.Provision of doctor on regular in. 12.External agency should appoint to disposal of garbage. 4.Emergency drill should be conduct for health emergency. 15.Regular Dont use naked wire in electrical holder. 17.Proper supervision. vered to labour colony. 19.Displayed of various signages & posters VES

Separate storage area provided. 3. Proper arrangement of stacking Material should be stacked not more than 5 feet or refer IS or lifting material. 6.Proper supervision. 7.Follow instruction board. rk. 9.Use of PPEs.

ment .2) Illumination glare . 3)Use of ELCB. 4)use USB . 5)Suitable er certain intervals. 6)Proper supervision to monitor the computer. nputer user.

roper access egress provided. 3. Training conducted to all engaged hould be properly heighted 5. follow work instruction. 6. Use of PPEs

Proper access egress provided.3.Ensure all electrical connection to le should be properly heighted.5.Proper supervision. 6.Train person to wed all safety instruction. 8.Use of PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure			Severity	Probability	Risk score	Disk Issuel	1
						A	В	S	Р	(AXBXSXP)	Risk level	
60	Preparation of water tank on upper floor	Fall of person	Injury ,Major cuts, casualty	Y	Use of safety harness & training conducted to all engaged	2	2	5	5	100	moderate	1)Use Safe working paltform .
					workers							2) Provided safety net
		Fall of material	Injury ,Major cuts.	N		1	1	1	2	2	Trival	3.Shuttering should be properly su
												4) Provided & fixing of life line as
		Collapse of structure	Injury ,Major cuts, casualty	Y		2	2	5	5	100	moderate	5.All cut outs/duct properly closed
					-							6.All edges protection & staircase
		Electrical shock	Electrocution, ill health	Y		2	2	5	5	100	moderate	7)ELCB/RCCB provided to electric
					_							8.Avoid to electrical cable passing
		Caught in between	Injury ,Major cuts,	N		1	1	2	2	4	Trival	9.walkways obstruction free
					-							10.Medical check up done or heig
												11.Proper supervision provided
												12.Trained people to do the work
												13. Follow work permit system
												14. Display of Instruction board in
		-										15.Use of PPE like Safety harness,
61	Tile cutting by use of cutting machine	Electrocution	Electric shock, ill health	Y	Use of goggle & ear plug	2	2	4	2	24	Tolerable	1. Use Good quality and standard 4.Machine should be connected w
	machine	Wheel break	body injury	N	-	1	1	2	2	4	Trival	height.5.Proper supervision. 6.Tra
		Fly partical	eye injury	N	-	1	1	2	5	10	Tolerable	
		Contact with hand	Hand injury	Y		2	1	2	5	20	Tolerable	
62	Flooring/Tile work	1.Fall of person on same		N	Use of appropriate PPEs	1	1	2	5	10	Tolerable	1.Walkway should be free from ol
		2.Caught in between	injury, cut	N	-	1	1	2	5	10	Tolerable	& MSDS with COSHH. 4.COSHH tra
			Body injury	N		1	1	2	5	10	Tolerable	
63	Back filling by use of vehicles	Hit to person	Body injury	Y	Instruction displayed to gate	2	2	5	5	100	moderate	1.Vaild driver licence. 2.Medical cl
		Fall of material	Fracture	N	_	1	1	2	2	4	Trival	out provided to all vehicles. 5.Foll
		Break failure	Caught in between	N	_	1	1	2	5	10	Tolerable	applicable as per BOCW requirem XIV) 6.Always use wheel chock for
		Health Hazard	Body injury	N	_	1	1	2	5	10	Tolerable	site. 8.Follow speed limit displaye
		Fall of vehicle	Fatalality	Y		2	2	5	2	40	moderate	switch before starting of work. 10 all drivers & signalman. 12.Use of
64	Mannual Back filling	1.Fall of person	Body injury	Y	Training conducted to all	2	2	2	5	40	moderate	1.Walkway should free from obstr
		2.Fall of material	Fracture	N	engaged workers.	1	1	2	2	4	Trival	break 5 min atleast half an hours.
		3.Caught in between	hand injury	N]	1	1	1	5	5	Trival	7.Displayed instruction & warning
		4.Back pain	Body injury	N		1	1	1	5	5	Trival	
		5.Electricution	Electric shock, ill health	Y		2	2	3	2	24	Tolerable	
		6.Health hazard	Body injury	N		1	1	2	5	10	Tolerable	
65	Loading of construction material	1.Back pain	Body injury	N	Provided appropraite PPEs	1	1	1	5	5	Trival	1.Walkway should be clear from o
	(Like cement, plywood, sand,	2.Fall of person on same	Minor injury	Y		2	2	2	5	40	moderate	overflow the material. 4.Proper su
	stone, scaffolding, shuttering	3.Fall of material	Fracture	N		1	1	2	2	4	Trival	instruction in local language. 7.Us
	material etc)	4.Caught in between	hand injury	N		1	1	1	5	5	Trival	
		5.Fly particles	eye injury	N		1	1	2	5	10	Tolerable	
66	Unloading of construction	Caught in between	Hand injury	N	Use of hand gloves	1	1	2	5	10	Tolerable	1)Proper housekeeping. 2)Proper
	material (Like cement, plywood,	Fall of material	Body injury	N		1	1	2	2	4	Trival	Proper supervision provided. 5) In
	sand, stone, scaffolding material,		eye injury	N		1	1	2	5	10	Tolerable	1
	shuttering matrial etc)	Fall of person	Body injury	N		1	2	3	2	12	Tolerable	

