THANE MUNICIPAL CORPORATION
FIRE HAZARDS RESPONSE AND MITIGATION PLAN

GENERAL

Thane is located on Salsette Island to the Northeast of Mumbai. Spanning an area of about 147 km², the city is located at an elevation of 7 meters above sea level. Thane is bordered by the Yeoor Hills on one side and is dotted with numerous beautiful lakes, which are a cause of cooler weather than that of Mumbai. It is divided by Thane Creek, a stream of water from the Ulhas River and Arabian Sea forming an estuary. Two road bridges & one Rail Bridge connect the two parts of the city. The city has around 30 lakes. The most beautiful of them is the Masunda Talao, also known as Talao Pali. It is one of the oldest cities of India with its history dating back to about 2000 years.

The city has an area of 147 km2 and as per 2001 census the population of the district is 1,261,517 and its density is 8,582 /km2 (22,227 /sq mi). At present the city is becoming increasingly cosmopolitan. Because of the huge residential boom, the city has witnessed a large number of immigrants from the neighboring city of Mumbai as well as from other pockets of state and country.

Thane has a long history; other than British, Portuguese were the longest rulers. The Portuguese came to Thane about 1530 and ruled for over 200 years till 1739. Thane was then known as Cacabe de Tana. The Marathas, Chimaji Appa, the brother of Peshwa Bajirao I conquered Bassein and Thane in 1737 and 1739. For about sixty-four years, from 1739 to 1802 Vasai remained under the Maratha. In 1802 by the Treaty of Vasai it became a British possession & in 1818 it was incorporated in the Bombay Presidency. They made Thane the headquarters of the district administration with a district collector stationed in Thane. The Thane Municipal Council was formed in 1863 when the city had a population of 9000 people only.

Brief History of Fire Brigade of Thane

In 1949-50, Thane Borough Municipality created a Fire Service Cell. The Cell was in its organic state. It was overlooked by the Water Department of the Borough Municipality. The cell of 16.5 Sq. Km. possessed one Fire Engine, an old Chevrolet vehicle on which five firemen were recruited. At that time the incumbent of the posts also attended to the duties of watchmen and the fire engine was maintained by the plumber. Sirens were blown to alarm the citizens, on receiving calls of fire. The fire calls were attended by the firemen (cum watchmen) who were assisted by the other works of the Municipality. At the times of crisis, help was sought from the Church by ringing the Church bell to give wide fire alarm.

In 1958, after encountering three big incidences of fire in the city, a need was felt to establish an independent Fire Brigade Department. Thus in 1960 the Thane Fire Brigade Department was established. Two Officers of the Municipality Ex. Chief Fire Officer and Ex. Dy. Chief Fire Officer was deputed to receive training on fire services in the Nation Fire Service College, Nagpur. Since then the two officers have taken the lead in grooming this department and attending to fire and emergency calls in Thane Over the period the department has gradually expanded. Today it proudly stands on 149.05 Sq. Km. area of Thane Municipal Corporation. The Chief Fire Brigade Officer is In-charge of this Department of Fire Services of Thane Municipal Corporation.

Currently, there are five Fire Stations within the limit of the Thane Municipal Corporation. The sixth Fire Station has recently constructed and is ready for commissioning. Apart from these Stations, adjoining to the Then Municipal Corporation area all the Municipal Corporations like Greater Mumbai-Municipal Corporation, Navi Mumbai Municipal Corporation, Kalyan-Dombivali Municipal Corporation, Bhiwandi-Nijampure Municipal Corporation, and Mira Bhayinder Municipal Corporation have independent fire units.

In past five decades, Thane Fire Brigade has attended all sorts of emergency calls made within the area that comes under the Thane Municipal Corporation jurisdiction as wells a from the localities that positioned in close vicinity, under specific conditions. Nevertheless with growing immigration from within the State as well as the other States, the population of Thane is expanding so are the challenges. To meet these challenges and provide better services, Thane Fire Brigade feels the need to be better equipped.

Vision

" To raise the level of prevention and preparedness so as to minimize loss of life and property in the city from fire and non-fire emergencies, to include safety consciousness among the general public, either at the place of work, home or public gatherings." Government of Maharashtra had given the directives to prepare & submit Fire Hazards Response and Mitigation Plan for the department.

Thane Municipal Corporation, Thane

FIRE HAZARDS RESPONSE AND MITIGATION PLAN

The Fire Hazard Response and Mitigation plan is being provided below for Thane Municipal Corporation which is prepared on the basis of guidelines which are given by National Disaster Management.		
1	Name of City	Thane Municipal Corporation, Thane, Maharashtra.
2	Population of City as per 2001 Census	12,61,517 (Twelve Lacs Sixty One Thousand Five Hundred Seventeen) 25% of the population is to be added in 2001 census to get the approx. population for the year of 2010 which is equal to roughly 15,76,897.
3	Area of City (In Sq.Kms.)	149 Sq.Kms
4	Density of Population in the City :	1) 8467 per Sq.Kms. (as per 2001 ensus) 2) 10584 per sq. Kms. (as per 2010 approx. population)
5	Vulnerability Analysis of the city : (Mention all the relevant possible hazards)	Details are given in Annexure ï "A" (Page No. 20)
6	Name of the Authority maintaining Fire & Emergency Services i.e. State Fire & Emergency Service/ Local Self Government such as Municipal Corporation / Municipal Council with its detailed Address, District & Pin-code	Thane Municipal Corporation, Mahapalika Bhavan, Dr. Almeda Road, Chandanwadi, Panchpakhadi, Thane (West), Pin : - 400602 Tel : (022) 25331590 / 25331280
7	Deficiencies on the basis of the SFAC norms. a) One fire engine for 50,000 population; b) One fire station for 10 sq. Km Urban area; c) One fire station for 50 sq. Km Rural area; and d) Response time maximum 5 minutes in Urban Area and 20 minutes in Rural area.	Required fire stations and fire engines for the corporation are calculated on the basis of current S.F.A.C. norms and existing potential hazards. The gap analysis of these (Fire Stations & Fire Engines) is attached in Annexure ï "B" (Page No. 22). Accordingly the required funds for the development of the department is attached in Annexureï ñRò(Page No. 82)

8	State Level Nodal Authority for Fire Services (in case Fire Services is not provincialised)	Director, Fire & Emergency Services Govt. Of Maharashtra, Mumbai.
9	. Head of Fire & Emergency Service :	
	▪ Name:	Shri. Arvind Prabhakar Mandke
	▪ Designation:	Chief Fire Officer
	▪ Address with Pin code:	Panchapkhadi Fire Station, Near Nitin Company, Panchapakhadi Thane (W) Pin : 400 602
	▪ Telephone No. (with STD Code):	022- 25331264
	▪ Fax No.:	022- 25331264
	▪ Mobile No.:	09969201541
	▪ E-Mail:	mandkea@yahoo.co. in
10	Details of the Emergency Operation Centre (DDMA)of the concerned city : ▪ Address with Pin code: ▪ Telephone No. (with STD Code): ▪ Fax No.: ▪ E Mail:	Details of the Emergency Operation Centre are given in Annexure ï "C" (Page No. 25)
11	Whether Fire & Emergency service is governed by Any Fire Act or other Act and Rules, if not, how you are going to enforce preventive steps ?	Details are given in Annexure ï "D" (Page No. 25)
12	Calendar for the fire safety training and awareness programme for the public. This should be so designed as to cover majority of the population in the vulnerable area of jurisdiction.	Details are given in Annexure ï "E" (Page No.27)

13	Plan and calendar of evacuation drills/ mock drills in vital installations/ industrial plants/ Government buildings / schools and critical infrastructure like hospitals, etc.	Details are given in Annexure ï "F" (Page No. 28)
B	**Risk Assessment, Incident Prevention & Mitigation of City :** (Risk Evaluation and Control Plan)	
14	Plan for compulsory Fire Hazard evaluation of all types of buildings old and new .	Details are given in Annexure ï "G" (Page No. 35)
15	Plan for enforcement of Fire Approvals as per the Provisions contained in National Building Code 2005 for new constructions.	Details are given in Annexure ï "H" (Page No. 36)
16	Plan how data of all fire approvals are maintained in the headquarters or at the central data setup.	Details are given in Annexure ï "I" (Page No. 37)
17	Plan for introducing and enforcing Development Control Rules of the city for new development projects.	Details are given in Annexure ï "J" (Page No. 38)

18. The details of Potential Fire Risk in the City

SL.	particulars	Nos.	
		Residential	**Non-Residential**
1.	**Buildings**	1. Fire approvals for the residential buildings which are above 25 m in height and for all the special buildings are given by this department. 2. As per sanction Development Control Rule (Table No.16- 2(e) buildings above 92 m in height are not permissible within the limit of Thane Municipal Corporation.	
	Upto 15 Meters		
	15 to upto 24 Meters		
	Above 24 to upto 36 Meters		

SL.	particulars	Nos.	
		Residential	Non-Resdential
	Above 36 to upto 45 Meters	3) Year wise details of the fire approvals of last 5 years are as follows 1. 2005-06 - 141 2. 2006-07 - 158 3. 2007-08 - 162 4. 2008-09 - 134 5. 2009-10 - 185 6. 2010-11 - 69 Up to Dated Oct. 2010	
	Above 45 to upto 60 Meters		
	Above 60 to upto 75 Meters		
	Above 75 to upto 100 Meters		
	Above 100 to upto 150 Meters		
	Above 150 Meters above.	Building above 92 mtr is not permissible	
2.	Industrial Area / Chemical Zone	Yes - Wagle Industrial Area and certain pockets of Balkum & Kolshet village covers the chemical zone.	
3	Cinema Halls/ Malls/ Drama Theators	Yes - 06 cinema hall and 03 multiplexes, 06 malls and 01 drama theatres.	
4	Public Gathering Places	Yes - Cinema halls , Multiplexes, Malls, Stadium , Railway Stations Bus Stands, Auditorium,	
5.	Hazards storage	N.A	
6.	Pilgrims Area (Floating Population)	Not significant	
7.	Exhibition/ Public Function Grounds where permission for erecting pendals for circus or any other religious / social functions are granted.	Permissions are granted for erecting pedals for circus or any other religious / social functions etc for a temporary period.	
8.	Other (Please give details)		