/ support.

e as per IS 1926.104 & Use of proper access osed

ase railing done as per IS 4912

trical panel board

ing through the MS material

height pass test done

ork

l in local language

ess, Helmet & shoes

ard machine. 2.Select proper base for tile.3.Proper housekeeping. ed with ELCB/ RCCB & all electical should be passed 8 feet .Trained person to do the work. 7.Use of required PPEs.

n obstruction. 2. Proper supervision. 3. Displayed of instruction board I training conducted to all engaged workers. 5. Use of required PPEs

al check up done. 3.Ensure PUC & Insurance copy . 4.Instruction hand Follow general safety like reverse horn, head light, tail light & all rement (Central rules95 Chapter X/Maharashtra rules122 chapter & for standing vehicles. 7.Always follow rules & regulation displyed at ayed at site. 9.Always check all switch, gear, brake, horn & required & 10.Provide signal man & Proper supervision. 11.Training conduct to e of PPEs

bstruction. 2.Area barricaded. 3.All electrical cable removed. 4.Take urs. 5.Proper supervision. 6.Training given to all engaged workers. ning signages. 8.Use of appropriate PPEs.

m obstruction. 2.Do not overload execessive weight.3.Do not er supervision. 5.Trained person to do the work. 6.Displyed loading .Use of PPEs.

per communication. 3) Training provided before starting of activity. 4) i) Instruction displyed on local languages. 6) Use of required PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard		(Y/N)	Existing control Measure	•		Severity	Probability	Risk score	Risk level	1
						Α	B	S	Р	(AXBXSXP)	RISK IEVEI	
67	Tile cutting by use of Tile cutting	Electrocution	Electric shock, ill health	Y	Use of goggle & ear plug	2	2	4	2	24	Tolerable	1. Use IS standard moving wheel
	machine	Wheel break	body injury	N		1	1	2	2	4	Trival	to cutting wheel. 3.Select proper
		Fly partical	eye injury	N		1	1	2	5	10	Tolerable	ELCB/ RCCB for electrical connect
		Contact with hand	Hand injury	N		1	1	2	2	4	Trival	work.9.Display work instruction i
68	POP work	Fall of person	Major injury	Y	Use of PPEs like helmet, safety	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Are
		Fall of material	Fracture	N	shoes, mask, goggles,	1	1	3	5	15	Tolerable	person. 4.Use of fully planked. 5.I
		Contact with chemical, c		N	handgloves etc	1	1	2	2	4	Trival	safety belt anchoragement. 7.Do electrical cable passing to scaffol
		Electrocution	Electric shock, ill health	Y	-	2	2	5	2	40	moderate	MSDS with COSHH in local langua
		Health hazards	Body injury	N		1	1	2	5	10	Tolerable	handling of chemical & COSHH. 1
69	Transist Mixer	Hit to person	Body injury	Y	Instruction hand out issue to all	2	2	5	5	100	moderate	1.Vaild driver licence. 2.Medical c
		Fall of material	Fracture	N	drivers	1	1	2	2	4	Trival	out provided to all vehicles. 5.Foll
		Break failure	Caught in between	N		1	1	2	5	10	Tolerable	applicable as per BOCW requiren
		Fall of vehicle	Fatalality	Y		2	2	5	2	40	moderate	XIV) 6.Always use wheel chock site. 8.Follow speed limit displa switch before starting of work
70	Formwork	Fall of person	Major injury	Y	TBT Training provided to all	2	2	5	5	100	moderate	1.Walkway should be clear. 2.Pro
		Fall of material	Fracture	N	Workers	1	1	2	2	4	Trival	3.Anchoragement provided for fix
		Caught in between	Hand injury	N		1	1	2	2	4	Trival	5.Protection of all edges barricat of lift shaft. 7.Proper supervision. 8.Trained person to do the work.
71	Chipping work	Contact with moving par	tHand injury	N	Nose mask provided to all	1	1	3	2	6	Trival	1. Use IS standard moving wheel
		Flying of particules	eye injury	N	engage workers.	1	1	2	2	4	Trival	to chipping wheel. 3. Use ELCB fo
		Electrical Shock	body injury may be fatal	Y		2	2	5	5	100	moderate	6.Regular inspection done. 7.Trai
		Wheel break	Body injury	N		1	1	3	2	6	Trival	installation by ring test.9Displye
		Noise	Hearing loss	N		1	1	2	5	10	Tolerable]
72	Use of Hydrolic Mobile Tower	Fall of material	Body injury	N	Use of PPEs & Third party done	1	1	2	2	4	Trival	1.Walkway should be clear. 2.Are
	crane	Fall of bucket or	major injury	N		1	1	2	2	4	Trival	4.Medical examination to be don
		shuttering material			-							provided with proper support. 7.1 starting of activity check all limit
		wire rope break	minor injury	N		1	1	1	2	2	Trival	Seat belt. 11. Fixing of nylon rope signal man. 13. Trained signal ma
		Collapse of structure	major injury	Y		2	2	5	2	40	moderate	16.Use ELCB/RCCB & regular chee
		hit by person	body injury	N		1	1	2	2	4	Trival	signages & load chart in local lang
		Fire	loss of property, body injury	Y		2	2	4	2	32	moderate	1
		Electrocution	Electric shock, ill health	Y		2	2	4	2	32	moderate	
73	Use of Farana	Fall of material	Body injury	N	Induction given to Farana	1	1	2	2	4	Trival	1.Walkway should be clear. 2.Ens
		wire rope break	minor injury	N	operator,	1	1	1	2	2	Trival	done. 4. Medical examination to b
		Collapse of structure	major injury	Y	Inspection done before entering	2	2	5	2	40	moderate	horn, head light, tail light & all ap
		hit by person	body injury	N	of new Farana & all documents	1	1	2	2	4	Trival	X/Maharashtra rules122 chapter
		Fire	loss of property, body injury	Y	will be checked	2	2	4	2	32	moderate	done on regular basis & record m
		Electrocution	Electric shock, ill health	Y		2	2	4	2	32	moderate	checked. 10.Provision of fire extir rope to all shifting material 13.Pr do the work. 15.Proper supervisio & Form no-11 inside Farana. 17.U