Note:- All building should be sub-classified on the basis of following classification as per Part 4 of NBC 2005:

A) Residential Buildings

a) Lodging or Rooming Houses

b) One or Two Family private Dwelling

c) Dormitories

d) Apartment Houses (Flat)

e) Hotels

f) Hotels (Starred)

B) Educational Buildings a) School upto Senior Secondary Level b) All Other Training Institutes		
C) Institutional Buildings a) Hospitals & Sanatoria b) Custodial Institutions c) Penal & Mental Institutions		
D) Group D Assembly Buildings **E) Group E Business Buildings** **F) Group F Mercantile Buildings** **G) Group G Industrial Buildings** **H) Group H Storage Buildings** **I) Group J Hazardous Buildings**		
19	**Road Map of the City with the following details :**	
	a) Any major National Highway passing through City	Yes, 1) National highway No. 4 i.e. Mumbai Pune having the stretch of App. 15 Km in the limits of Thane Municipal Corporation. 2) National Highway No. 3 i.e. Mumbai Agra having the stretch of App. 10 Km in the limits of Thane Municipal Corporation.
	b) Any State Highway passing through City	No
	c) Any Tunnels in the City	Yes, Railway Parsik tunnel Approx. 750 mtrs in length
	d) Major Bridges in the City	Yes, 1. ñKasheliò - Approx. 1 km. 2. ñKalva,Nishik by passòï Approx.200 m 3. ñVitava Railway Bridgeòï Approx. 300 m 4.òMumbra Railway Bridgesò- Approx. 50m 5.òKopariòï Approx. 50 m 6. ñChendaniòï Approx. 50 m
	e) Accident prone patches	ñGhodbandar Roadò, ñMumbra by - pass roadò, and ñAll Highwaysò
	f) Roads in Hilly Areas or Hilly/Mountain Area in the City or near City	Some part of ñGhodbandar Roadò, ñMumbra by- pass roadò& ñYeur Village Road.

	g) And other related information	City is also covered by low lying areas where chances of logging water is more. Major low lying pockets are: a. Vartak Nagar b. Naupada ï i. Telephone Exchange ii. Reserve Bank Colony (Gawand Path) iii. Kopri Bridge c. Agra Road i. Vandana Talkies ii. Lokmanya Society iii. High Corner Surve Wadi d. Kopri Colony ï Prem Nagar e. Wagle Estate ï Kisan Nos. 2 & 3 f. Karvallo Nagar g. Kapur Bavdi ï Naupada h. Shrirang Society ï Majiwade Area. i. Diva
20	**Railway Network**	
	a) Mail/Express Train main stations	Thane Railway Station Approx. 2 .50 Lakhs. Passengers use the platform every day.
	b) Local Train stations	Thane, Kalwa, Mumbra, & Diva.
	c) Metro train stations	Proposed (Route is not yet final)
	d) Underground Metro stations	Will be proposed in future
	e) Sky Bus	Will be proposed in future
	f) Mono Rail	Proposed (Route is not yet final)
21	**Airport**	
	a) Domestic	Not in existence
	b) International	Not in existence
	c) Cargo	Not in existence
	d) Helipad	Kaneri and Kolshet Air Force Airbase. Where they have their own helipads. As and when required temporary helipads are erected in

		ñCentral Maidan and in the Raymond Company premises.òOr as per the directives of Police or PWD.
	e) Air force Airbase	Kaneri and Kolshet Air Force Airbase.
22	**Sea / River Port**	
	a) Passenger Jetties	NO
	b) Container Jetties	NO
	c) Bulk Material Handling Jetties	NO
	d) Petroleum Products Handling Jetties	NO
	e) Chemical & Hazardous Goods Handling Jetties	NO
	f) Fishing Jetties	NO
	g) Ship Breaking Areas	NO
	h) Ship Building Docks	NO
	i) Naval Base	NO
	Additional Information	Geographically North-East portion of the Municipal Corporation is covered by creek. Major pockets of the creek in the city are Gaimukha, Waghbil, Kolshet, Kalwa, Vitava, Kopari, Parsik, Mumbra, Diva etc.
23	**Vital Installations in the City**	
	a) Secretariat	NO
	b) Legislation Assembly	NO
	c) Bank Headquarters	NO
	d) Headquarters of major Government and Semi Government Organisations	Collector Office, Municipal Commissioner Officer, Police Commissioner Office, R.T.O., Office, Mental Hospital, Civil Hospital
	e) Atomic Power Station	NO
	f) Chemical Factories	Hardly few (not more than 3 to 5)
	g) Fertiliser Plants	NO
	h) Major Hazardous Units	Hardly few M.A.H. industries are in existence. These industries are either sick units or close down.

	i) Cross Country Pipelines	Yes 1. Mumbai Manmad Pipe line. 2. 40% pocket of the city are laid & commissioned by the M.G.P.L. 3. M.G.L. has laid down the P.N.G. as well as C.N.G. pipelines in the city.
	j) Petroleum Oil Companies like Refinery, Bulk Storages Depot,	NO
	k) Petroleum & Flammable Gas, LPG filling Stations	NO
	l) Domestic Gas Pipe Network	Mahanagar Gas Pipe Line
	m) Cylinder Gas Storage-outlets	Approx. 15 Outlets are located in a different pockets of the city, where the storage of domestic / commercial L.P.G. cylinders are done.
	n) and such other points	
24	**Temporary Structures such as Exhibition Halls, Circus tent, Pedal erected for religious activities .**	1. Temporary structure are erected in the city of corporation for Exhibition Halls, Circus tent and Pedal. 2. Permissions for such type of temporary structures are granted only in the open grounds. 3. The conditions which are mention in IS 8758 is strictly adhere while erecting such structures. 4. Approx. 300 permissions per annum are granted by this department for erecting the temporary structure. 5. Permissions for erecting temporary structure are given to the concern applicant.
25	**Dilapidated & Unsafe Buildings in the City.**	Ward vise list of depilated and unsafe buildings of the entire corporation is attach herewith Annexure ï "K". (Page No. 39)
26	**Unorganised Houses like Juggi Zopadi & Slum Area.**	Ward vise list of Unorganised Houses like Juggi Zopadi & Slum Area of the entire corporation is attach herewith Annexure ï "L". (Page No. 39)
27	Details of other hazards that exist in the city and plans for response and mitigation accordingly. Hazards like Geological, Metrological, Biological, Human Caused, International and Technological.	The details of other hazards that exist in the city and plans for response and mitigation is attached herewith in Annexure No. ñMò(Page No. 40)
A	**Geological Hazards Associated with City** :	
	a) Earthquake	Yes
	b) Tsunami	Yes
	c) Landslide, Mudslide, Subsidence	Yes
	d) Glacier, Iceberg	NO

B	**Meteorological Hazards Associated with City :**	
	a) Flood, Flash Flood, Tidal Surge	Yes
	b) Drought	No
	c) Fire (Forest, range, urban, wild land	Yes
	d) Snow, Ice, Hail, Avalanche	No
	e) Windstorm, tropical, cyclone, hurricane, tornado, water spout, dust/ sand storm.	Yes
	f) Extreme temperatures (Heat, cold)	$40^{o}C$ - $22^{o}C$
	g) Lightning strikes	Yes
	h) Famine	No
	i) Geomagnetic storm	No
C	**Biological Hazards Associated With City**	
	a) Emerging diseases that impact human or animal (Swine-flu, Malaria, Birds flu, Plague Smallpox , Anthrax, Foot & Mouth Disease.)	Yes
	b) Animal or Insect infestation or damage.	Yes
D	**Human Caused events such as the following :-**	
	Accidental	
	i) Hazardous material (explosive, flammable liquid, flammable gas, flammable solid, oxidizers, poison, radiological, corrosive) spill or release	Yes
	ii) Explosion / fire	Yes
	iii) Transportation accident	Yes
	iv) Building / structure collapse	Yes
	v) Energy / power/ / utility failure	Yes
	vi) Fuel/ resource shortage	Yes
	vii) Air/ water pollution, contamination	Yes
	viii) Water control structure/ dam/ lever failure	Yes
	ix) Financial issues (economical depression, inflation, financial system collapse)	Yes
	x) Communication system interruptions	Yes
	xi) Misinformation	Yes
	xii) and any other	

	Intentional **(assessments of the following threats and plan of the action to meet the situation arising out of)**	
	i) Terrorism (explosive, chemical, biological, radiological, nuclear, cyber)	Yes
	ii) Sabotage	Yes
	iii) Civil disturbance, public unrest, mass hysteria, riot	Yes
	iv) Enemy attack, war	Yes
	v) Insurrection	Yes
	vi) Strike or labour dispute	Yes
	vii) Disinformation	Yes
	viii) Criminal activity (vandalism, arson, theft, fraud, embezzlement , data theft)	Yes
	ix) Electromagnetic pulse	Yes
	x) Physical or information security breach	Yes
	xi) Workplace violence	Yes
	xii) Product defect or contamination	Yes
	xiii) Harassment	Yes
	xiv) Discrimination	Yes
	xi) And any other	
	Possibility of Technological Caused events that can be unrelated to natural or human caused events, such as:	
	a) Central computer, mainframe, software, or application (internal / external)	Yes
	b) Ancillary support equipment	Yes
	c) Telecommunications	Yes
	d) Energy / power / utility.	Yes
	e) and any other	

28. Collect details and Analyses of Fire & Rescue Calls of the last five years to Draw a Probability of Hazards.

SL.	Particular	2005	2006	2007	2008	2009
1.	Total No. of Fire & Rescue Calls					
	a) No. of Fire Calls	362	472	361	454	399
	b) No. Rescue Calls	362	373	418	396	448
	c) No. of Gas Leaks	44	35	23	26	33
	d) Building Collapse	07	09	17	12	12
	e) Hazards Material calls	--	--	--	--	--
	f) Animal Rescue Calls	30	24	22	25	40
	g) Other calls					
2.	No. of Lives Saved	14189	17	39	08	19
3.	No. of Lives Lost	60	81	62	51	79
4.	No. of Injured	63	97	137	70	98
5.	Property Saved (Rs. In Lakhs)	1080	6722	2683	638.6	3155
6.	Property Lost (Rs. In Lakhs)	500.7	5719	9004	660.2	2407

29. Analysis of probable timing of Incidents

SL.		2005	2006	2007	2008	2009
A	Nos. of Fire/Rescue Calls received from 7000 hrs to 1900	666	728	666	824	892
B	Nos. of Fire/Rescue Calls received from 1900 hrs to 7000	360	391	474	396	410

C	**Planning, Resourc e Manage ment & Incident Manage ment** (Mutual Aid/ Assistance, Emergency Response and Operations, Developing and Implementing emergency response plan & procedures)	
	30. Disaster Management Plan of the city and the responsibilities of the fire services there in.	Copy of Disaster Management Plan of the city attached herewith Annexure ï "N" (Page No. 43)
	31. Plan for availing Mutual Aid with any Central or other State Government Authority for conducting fire & rescue operations. Please provide details	The Mutual Aid assistance between Civil & Defence fire fighting organization is establish wide Govt. Of India, Ministry of Defence Office Memoranda No. F256/31/D(IS) dated 18th April 1955. copy is attached herewith in Annexure ï "O" (Page No. 72)
	32. Collect all on site and off site Disaster Management Plans for all vital installations, buildings and industrial plants in the jurisdiction and the role of Fire Services in them.	Industries which are existing in the corporation limit are either closed down or they are declare as sick units. The onsite and offsite plan of the concern industries are available with the Collector of Thane.

33. Addresses of Fire Stations which can be requested to help.

SL.	Name of Fire Station	Type of Constructi on of Fire Station	Address	Telephone No.	Fax No.
1	Jawahar Baug	RCC	Near Dadoji Kondadeo stadium, Station Road, Thane (w)	(022) 25331600 (022) 25334216 (022) 25365202	
2	Wagle Estate	RCC	Near Road No16, Wagle, Thane (w)	(022) 25823477 (022) 25823547 (022) 25820660	
3	Balkum	RCC	Mumbai Agra Road, Balkum, Thane (W)	(022) 25366702 (022) 25366401 (022) 25363101	
4	Mumbra	RCC	Old Mumbai Puna Roda, Mumbra	(022) 25462424 (022) 25462444 (022) 25462001	
5	Kopari	RCC	Daulat Nagar, Kopari ï Thane (E)	(022) 25325313	
6	Panchpakhadi	RCC	Near Nitin Casting Co., Service Road, Panchpakhadi, Thane (w)	(022) 25440797 (022) 25440798 (022) 25440799	25331264

Manpower :-

Sr. No.	Designation	Pay In Pay Band	Grade Pay	No. of Posts		
				Sanctioned	Filled	Vacant
1	Chief Fire Officer	8500 -15025		01	--	01
2	Dy. Chief Fire Officer	7500 - 13850		01	01	--
3	Divisional Fire Officer	6500 ï 12550		03	02	01
4	Asst. Divisional Fire Officer	--		--	--	--
5	Station Officer	5500 ï 11800		11	08	03
6	Assistant Station Officer	---		--	--	--
7	Sub-Officer	4500 ï 10475		18	09	09
8	Leading Fireman/Rescuer	3850 ï 8500		39	36	03
9	Driver Operator	--		--	--	--
10	Driver	3650 ï 7540		45	27	18
11	Fireman/Rescuer	3400 ï 7265		215	187	28
12	Wireless Supervisor	4500- 10475		01	01	00
	Total			334	271	63

34. Details of Fire and Rescue Appliances made available in Fire Stations

SL.	Name of Fire Station	Number of Water Tenders	Number of Rescue Tenders	Number of Ladders i.e. TTL/ ALP's	Other fire or rescue Appliances
1	Jawahar Baug	03	--	--	
2	Wagle Estate	02	01	01	
3	Balkum	02	01	01	
4	Mumbra	02	02	--	
5	Kopari	02	--	--	
6	Panchpakhadi	--	--	--	

35. Summary of Fire and Emergency Service

SL.	**Type of Vehicles**	**Nos.**
1.	Number of Fire Stations	05
2.	Water Tenders	12
3.	Rescue Tenders	03
4.	Advance Emergency Rescue Tenders	--
5.	Flood & Rescue Tenders	--
6.	Hazmat Vans	--
7.	Turn Table Ladders	--
8.	Hydraulic Platforms	02
9.	DCP Tenders	--
10.	Foam Tenders	--
11.	Smoke Blowers	--
12.	Control Post Vans	--
13.	Water Tankers	04
14.	Ambulances	--
15.	Cars	01
16.	Jeeps	08
17.	High Pressure Portable Pumps	--
18.	Portable Pumps	18
19.	Breathing Apparatus Sets	10
20.	Flood rescue boats	01
21.	Life jackets	40
22.	Details of others Appliances & Equipment	--
23.	Detailed address and telephone numbers if any of all the personnel in the Fire Station.	Cader wise existing manpower of each station is attached in Annexure ï "P" (Page No. 75)
24.	Plan for day to day training requirements of the station personnel like training ground, drill tower, etc.	Pared ground, drill tower, B.A. training gallery, training centers with required infrastructures, with the modules of different equipments U.G. tanks for testing the pumps / fire engines are the basic day to day training requirement for the station personnel.

36. Details of Officers & Staff attached to Fire & Emergency Service (Right from the State HQ to the Local Fire Station) :

List of the Officers with their addresses and contact numbers along with the name of the employees of the department is attached herewith the Annexure ï "Q" (Page No. 80)

D	**Communication, Early Warning, Operational Procedures and Decision Support System (DSS)**	
	This should have details of the type of communication available ï Wireless, (UHF / VHF), Internet, Tie up with local radio stations, TV and cable channels, Mobile phone service providers, Global Positioning System (GPS), Geographical Information System (GIS) and standard Operating Procedures (SOPs) as prescribed from time to time.	1. Fire Brigade department of Thane Municipal Corporation have a separate Communication wing which comprise of wireless communication (V.H.F.) Landline phones and Mobile phones. i) V.H.F. Sets - 56 Nos. ii) Walki talki - 23 Nos. iii) Landline phone - 18 Nos. iv) Mobile Phone - 23 Nos. 2.All the Fire Engines are connected with each other and control room by the V.H.F. sets. 3. Control rooms and District Disaster Management Control Room / Regional Disaster management Control Room are connected with V.H.F. sets, Landline & hotlines. 4. Radio Trunking System of the latest technology i.e. MPT 1327 will be introduce in the department very soon. This technology comprises of GIS & GPS and AVL system. 5.. A separate qualified Wireless supervisor is appointed to maintained the entire communication system of the department.

	Capacity Building	
	Capacity building for disaster management has been identified by the 3th FC as a critical area and allocated substantial funds to States under this head. These funds should be utilized for training fire personnel also.	1. This department gives the departmental training for the new recruits as well as refreshers. 2. Employees of the department also recommended for the courses which are conducted at District Level . 3. Department prefer to send the candidate for the further training to the State Level. 4. Officers of the department are trained from the National Fire Service College. 5. We propose to send some officers to the aboard for the Advance Training in the field.

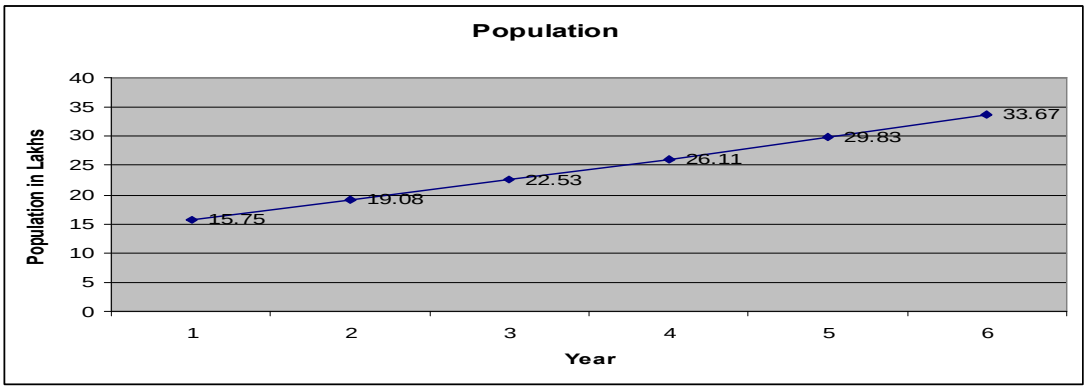
Annexure – A

Vulnerability Analysis of the city

Population growth of the city is given in the following graph.