eel Only and ensure not to use after expirary date. 2.guard provided her base for tile. 4.Area barricaded. 5.Proper housekeeping. 6.use ection .7.Proper supervision. 8.Trained person to do the n in local languages. 10.Use of required PPEs.

Area cordon off. 3.Use of Proper safe scaffold inspected by competent 5.Do not stacked heavy & loose material at platform. 6.Provision of Do not store loose material in pheriphery of building. 8. Remove of all folding.9.Proper supervision. 10.Displayed of work instruction & guages. 11.Training to be conducted to all engaged workers regarding 1. 12.Use of PPEs

al check up done. 3.PUC & Insurance copy check. 4.Instruction hand follow general safety like reverse horn, head light, tail light & all rement (Central rules95 Chapter X/Maharashtra rules122 chapter for standing vehicles. 7.Always follow rules & regulation displyed at ayed at site. 9.Always check all switch, gear, brake, horn & required . 10.Proper supervision. 11.Training to all drivers. 12.Use of PPEs

Proper stagging should be provided with proper working platform. r fixing of safety harness. 4.All duct/ cutout, lift shaft properly closed. cation. 6.Provision of safety net for outside coloumn as well as inside on. 8.Displayed instruction & warning signages in local languages. rk.9.Use of PPEs

el Only and ensure not to use after expirary date. 2.guard provided for ele.connection. 4.Do not use joint cable. 5.Proper supervision. rained person to do the work. 8.Cracks should be checked before yed work instruction in local languages.10.Use of PPEs

Area should be barricaded. 3.Third party inspection should be done. one. 5.Use of good quality of crane material. 6.Proper base to be 7.Inspection done on regular basis & record maintaned 8.Before nit switch. 9.Provision of fire extinguisher in operator cabin. 10.Use of pe to all lifting material 12.Proper communication to operator & man provided.14. Train person to do the work. 15.Proper supervision. hecking of earthling. 17.Displayed instruction & safety warning anguages. 18.Use of PPEs

insure proper weather protection. 3. Third party inspection should be o be done. 5. Valid driving licence. 6. Follow general safety like reverse applicable as per BOCW requirement (Central rules95 Chapter er XIV) 7. Always use wheel chock for standing vehicles. 8. Inspection maintaned 9. Before starting of Farana all limit switch should be stinguisher in operator cabin. 11. Use of Seat belt. 12. Fixing of nylon Proper communication to operator & signal man. 14. Train person to ision. 16. Displayed instruction & safety warning signages & load chart 7. Use of PPEs

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard		(Y/N)	Existing control Measure			Severity	Probability	Risk score		1
					1 -	A	В	S	P	(AXBXSXP)	Risk level	
74	Installation of Fire pipe, plumbing	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Prop
	pipe, HVAC duct, IBMS cable at	Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	with proper tag provided. 4.Inspe
	ceiling & duct	Pain ,sprain	Body injuruy	N	1	1	1	2	2	4	Trival	working platform. 6.All electrical e
		Eletricution	Electric shock, ill health	Y		2	2	4	2	32	moderate	through proper height. 8.Anchore achoragement provided. 10.Ensur provided to all engaged workers. 2
89	Excavation for Pipe fixing & Chamber making	Collapse of structure	injury, casualty Injury ,Major cuts, casualty	у	Training conducted to all engaged workers.	2	2	5	3	60	moderate	1) Hard barrication provided 1 me 1.5 m. 3)Proper excavation slope
		Fall of person	Injury ,Major cuts, casualty	У		2	2	5	3	40	moderate	maintain clear. 6) Regular maintai workers. 8)Follow excavation wor
		Fall of vehicles		Y		-	-		J J	60	moderate	language. 10) Proper supervision.
		Failure of excavator	injury	N]	1	1	2	2	4	Trival	
		Electrocution	electric shok , ill health	Y		2	2	5	5	100	moderate	
		struck into	injury, casualty	N		2	2	5	3	60	moderate	
75	HVAC Duct making	Fall of person	Injury major cut casualty Injury ,Major cuts, casualty	Y	Inside area provided to making duct	2	2	5	3	60	moderate	1.Area barricaded. 2.Walkway obs technician is allowed for duct boxi
		Fall of material		Y		2	2	3	2	24	Tolerable	duct boxing work cotton hand glo
		Contact with sharp object	Injury major cut casualty	N	1	1	1	3	2	6	Trival	workmen.7.Ducting workman give
		Vibration hazard	Hand arm vibration syndrome (HAVS). & full body vibration	N		1	1	2	2	4	Trival	ensured.9.Display the sign of nois like ear plug, helmet, safety shoes
		Noise	Temporary disablement position, Hearing loss	N		1	1	2	2	4	Trival	
76	Duct insulation for nitrile rubber	Fire	loss of property	Y	Training to be conducted to all	2	2	5	5	100	moderate	1.Proper housekeeping. 2. Fire ext
		Contact with skin	Skin injury	N	engaged workers	1	1	3	2	6	Trival	helper should be present at the tin working of bitumen burn.5.All are bitumen Bern through to toolbox 8.Proper supervision. 9.Use of PPE
77	Piping Insulation	Fire	loss of property	Y	Training to be conducted to all	2	2	5	5	100	moderate	1.Proper housekeeping. 2. Fire ext
		Contact with skin	Skin injury	N	engaged workers	1	1	3	2	6	Trival	helper should be present at the tin working of bitumen burn.5.All are bitumen Bern through to toolbox 8.Proper supervision. 9.Use of PPE
78	Scrap Insulation material	Contact with sharp object	Injury major cut casualty	N	Separate srape yard provided	1	1	3	2	6	Trival	1.Area barricaded. 2.Walkway sho
		Health hazard	Body injury	N	1	1	1	2	5	10	Tolerable	collected. 4.Insulation scrap mate
		Fall of person	Injury major cut casualty	Y	1	2	2	5	3	60	moderate	yard. 5.Garbage shall provided at
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate maintained neatly 7.All electrical cab 8.Proper supervisi	maintained neatly. 6.Dustbin shal 7.All electrical cable connected wi 8.Proper supervision. 9.Training c activity in local languages. 11.Use
79	Piping & HVAC duct errection	Fall of person	Injury major cut casualty	Y	Proper platform provided	2	2	5	3	60	moderate	1.Load should be properly ascerta
		Fall of material	Injury major cut casualty	N]	2	2	3	2	24	Tolerable	before handling any equipment.2.
		Caught in between	hand injury	N		1	1	3	2	6	Trival	visual check must be check regard

Proper housekeeping. 3.Proper working platform or mobile scaffold spection done on regular basis. 5.Heavy material not stacked at cal equipement connect with ELCB/RCCB. 7.Electrical cable passing ore fasher used for supporting of pipe. 9.Proper Safety harness issure all duct closed properly. 11. supervision provided. 12.Training rs. 13.Follow work instruction. 14.Use of required PPEs.

meter away from excavation.2) Loose mateial not stacked with in pe maintained. 4) Emergency access provided. 5) All entry/ exit ntainance all vehicles & equipement. 7) Health check up done involve work permit system. 9) Excavation instruction displyed in local on. 11) Trainined person to do the work. 12) Use of PPEs

obstruction should be clear.3.Experience & trained ducting poxing.4.HSE induction is given to all ducting technician.5.During the gloves should be ensuring.6. Medical check up should be done to all given the knowledge of hearing hazard.8.Supervision is noisy area & instruction displyed to local languages. 10.Use of PPEs oes & handgloves.

extinguisher to be present near working area. 3.One person or e time of bitumen burn.4.Hot work permit has to be taken while the area is properly barricaded. 6.Workman to aware the hazard of pox meeting. 7.Warning sign should be displayed at working site. PPEs.

extinguisher to be present near working area. 3.One person or e time of bitumen burn.4.Hot work permit has to be taken while the area is properly barricaded. 6.Workman to aware the hazard of box meeting. 7.Warning sign should be displayed at working site. PPEs.

should be clear. 3.Wastes insulation scrap material shall be properly aterial collecting the one place, and fortnightly disposed the disposal at convenient location of the sites and this garbage hall be hall be provided to collect the various types of wastes separately. d with proper ELCB/RCCB & cable passing through proper height. g conducted to all workers. 10.Displayed various instruction related Jse of PPEs.

rtained to identify of center of gravity and load at slinging point t.2.Only certified lifting & haulage tackles, ropes, sling to be used as arding fitness of all these items.3.None of these should be