Population : The Population forecast for Thane Municipal corporation area is as follows :

Sr. No.	Year	Population (In Lakhs)	Remark
1	2006	15.75	Figures are taken from the City Development Plan which is prepared in the Year 2006
2	2011	19.08	
3	2016	22.53	
4	2021	26.11	
5	2026	29.83	
6	2031	33.67	



After going through the above figures, it is observed that growth of population is almost minimum 12.56 % to maximum 21.14 % .

Considering the population as on today, following potential Hazards are already existing within the limits of Thane Municipal Corporation area.

Considering the graph of population growth, there are the chances of increase in the potential hazards of the city in future.

1.	Sky scrapers	-	Approx 1000 nos.
2.	I.T. Industries	-	10 nos.
3.	Slums	-	30 nos.
4.	Few M.A.H. Industries	-	05 nos.
5.	Small scales	-	300 nos.
6.	Malls	-	06 nos.
7.	Multiplex	-	05 nos.
8.	Small & Big restaurants, Hotels	-	more than 2500 nos.
9.	Lodging & Boarding houses	-	more than 40 nos.

10. Transportation of hazardous chemical from national highways.
11. Land slide
12. Dilapited Buildings.
13. Communal riots
14. Flyovers
15. Creek
16. National Highways
17. Railway Bridge

Annexure – B

a. Norms for the Fire Stations

- ✓ In peek hours response time shall be maximum 5 mins.
- ✓ A fire station would be located in 5 Km radius,

Sr. No.	Existing Fire Station (05 Nos.)	Required Fire Stations with Locations (as per S.F.A.C.Norms) (05 + 09 = 14 Nos)	Gap Analysis (09 Nos.)	Remark
1	Jawahar Baug	Nitin Company	Nitin Company	Will be constructed & commission once the funds will be release from the Government.
2	Wagle Estate	Vartak	Vartak	
3	Balkum	Voltas	Voltas	
4	Mumbra	Kalwa Hospital	Kalwa Hospital	
5	Kopri	Owala	Owala	
6		Kolshet	Kolshet	
7		Parsik	Parsik	
8		Diva	Diva	
9		Dighar	Dighar	

Note: Fire Engines are actually run in pick hours to attain the response time

b. Norms for Pumping units

- ✓ Required Pumping Units are calculated on the basis of population density of that area' *(ref: govt. of Maharashtra's Guidelines)*

1) In the areas where the Population Density is less than 50,000 for 20 Km^2area then it means minimum 2 Pumping Units are required in each 20 Km^2 area.

2) In the area where Population Density is more than 50,000 for 20 Km^2 then the aggregate capacity of all pumping units at a fire station should be equal to 460 liters per 10,000 populations in the area covered by the station provided that there should be minimum of two pumping units per 50,000 populations.

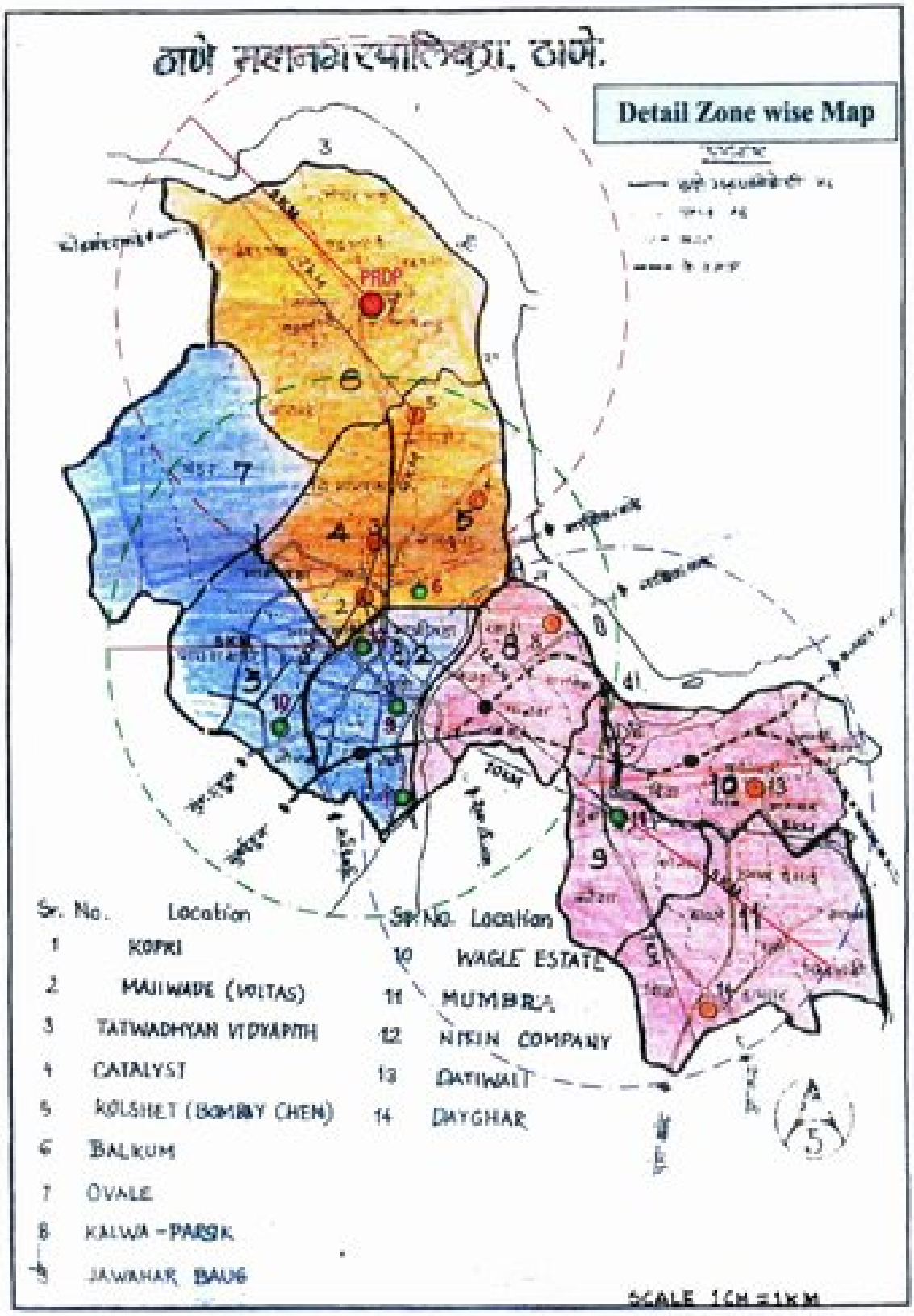
3) If population density of over 1,00,000 per 20 Km^2 area pumping capacity should be as per the table given bellow:

Sr. No.	Population in Lakhs	Pumping Units	Aggregate Capacity
1	1.0	02	2700 L/min
2	1.5	03	4050 L/min
3	2.0	04	5400 L/min
4	2.5	05	6750 L/min
5	3.0	06	8100 L/min
6	Above 3.0	One additional pumping unit for every one lakh of population or part thereof.	

Pumping Unit : -

Sr. No.	Type	Existing	As per norms required	Gap Analysis	Remark
1	Water Tender	14	26	08	Will be purchased once the funds will be release from Government
2	Water Tanker	04	14	10	
3	Arial Ladder Platform	02	03	01	
4	Turn Table Ladder	-	02	02	
5	Hazmat Van	-	01	01	
6	Emergency & Rescue Tender	07	03	04	
7	Control Post Van	-	02	-	
8	D.C.P. Tender	-	-	-	
9	Foam Tender	-	-	-	

Note :- All the required vehicles except Water Tender /Water Tanker are calculated on the basis of potential hazards of the city.