				Legal		N/E	Scale		Risk	rating		
Sr no	Activity/Task	Hazard	Risk	(Y/N)	Existing control Measure			Severity	Probability	Risk score	Disk laws	1
						A	B	S	Р	(AXBXSXP)	Risk level	
												overloaded. SWL should be clearly
												for steel wire rope.5 Loose bolts ducting structure.6.When a ducting
												lines.7.Tag lines should be used to
												beneath suspended load.9.Proper
												supervision. 11. Training conducte
												languages. 13.Use of PPEs.
80	Partition work	Fall of person	major injury	Y	TBT Training provided to all Workers	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Pro 4.Inspection done on regular basi
		Fall of Material	fracture	N		1	1	2	2	4	Trival	supervision provided. 8.Training p
		Electricution	Electric shock, ill health	Y	1	2	2	5	5	100	moderate	connect with proper ELCB. 8.All e
		Pain ,sprain	Body injuruy	N	-	1	1	2	2	4	Trival	of required PPEs.
81	False ceiling work	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Pro
		Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	4.Inspection done on regular basi
		Electricution	Electric shock, ill health	Y	1	2	2	5	5	100	moderate	supervision provided. 8. Training p
		Pain ,sprain	Body injuruy	N		1	1	2	2	4	Trival	connect with proper ELCB. 8.All e of required PPEs.
82	Joinery work	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Pro
		Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	4.Inspection done on regular basi
		Contact with chemical	Hand & body part injury	N		1	1	2	2	4	Trival	supervision provided. 8.Training p
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate	connect with proper ELCB. 8.All e
		Pain ,sprain	Body injuruy	N		1	1	2	2	4	Trival	MSDS displyed. 8.Use of required
83	Metal work of Frame work	Fly particles	Eye injury	N	PPEs provided to all workers	1	1	2	2	4	Trival	1.Area barricaded, 2.Walkway sho
		Fall of material	Fracture	N		1	1	2	2	4	Trival	4.All electrical lying with proper h
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate	workers. 7.Displyed of instruction
		Pain ,sprain	Body injury	N		1	1	2	2	4	Trival	
84	Polishing work	Fly particles	Eye injury	N	MSDS Training given to all	1	1	2	2	4	Trival	1.Area barricaded, 2.Walkway sho
		Contact with chemical	Body part injury	N	engaged workers	1	1	2	2	4	Trival	4.All electrical lying with proper h
		Electricution	Electric shock, ill health	Y]	2	2	5	5	100	moderate	workers. 7.Displyed of instruction
		Pain ,sprain	Body injury	N		1	1	2	2	4	Trival	1
85	Glass panneling	Fall of person	major injury	Y	TBT Training provided to all	2	2	4	5	80	moderate	1.Walkway should be clear. 2.Pro
		Fall of Material	fracture	N	Workers	1	1	2	2	4	Trival	4.Inspection done on regular basi
		Pain ,sprain	Body injury	N		1	1	2	2	4	Trival	supervision provided. 7.Training p required PPEs.10.Use of good qua
86	Use of gypsum	Fly particles	Eye injury	N	MSDS Training given to all	1	1	2	2	4	Trival	1.Walkway should be clear. 2.MSI
		Health hazard	contact with chemical	N	engaged workers	1	1	2	2	4	Trival	supervision.5. Instruction board d
87	Fabrication work or yard	UV /IR radiation	eye injury	N	Use of face sheild	1	1	3	5	15	Tolerable	1.All Flammable & inflammable m
		Contact with hot object	hand, arm injury	N		1	1	3	5	15	Tolerable	fabrication yard or work area .2. S
		Electrocution	Electric shock, ill health	Y		2	2	4	5	80	moderate	extinguishers etc should be kept i

arly marked.4.. Pulley block suitable for fiber rope should not be used olts, nuts, welding bits and tools must be kept in boxes in not on icting is erected, it should be kept in vertical position using 2 tag d to controlling the load.8.. No person should walk, stand, or work per working platform provided with prag system. 10.Proper icted to all engaged workers. 12.Instruction displayed in local

Proper housekeeping. 3.Proper working platform provided. asis. 5.Heavy material not stacked at working platform. 6.Proper ng provided to all engaged workers. 7.All electrical equipement Il electrical cable should be proper height. 9.Follow instruction. 8.Use

Proper housekeeping. 3.Proper working platform provided. asis. 5.Heavy material not stacked at working platform. 6.Proper g provided to all engaged workers. 7.All electrical equipement I electrical cable should be proper height. 9.Follow instruction. 8.Use

Proper housekeeping. 3.Proper working platform provided. hasis. 5.Heavy material not stacked at working platform. 6.Proper ng provided to all engaged workers. 7.All electrical equipement Il electrical cable should be proper height. 9.Follow instruction & red PPEs.

should be clear. 3.All electrical equipement connected with ELCB. er height. 5.Proper supervision. 6.Training conducted to all engaged ion board in local languges. 8.Use of PPEs

should be clear. 3.All electrical equipement connected with ELCB. r height. 5.Proper supervision. 6.Training conducted to all engaged ion board in local languges. 8.Use of PPEs

Proper housekeeping. 3.Proper working platform provided. asis. 5.Heavy material not stacked at working platform. 6.Proper ng provided to all engaged workers.8.Follow instruction. 9.Use of quality material

/ISDS displyed. 3.Training of MSDS conducted to all workers. 4.Proper d displyed in local languages. 6.Use of required PPEs

e material from the area should be removed & kept 5 m away from 2. Sufficient number of water / sand buckets/ portable fire pt in fabrication work or yard . 3. Welder should watch the fire after