Annexure – C

Details of Emergency Operation center

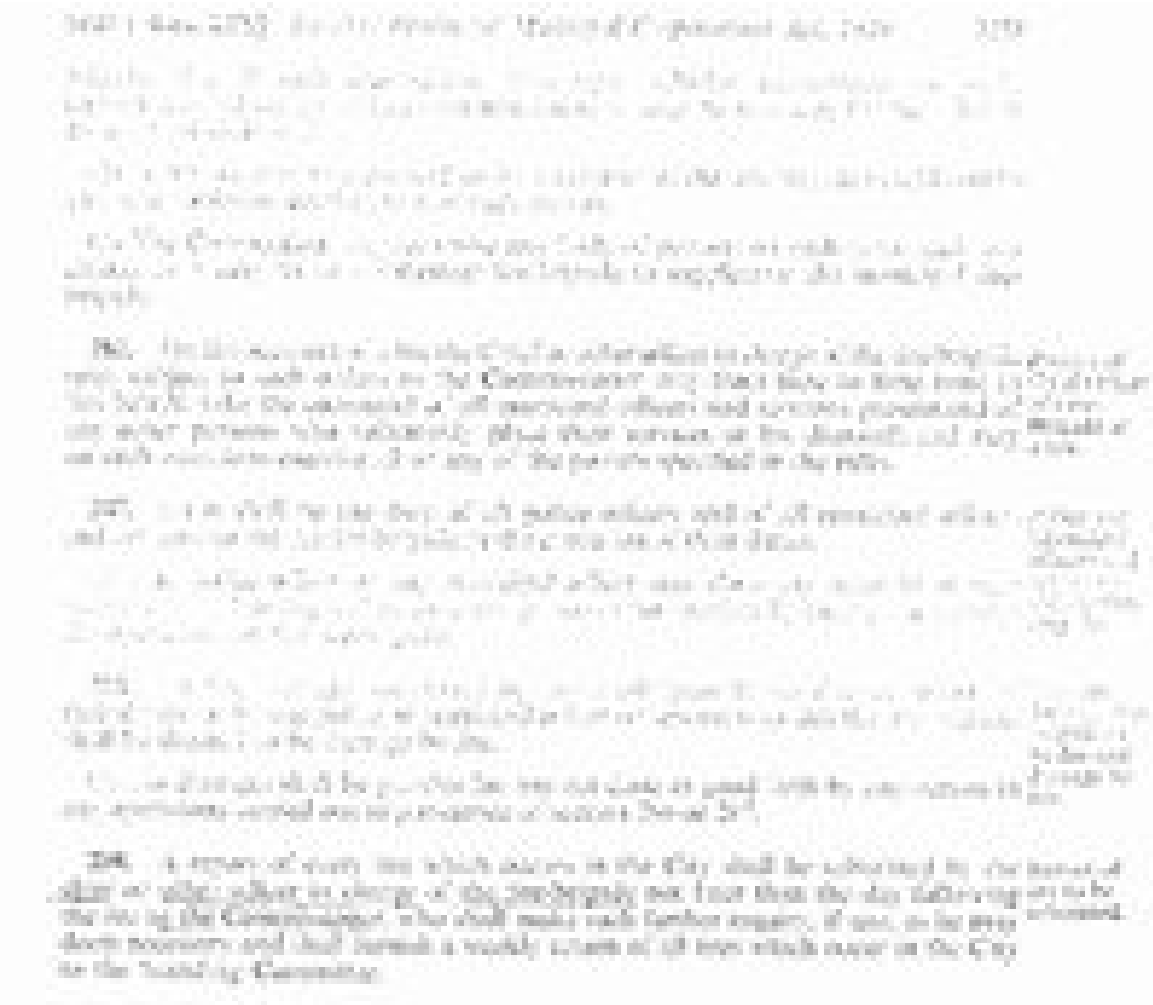
SL.	Name of Fire Station	Address	Telephone No.	Remark
1	Jawahar Baug	Near Dadoji Kondadeo stadium, Station Road, Thane (w)	(022) 25331600 (022) 25334216 (022) 25365202	1. All the fire stations & fire engines are connected with V.H.F. wireless sets. 2. District Disaster Control Room & Regional Disaster Control room are connected with V.H.F. sets Landlines and Hotlines.
2	Wagle Estate	Near Road No16, Wagle Estate,Thane (w)	(022) 25823477 (022) 25823547 (022) 25820660	
3	Balkum	Mumbai Agra Road, Balkum, Thane (W)	(022) 25366702 (022) 25366401 (022) 25363101	
4	Mumbra	Old Mumbai Puna Roda, Mumbra	(022) 25462424 (022) 25462444 (022) 25462001	
5	Kopari	Daulat Nagar, Kopari ï Thane (E)	(022) 25325313	
6	Panchpakhadi	Near Nitin Casting Co., Service Road, Panchpakhadi, Thane (w)	(022) 25440797 (022) 25440798 (022) 25440799	

Annexure – D

Fire & Emergency Services of the Thane Municipal Corporation is governed by Section 285 to 289 of B.P.M.C. Act 1949. Copy of these sections are attached herewith for the ready reference.

In addition to this Maharashtra Fire Prevention & Life Safety Measures Act is enforce in the state W.E.F. 6th of Dec. 2008.

Copy of BPMC Act. 1949 CHAPTER XVII



Annexure – E

Calendar for the fire safety training and awareness program for the public

Sr. No.	Area	Plan
1	High Rise Building	a) Once in a month b) Minimum 12 programs per annum c) Guidelines will be given to the occupants for conducting the evacuation / mock drill as per the N.B.C. guidelines.
2	Slum Areas	a) Once in a month b) Minimum 12 programs per annum
3	Schools	a) Once in a two month b) Minimum 6 programs per annum C) Evacuation drill will be conducted once in a 6 months.
4	Multiplex	a) Once in a two month b) Minimum 6 programs per annum C) Evacuation drill will be conducted once in a 6 months.
5	Hotels / Hospitals	a) Once in a three month b) Minimum 04 programs per annum C) Evacuation drill / mock drill will be conducted once in a 6 months.
6	Industries	➢ Hardly few industries are remain in the area. ➢ All most all the industries are became either sick ï unit or close down. ➢ Evacuation drills / mock drills are conducted in once an 6 months with the help of DISH Authorities.
7	Govt. buildings	➢ Fire safety training and awareness programme are conducted once in 6 months

Annexure – F

Plan and calendar of evacuation drills/ mock drills

13.	A. Evacuation Drill / Mock Drill are carried out as per the guidelines of NBC 2005, Appendix ï E. Copy attached herewith for the ready reference. B. In some organization evacuation / mock drills are carried out as per their request. C. Action Plan for the conducting Evacuation / mock drills in a vital installations/ industrial plants/ Government buildings / schools and critical infrastructure like hospitals for the calendar is as follows.		
	Action Plan		
	Sr. No.	Organization	Month
	1	School	January / July
	2	Govt. Buildings	February / August
	3	Vital Industries	March / September
	4	Industries	May / October .
	5	Hospitals	June / November
	6	High Rise buildings	July / December

Annexure – G

Plan for compulsory Fire Hazard evaluation of all types of buildings old and new.

14	Maharashtra Fire Prevention & Life Safety Measures Act is enforce in the State w.e.f. 6th Dec. 2008. As per sub section 3 of section 3 of this act, every building should certified for the fire prevention & life safety measures every after 6 months by Licensing Agency. This section is strictly adhered in the area of Thane Municipal Corporation. Accordingly buildings are inspected & evaluated with reference to the fire hazard.	
	Check list for fire hazard evaluation of old & new buildings :	
	Sr. No.	Check list
	1	Type of Structure
	2	Abiding Road
	3	Entrance Gate
	4	Open Space
	5	Number and type of staircases
	6	Refuge Area
	7	Lifts
	8	Height & floor occupancy of the building
	9	Location of Sub Station, D.G. , Meter Room
	10	Electrical Ducts
	11	Alternative Source
	12	Storages
	13	All active measures like wet / dry risers, fire pump, hose reel hose, sprinklers, U.G. tank, booster pump, pump, detectors, extinguishers etc.
	14	Type of Electric Cables
	15	Signage, fire orders / notices
	16	House Keeping
	17	Misc.

Annexure – H

Plan for enforcement of Fire Approvals as per the Provisions contained in National Building Code 2005 for new constructions.

15	**Procedure for Enforcement of Fire Approvals as per D.C. Rule / NBC :-** a. Application will be submitted by the Architect to C.F.O. b. Scrutinize by the concern officer as per the provision of D.C. rule /N.B.C. c. Required Changes are suggested to the Architect. d. Provisional approval is given to the Architect under terms & conditions. e. Architect resubmit the application to the C.F.O. for final approval before getting the O.C. f. Inspection is done & accordingly final approval is given. g. System is inspected by 6 months interval by a Licensing Agency as per Maharashtra Fire Prevention & Life Safety Measures Act. h. It is requested to the ADTP of the corporation for the submission of the approved plans of the building to the Fire Brigade Department. i. This process will continue.

Annexure – I

Plan how data of all fire approvals are maintained in the headquarters or at the central data setup.

16	**Plan for maintaining the data :** ➢ Department was maintaining a separate registers of all the approvals Up to March 2010. ➢ April 2010 onwards separate file is created for an individual approval and digital number is given to each file. ➢ Accordingly file & register is maintained at the head office. ➢ Department is planning to introduce the Auto DCR very soon. Which will give the detail computer record of each proposal.

Annexure – J

Plan for introducing and enforcing Development Control Rules of the city for new development projects.

17	**Plan for introducing and enforcing Development Control Rules of the city for new development projects.** a. Please refer the Annexure No. H

Annexure – K

Dilapidated & Unsafe Buildings in the City.

Sr. No.	Ward	Total Numbers of Unsafe / Dilapidated buildings
1	Kalwa	47
2	Kopari	19
3	Majiwada	55
4	Mumbra	97
5	Naupada	132
6	Railadevi	04
7	Wagle	320
8	Uthalsar	82
9	Vartaknagar	16
	Total	772

Annexure – L

Unorganised Houses like Juggi Zopadi & Slum Area.

Sr. No.	Ward	Total Numbers of Unorganised Houses like Juggi Zopadi & Slum Area.
1	Kalwa	45272
2	Kopari	8250
3	Majiwada	29356
4	Mumbra	44500
5	Naupada	10967
6	Railadevi	47541
7	Wagle	6904
8	Uthalsar	16388
9	Vartaknagar	16530
	Total	2,25,708

Annexure – M

Details of other hazards that exist in the city and plans for response and mitigation

A. **DETAILS OF OTHER HAZARDS THAT EXIST IN THE CITY**

1.	Sky scrapers	-	Approx 1000 nos.
2.	I.T. Industries	-	10 nos.
3.	Slums	-	30 nos.
4.	Few M.A.H. Industries	-	5 nos.
5.	Small scales	-	300 nos.
6.	Malls	-	06 nos.
7.	Multiplex	-	05 nos.
8.	Small & Big restaurants, Hotels	-	Approx. 2500 nos.
9.	Lodging & Boarding houses	-	Approx. 40 nos.