Sr no	Activity/Task	Hazard	Risk	Legal	Existing control Measure	N/E	Scale	Risk rating				
				(Y/N)		•		Severity	Probability	Risk score	Disk laws	1
						A	В	S	Р	(AXBXSXP)	Risk level	
		Fire	Burn injury	Y		2	2	4	2	32	moderate	30 minutes of completion of job. required to be carrying out on die shielded from falling down in cas material. 6. Job should be consta possible screen shall be used to a Use ELCB for Ele.connection. 9.Pr work. 12.Medical should be check arrestor/NRV to both end of gas position. 16.Do not mixed with A
87	Unloading of 15 tonn Transformer	Fall of Person	Major injury	Y	Training provided to all	2	2	5	5	100	moderate	1. Work permit must be issued be
0,	by use of Mobile crane	Fall of material	Fracture	N	workers.All applicabe doc like medical examination of driver, licence & third party inspection record checked before starting of unloading work	1	1	2	2		Trival	specialised training to be given be on the job.4.First Aid materia
			hand injury	N		1	1	2	2		Trival	
		Toppling of mobile crane		Y		2	2	5	5	100	moderate	during the work.6. Equipments / ⁻
			Electrical shock	Y		2	2	5	5	100	moderate	Communication system provided
		Sprain, pain or hiiting to p		N		1	1	2	2		Trival	examination check to mobile oper third party .12.Remove of all Elec supporting of transformer. 13.U
108	Unloading of Electical panel, 33KV HT panel by use of Farana	Fall of person	Major injury	N	Induction given to Farana operator, Inspection done before entering of new Farana & all documents will be checked	1	2	5	5	50	moderate	1.Walkway should be clear. 2.En done. 4.Medical examination to
		Fall of material	Fracture	N		1	1	2	2	4	Trival	
		Caught in between	hand injury	Y		1	1	2	2	4	Trival	horn, head light, tail light & all ap
		wire rope break	minor injury	Ν		2	2	5	2	40	Trival	X/Maharashtra rules122 chapt done on regular basis & record checked. 10.Provision of fire ex
		hit by person	body injury	Y		2	2	4	2	32	moderate	
		Electrocution	Electric shock, ill health	Y		2	2	5	5	100	moderate	rope to all shifting material 13.Pro do the work. 15.Proper supervisio & Form no-11 inside Farana. 17.U
88	10Mva work by use of Farana	Fall of person	Major injury	N	Induction given to Farana	1	2	5	5	50	moderate	1.Walkway should be clear. 2.Ens
		Fall of material	Fracture	N	operator,	1	1	2	2		Trival	done. 4. Medical examination to b
		Caught in between	hand injury	Y	Inspection done before entering	1	1	2	2	4	Trival	horn, head light, tail light & all ap
		wire rope break	minor injury	N	of new Farana & all documents – will be checked –	2	2	5	2	40	Trival	X/Maharashtra rules122 chapter
		hit by person	body injury	Y		2	2	4	2	32	moderate	done on regular basis & record m checked. 10.Provision of fire extir
		Electrocution	Electric shock, ill health	Y		2	2	5	5	100	moderate	rope to all shifting material 13. do the work. 15.Proper supervi & Form no-11 inside Farana. 17

bb. 4. Special care should be taken if any welding & gas cutting diesel /chemical paint tanks or pipe lines. 5.welding slag should be case Overhead welding and should be sealed with non-Combustible stantly supervised and all precautions should be followed strictly.7. If o avoid health hazard of the persons who are working in that area.8. .Proper lug used. 10.Provided Earthling. 11.Trained person to do the eck. 13.Proper supervision. Use of PPEs. 13. Use trolley, flash back cas cutting set. 14.Do not play the cylinder. 15.Always store upright a Actetylene & oxygen cylinder. 17.Proper identification displyed.

I before starting of work, with proper information.2.Tool Box talk & to the persons before starting of the work.3. Trained persons must ial should be available at the work place.5.Strict Supervision required 5 / Tools / PPE should be in Good condition & to be checked.7.Proper led.8. .Proper housekeeping. 9.Valid driver licence. 10.Medical operator 11.Ensure all lifting tools & tackles should be inspected to lectrical connection. 11 Area barricaded. 12.Use of Nylon rope for Use of PPEs.

Ensure proper weather protection. 3. Third party inspection should be to be done. 5. Valid driving licence. 6. Follow general safety like reverse applicable as per BOCW requirement (Central rules95 Chapter ter XIV) 7. Always use wheel chock for standing vehicles. 8. Inspection at maintaned 9. Before starting of Farana all limit switch should be extinguisher in operator cabin. 11. Use of Seat belt. 12. Fixing of nylon . Proper communication to operator & signal man. 14. Train person to ision. 16. Displayed instruction & safety warning signages & load chart 7. Use of PPEs

Ensure proper weather protection. 3. Third party inspection should be to be done. 5. Valid driving licence. 6. Follow general safety like reverse applicable as per BOCW requirement (Central rules95 Chapter ter XIV) 7. Always use wheel chock for standing vehicles. 8. Inspection I maintaned 9. Before starting of Farana all limit switch should be stinguisher in operator cabin. 11. Use of Seat belt. 12. Fixing of nylon . Proper communication to operator & signal man. 14. Train person to ision. 16. Displayed instruction & safety warning signages & load chart 7. Use of PPEs

	Activity/Task		Risk	Legal (Y/N)	Existing control Measure	N/E	Scale	Risk rating				
Sr no		Hazard						Severity	Probability	Risk score	Disk law 1	
						A	B	S	P	(AXBXSXP)	Risk level	
89	Dewattering	Electricution	Electrical shock	Y	Hard barrication provided, Using	2	2	5	5	100	moderate	1.Walkway clear. 2.Always materi
		Noise hazard	Ear injury	N	for shifting of pump in inside of	1	1	2	2	4	Trival	provided. 4. All electrical connecti
		Fall of person	Body injury	Y	excavation	2	2	5	5	100	moderate	supervision. 7. Training conducted
		Caught in between	Hand injury	N	1	1	1	2	2	4	Trival	9.Use of appropriate PPEs
		Fire	Burn	N	1	1	2	4	2	16	Tolerable	1
90	Waterproofing on top floor	Fall of person	Major injury	Y	PPEs provided to all workers	2	2	5	5	100	moderate	1.Do not allowed to seat on edges regarding MSDS. 3. Always displye engaged workers. 5.Do not stackir electrical cable lying on proper hei
		Contact with chemical	Body injury	N		1	1	2	2	4	Trival	
		Fall of material	Body injury	N		1	1	2	2	4	Trival	
		Fire	Burn injury	Y		2	2	4	2	32	moderate	
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate	with ELCB/RCCB. 10.Proper super
		Fly particles like Chemica		N		1	1	2	2	4	Trival	1
91	Waterproofing inside of water	Contact with chemical	Body injury	N	TBT conducted to all engaged worker	1	1	2	2	4	Trival	1.Ladder provided. 2.Walkway fre
	tank	Fall of person	Body injury	Y		2	2	5	5	100	moderate	workers provided. 5.Proper illumi
		Fall of material	Body injury	N		1	1	2	2	4	Trival	work permit issued. 8.All electrica
		Fire	Burn injury	Y		2	2	4	2	32	moderate	10.No smoking insided of water ta
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate	12.Proper supervision. 13.Work ir
		Fly particles like Chemica	Eye injury	N		1	1	2	2	4	Trival	1
		Health hazard/Unconsiou	Vomiting & minor injury	N		1	1	2	2	4	Trival	1
92		Fall of person	Body injury	Y	TBT conducted to all engaged	2	2	5	5	100	moderate	1.Ladder provided. 2.Walkway fre workers provided. 5.Proper illum work permit issued. 8.All electrice
		Fall of material	Body injury	N	worker	1	1	2	2	4	Trival	
		Fire	Burn injury	Y		2	2	4	2	32	moderate	
		Electricution	Electric shock, ill health	Y	1	2	2	5	5	100	moderate	10.No smoking insided of water ta
		Fly particles like Chemica	Eye injury	N	1	1	1	2	2	4	Trival	displyed. 13.Use of PPEs
		Health hazard/Unconsiou	Vomiting & minor injury	N		1	1	2	2	4	Trival	1
93	Material shifting inside of water tank	Fall of person	Body injury	Y	TBT conducted to all engaged worker	2	2	5	5	100	moderate	1.Ladder provided. 2.Walkway fre workers provided. 5.Proper illum work permit issued. 8.All electrica 10.No smoking insided of water t displyed. 13.Use of PPEs. 14.Prop
		Fall of material	Body injury	N		1	1	2	2	4	Trival	
		Fire	Burn injury	Y		2	2	4	2	32	moderate	
		Electricution	Electric shock, ill health	Y		2	2	5	5	100	moderate	
		Fly particles like Chemica	Eye injury	N		1	1	2	2	4	Trival	
		Health hazard/Unconsiou	Vomiting & minor injury	N		1	1	2	2	4	Trival	
94	Bitumen Burn	Health Hazards	Explosion, Skin injury	Y	Adquate supervision shall be provided	2	2	3	3	36	Trival	1. Housekeeping should be done r
		Fire hazards	or Property damage									the working on bitumen burn from
												betumen work. 4. Necessary PPE
												should be present near work.6. O
												burn.7. Workmen to aware the habe properly barricaded.9. Bitumer
												be property barricaded.5. Bitumer
95	DG set			N	1. Insulated cable joints. 2. Fire	2	1	3	3	18	Tolerable	1. Male-female coupler for cable j
55		Open un insulated joints of electrical contacts	Electrical shock		extinguisher provision.	-	-			10		given to all workmen
96	Erection Works	Material struck to person		N	Tag line/Guide Line is provided for Un loading/Shifting works. Work permit system. Load	2	1	4	3	24	Tolerable	1. Lifting/erection plan to be made
				1								should be conducted. 4. PPE's to b
												checked and ensured validity. 6. C
					calculation for material shifting.							barricading to be done. 8. Area level
												statement to be prepared as pe th
		Fall of material	Body injury, property dama	a								
		Toppling of crane	Fall of crane									
				1			1	1				

terial stack 1.5 meter away from excavation pit. 3.Proper earthing ection with ELCB/RCCB. 5.Provided proper access & egress. 6.Proper ted to all engaged workers. 8.Wok instruction & signages displyed.