10. Transportation of hazardous chemical from national highways.
11. Land slide
12. Dilapited Buildings.
13. Communal riots
14. Low line areas
15. Creek
16. Air Base Station
17. Navy Base
18. Railway Bridge, Road Bridge, Flyovers
19. Forest Fire
20. Terrorism

B. PLANS FOR RESPONSE AND MITIGATION

FIRE STATIONS : -

SL.	Name of Fire Station	Address	Telephone No.	Remark
1	Jawahar Baug	Near Dadoji Kondadeo stadium, Station Road, Thane (w)	(022) 25331600 (022) 25334216 (022) 25365202	1. All the fire stations & fire engines are connected with V.H.F. wireless sets. 2. District Disaster Control Room & Regional Disaster Control room are connected with V.H.F. sets Landlines and Hotlines.
2	Wagle Estate	Near Road No16, Wagle Estate,Thane (w)	(022) 25823477 (022) 25823547 (022) 25820660	
3	Balkum	Mumbai Agra Road, Balkum, Thane (W)	(022) 25366702 (022) 25366401 (022) 25363101	
4	Mumbra	Old Mumbai Puna Roda, Mumbra	(022) 25462424 (022) 25462444 (022) 25462001	
5	Kopari	Daulat Nagar, Kopari ï Thane (E)	(022) 25325313	
6	Panchpakhadi	Near Nitin Casting Co., Service Road, Panchpakhadi, Thane (w)	(022) 25440797 (022) 25440798 (022) 25440797	

MAN POWER :

Sr. No.	Designation	Pay In Pay Band	Grade Pay	No. of Posts		
				Sanctioned	Filled	Vacant
1	Chief Fire Officer	8500 -15025		01	--	01
2	Dy. Chief Fire Officer	7500 - 13850		01	01	--
3	Divisional Fire Officer	6500 ï 12550		03	02	01
4	Asst. Divisional Fire Officer	--		--	--	--
5	Station Officer	5500 ï 11800		11	08	03
6	Assistant Station Officer	---		--	--	--
7	Sub-Officer	4500 ï 10475		18	09	09
8	Leading Fireman/Rescuer	3850 ï 8500		39	36	03
9	Driver Operator	--		--	--	--
10	Driver	3650 ï 7540		45	27	18
11	Fireman/Rescuer	3400 ï 7265		215	187	28
12	Wireless Supervisor	4500- 10475		01	01	00
	Total			334	271	63

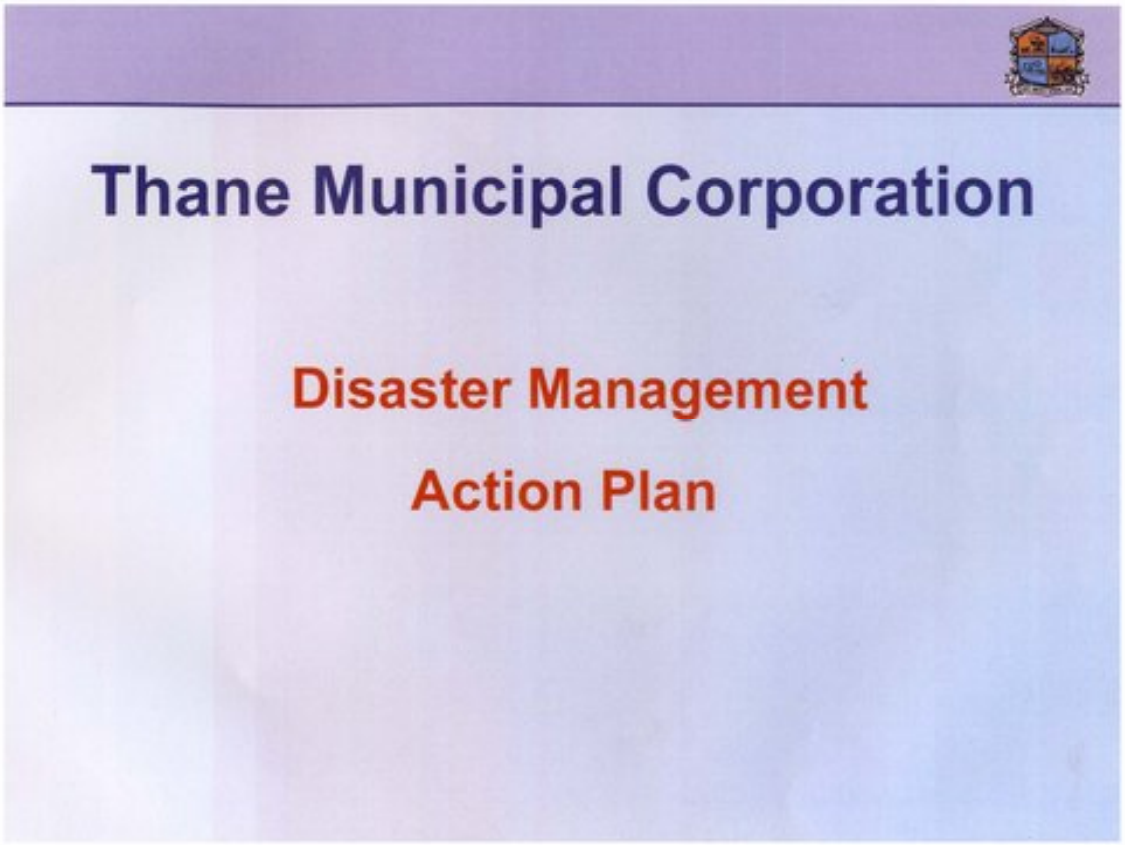
FIRE AND RESCUE APPLIANCES MADE AVAILABLE IN FIRE STATIONS :

Sr. No.	Name of Fire Station	Number of Water Tenders	Number of Rescue Tenders	Number of Ladders i.e. TTL/ ALP's
1	Jawahar Baug	03	--	--
2	Wagle Estate	02	01	01
3	Balkum	02	01	01
4	Mumbra	02	02	--
5	Kopari	02	--	--
6	Panchpakhadi	--	--	--

Sr. No.	Type of Vehicles	Nos.
1	Number of Fire Stations	05
2	Water Tenders	12
3	Rescue Tenders	03
4	Advance Emergency Rescue Tenders	--
5	Flood & Rescue Tenders	--
6	Hazmat Vans	--
7	Turn Table Ladders	--
8	Hydraulic Platforms	02
9	DCP Tenders	--
10	Foam Tenders	--
11	Smoke Blowers	--
12	Control Post Vans	--
13	Water Tankers	04
14	Ambulances	---
15	Cars	01
16	Jeeps	08
17	High Pressure Portable Pumps	---
18	Portable Pumps	18
19	Breathing Apparatus Sets	10
20	Flood rescue boats	01
21	Life jackets	40
22	Details of others Appliances & Equipment	inflatable light, saw cutters,

Annexure – N

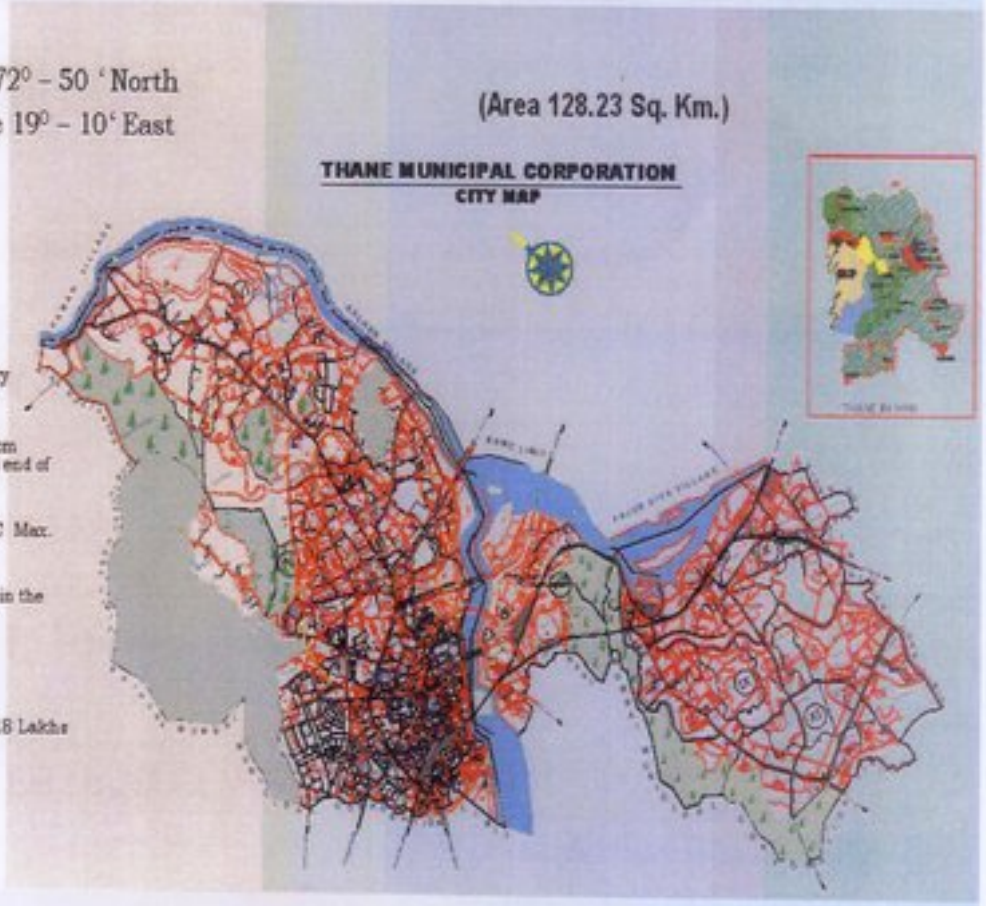
Disaster Management Plan of the city and the responsibilities of the fire services



Thane Profile

- **Location**
- Latitude 72⁰ – 50 ' North
- Longitude 19⁰ – 10' East

(Area 128.23 Sq. Km.)