lges of building. 2.Training conducted for all engaged workers plyed First aid measure in local languges. 4.Face mask provided to all cking loose material in phereiphery building. 6.Do not smoking .7.All height. 8.Use proper industrial socket. 9.All electrical board connect pervision. 11.Work instruction & signages displyed. 12.Use of PPEs

free from obsrtuction. 3. Soft barrication provided. 4.One stand by umination provided. 6. Proper ventillation provided. 7.Confined space rical board connect with ELCB/RCCB. 9.Fire extinguisher provided. er tank. 11.MSDS training conducted to all engaged workers. rk instruction & signages displyed. 14.Use of PPEs

free from obsrtuction. 3. Soft barrication provided. 4.One stand by umination provided. 6. Proper ventillation provided. 7.Confined space rical board connect with ELCB/RCCB. 9.Fire extinguisher provided. er tank. 11.Proper supervision. 12.Work instruction & signages

free from obsrtuction. 3. Soft barrication provided. 4.One stand by umination provided. 6. Proper ventillation provided. 7.Confined space rical board connect with ELCB/RCCB. 9.Fire extinguisher provided. er tank. 11.Proper supervision. 12.Work instruction & signages roper communication

ne near bitumen burn area.2. Hot work permit has to be taken while from SPCL.3. Experience & trained workmen shall be deployed for PE should be given to all workmen.5. Fire extinguisher or fire bukets 6. One person or helper should be present at the time of bitumen e hazards through to TBT or special training.8. All working area shall men burn area should be covered by shed.

ble joints. 2. Fire extinguisher provision.3. Necessary PPE should be

nade. 2. Load chart to be prepared before starting of the work. 3. TBT to be provided. 5. Test certificate of lifting tools & tackles to be 6. Operators medical examination of operators to be done. 7. Area a leveling should be done for proper access. 9. Safe work method e the activity plan.

	Activity/Task			Legal		N/E	Scale		Risk			
Sr no		Hazard	Risk	(Y/N)	Existing control Measure	А	В	Severity Probability		Risk score	Disk i	1
								S	P	(AXBXSXP)	Risk level	
97	Housekeeping	Dust generation, fly mate	eye irritation, inhilation problems	N	Tool box talk, use of safety goggles, nose mask.	1	1	1	2	2	Trival	Tool box talk, use of safety goggle Man movement to be restricted in
98	Fixing of sheet	Fall of person Fall of material Tripping Hazard Eletrocution	Injury, Fatility Material damage fall of person due to obstace Electrical shock	Y	Work permit system, Area barricading, safe working method statement, scaffolding staging with ladders for access,	2	4	4	3	96	moderate	1. Area barricading. 2. ccess shou ELCB/RCCB at panel board to avo authority. 5.Ladder provided for s line dully tied with stable structur work. 8. Tool box talk before start before starting of the work for he
99	Scaffolding erecting and dismantling	Collapase of scaffolding,	Material damage Material damage minor injury, major injury Material damage	Y	 Ensure scaffolding is erected as per standard. Ensure stability of scaffold before Starting the work. Green tag is displayed. Scaffold to be erected on leveled surface. Ensure scaffolding is in good condition 	2	4	3	3	72	moderate	 Ensure scaffolding is erected as Ensure stability of scaffold before Starting the work. Green tag is displayed. Scaffold to be erected on levele Ensure scaffolding is in good co like safety helmets, full body harr Proper supervision Training to be provided to worl Area should be barricaded.
100	Concreting by using concrete bucket by farana	Fall of bucket. Fall of concrete Fall of person from height	Equipement damage Soil contamination Injury to person	Y	1. Area Barricading. 2. Full body harness for workers at height. Work permit system.	2	2	2	2	16	Tolerable	1. Work method statement should be done. 4. Work permit should b should be prepared and attached avoid soil contamination and othe
101	Fixing of Roof ventilator	fall of material fall of person Eletrocution	Material damage Injury to person Electrical shock	Y	Work permit system, Area barricading, safe working method statement, proper insulated electrical connections and wires.	2	2	3	2	48	moderate	1.Work permit system.2. Area bar electrical connections and wires.5 operators. 7. Vertigo test for heig panel board. 8. Daily inspection cl

gles, nose mask., training to be provided for safe work. Proper PPEs. d in the area where housekeeping is going on.

nould be kept clear3. Use double insulated electrical connection cable, avoid electruction. 4. Height Work Permit takes from conserned or safe access.6. Use full body harness with double layn yard and life cture for fall protection. 7. Work method statement prior to start of tart of work. 9. Virtigo test by surgeon for the workers/operators r height work.

d as per standard.

veled surface. d condition. 6. Ensure use of PPEs arness with double lanyard, fall arrestor, safety shoes, etc.

orkers.

ould be made before starting of the work. 3. Area barricading should d be taken before starting of the activity.5. Working activity plan and with work permit. 6. Concrete spillage should be controlled to other environment hazards.

barricading.3. safe working method statement4. proper insulated s.5. Test certificate of tools & tackels. 6. Medical examination of eight test of the workers. 8. Provision of ELCB/RCCB at electrical a check list for the activity. 9. Proper supervision.