- **Weather**
  Typical Coastal sultry & not very hot.
- **Rainfall**
  Average 250 to 300 cm beginning of June to end of September.
- **Temperature**
  Average Min.16-24°C Max. 32-37°C
- **Humidity**
  45% to 87% highest in the month of August.
- **Population**
  Present – Approx. 17-18 Lakhs

OBJECT & IMPORTANCE OF DISASTER MANAGEMENT

- **TO MINIMISE**

•VULNERABILITY TO FLOODS AND CONSEQUENT LOSS OF LIFE

•LIVELIHOOD SYSTEMS

•DAMAGE TO PROPERTY, INFRASTRUCTURE & PUBLIC UTILITIES.

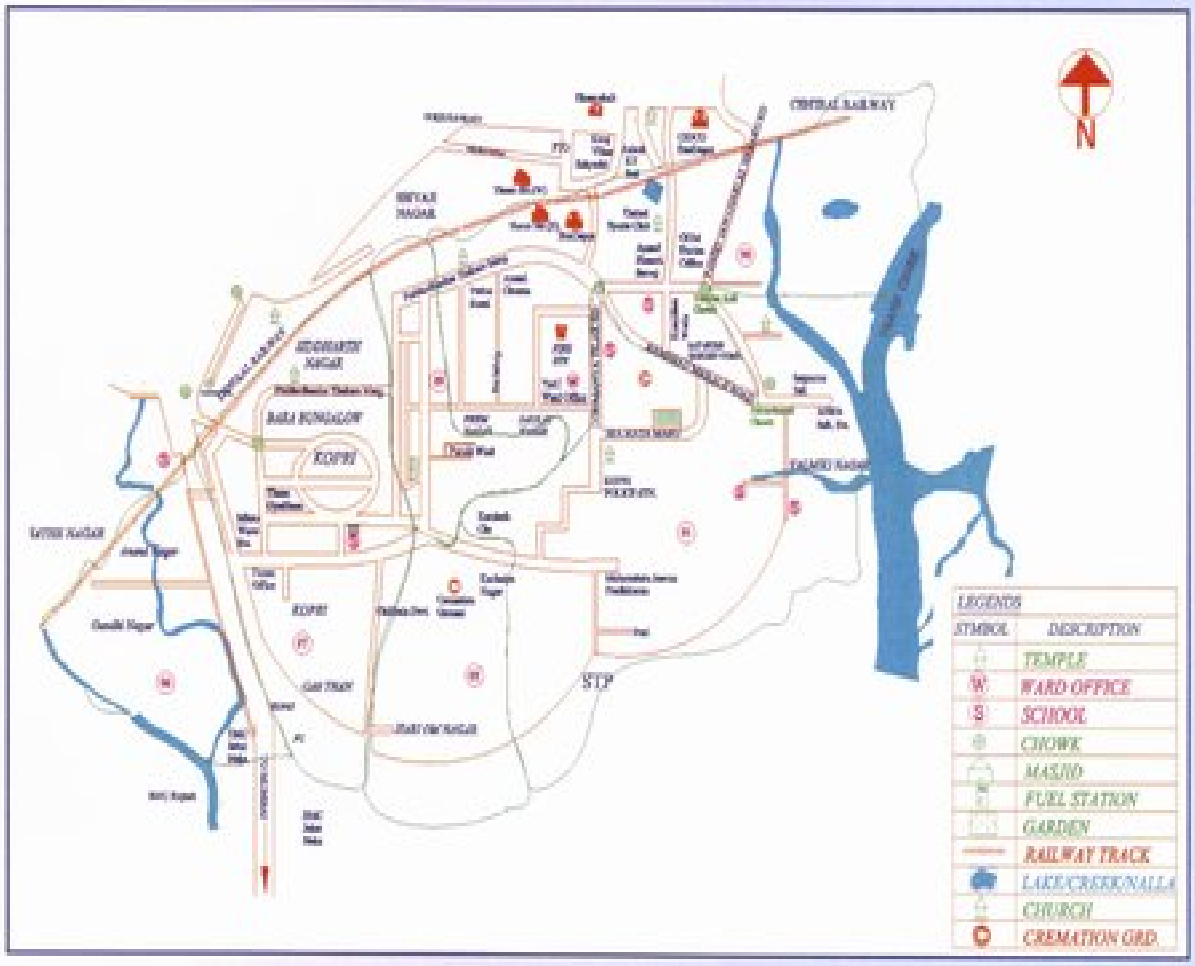
LEGAL FRAME WORK

- DISASTER MANAGEMENT ACT 2005

DANGEROUS BUILDINGS

Ward	Dangerous Building	Most Dangerous Building
Wagale	132	01
Railadevi	19	01
Vartalnagar	318	08
Majiwada	21	01
Uthalasar	55	-
Naupadfa	04	6
Kopari	82	04
Kalwa	44	03
Mumbra	131	09
Total	**806**	**27**

Kopri ward office

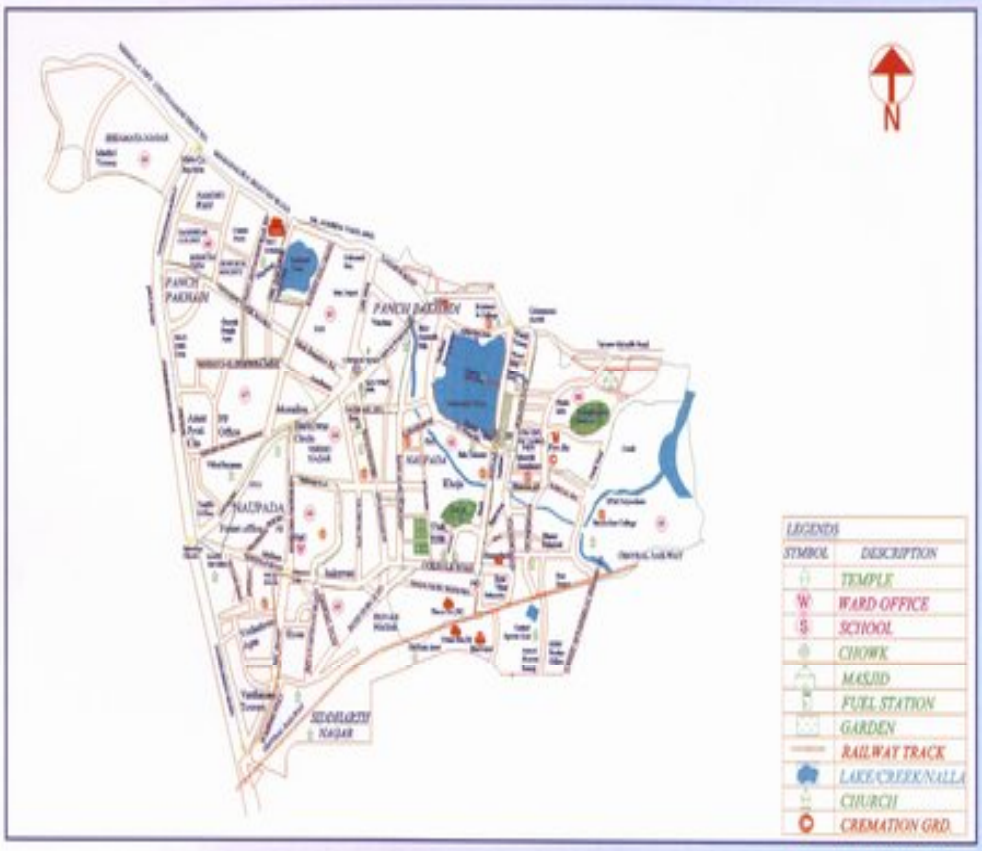


Thane Municipal Corporation

Kopri Ward Office – List of Low Line Area

G.M. KOLI MARG	CHENDANI KOLIWADA
CHIKHALADEVI MARG	THANEKARWADI
ANANDNAGAR, GANDHINAGAR MARG	ANANDNAGAR, KEDARESHWARNAGAR
SURYAKANT WADHAVKAR MARG	SAINATHNAGAR
HARISHACHANDRA RAUT MARG	DAULATNAGAR, PREMNAGAR, GHANSHYAMNAGAR

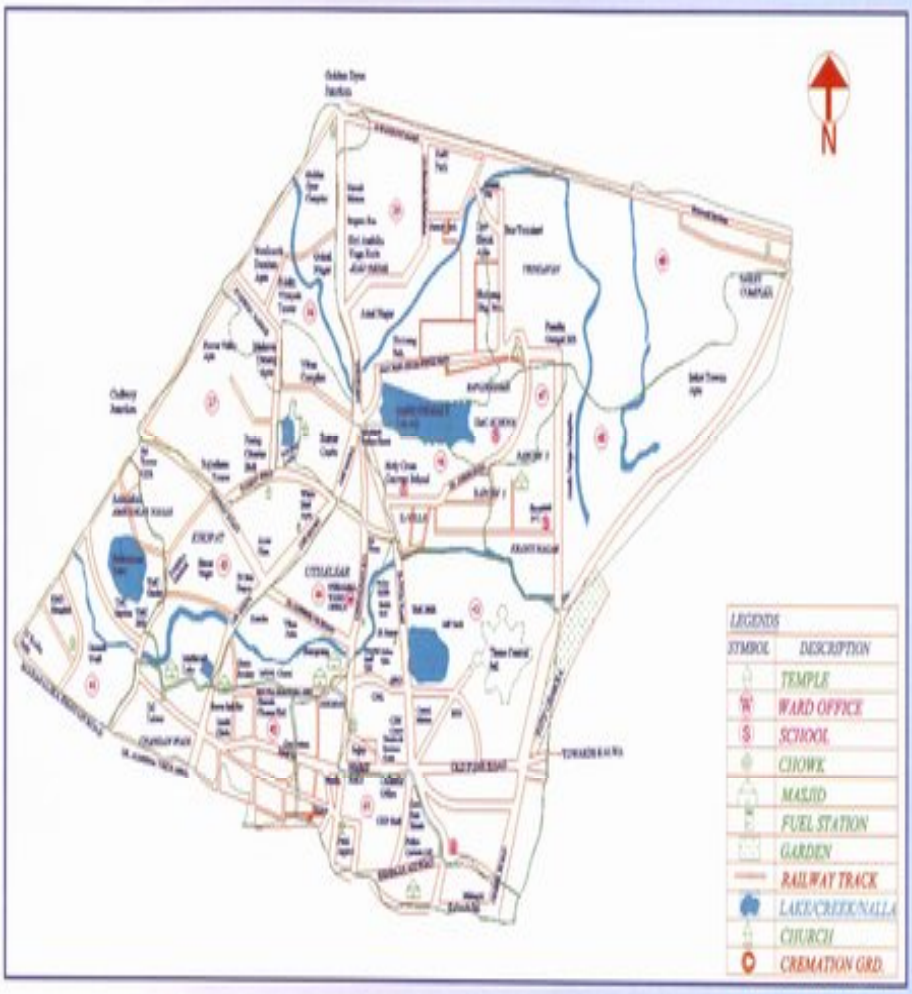
Naupada ward office



Naupada Ward Office – List of Low Line Area

Datta Mandir Marg	Chendani Koliwada, Cidco Bus Stop
Pradhan Marg (Kridapreksha Griha)	Stidum Area
Mohamad Ali Marg	Mahagir Mandai
Shivaji Path	Shivaji Maidan, Bhaji Market
Mahatma Gandhi Marg	Chikhalwadi
Prashant Nagar Marg	Wadarwadi
Vandana Society Marg	Vandana Society Area
Gururani Nagkanya Marg	Natraj Society Area
Madanlal Dhingra Marg	Shrikrupa Society Area
Lal Bahadur Shastri Marg	Vanda S.T. Stand Area
Veer Sawarkar Marg	In front of Maharashtra Vidyalaya
Ram Maruti Marg	Shivneri Society Marg
Gadkari Path	
Kaka Sohoni Path	In front of Nandu Garage
Almeida Marg	Right Side of Signal, Mahapalika Bhavan, Devnar Society
Tekdi Bunglow Marg	Saraswati School Area

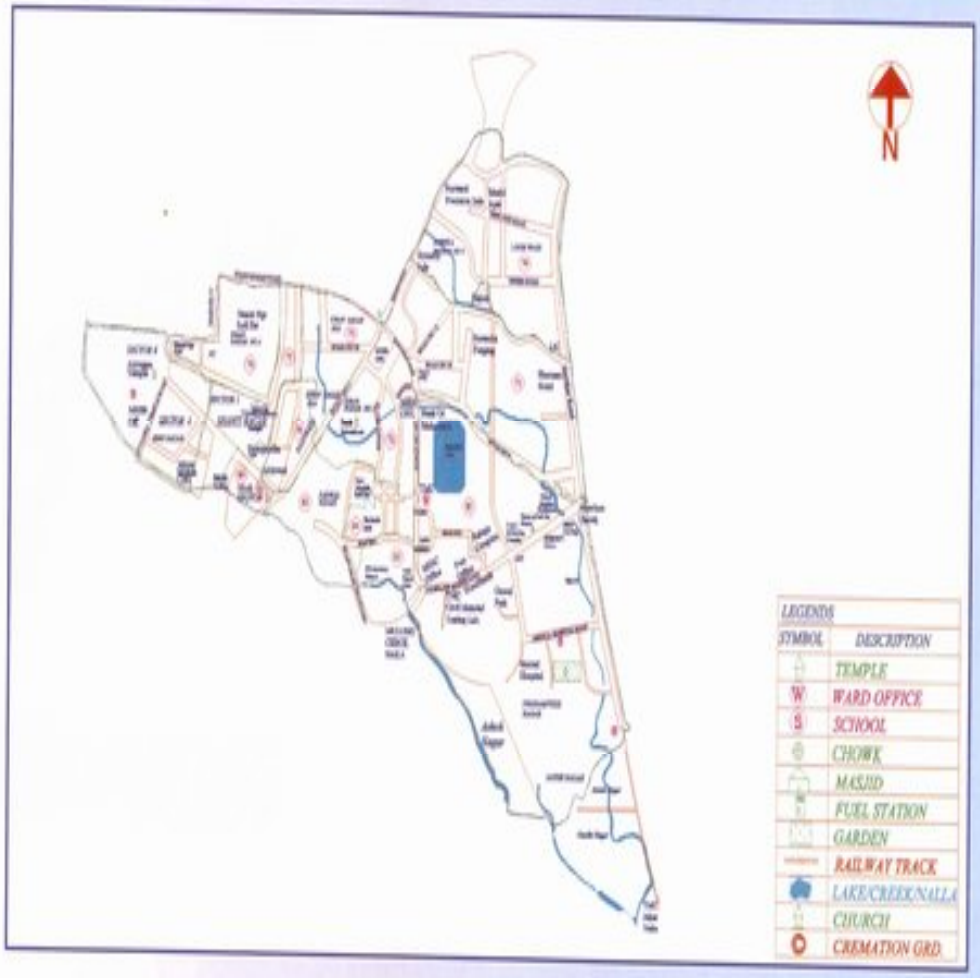
Uthalsar ward office



Uthalsar Ward Office – List of Low Line Area

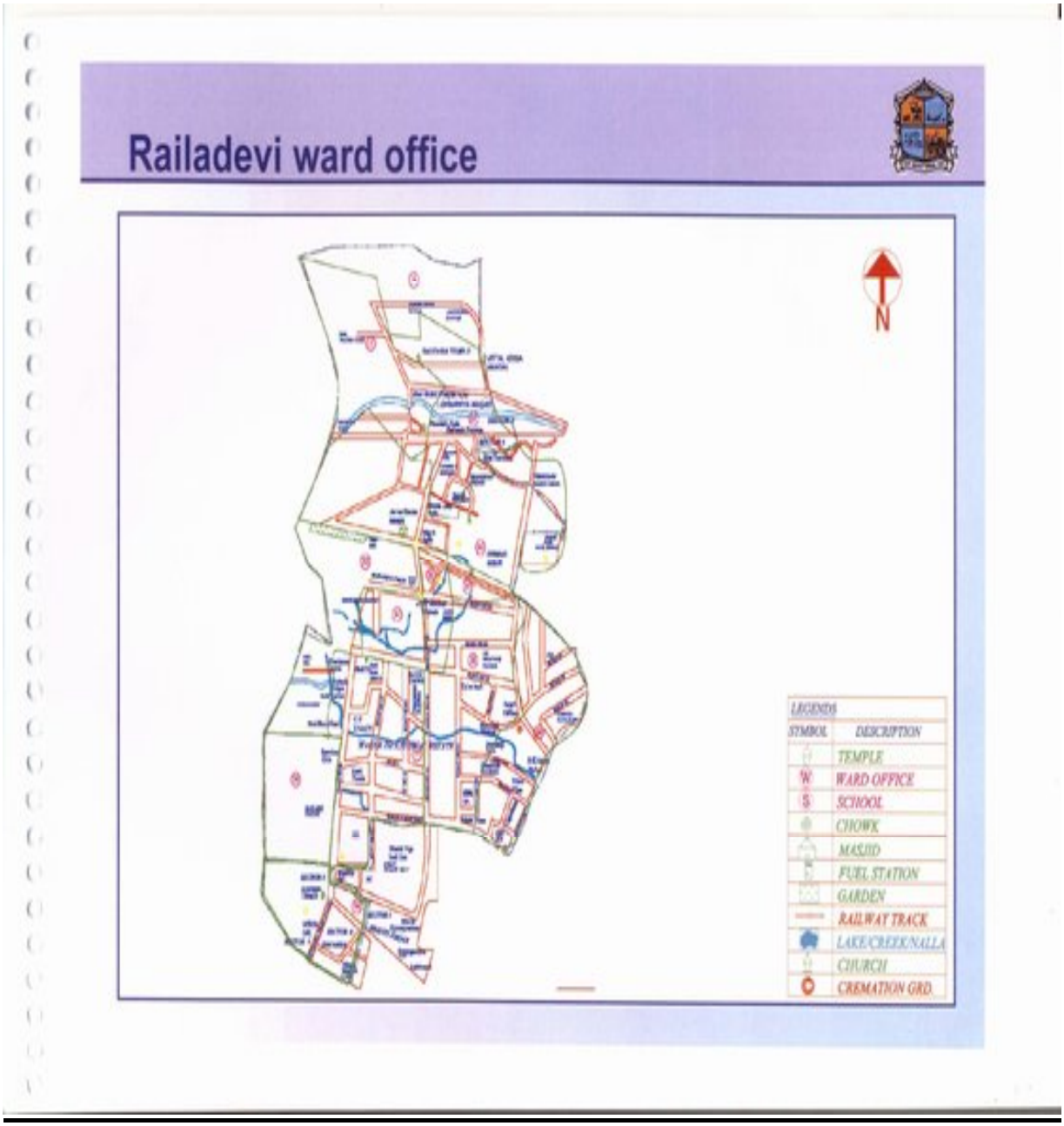
Ambedkar Marg	Ambedkar Pool
Castle Mill Marg	Casatle Mill Pool Shrirang Society, Anand Park, Vrindavan Society
Shrirang Society to Vrindavan Society Marg	Shrirang Society, Anand Park, Vrindavan Society
Saket Marg	Saket Society
Rabodi	Krantinagar, Panchganga Society
Ambedkar Pool To Castle Mill Circle Marg	Samant Wadi, Gadre Wadi, Narvel Chawl
Main Post Office To Holi Cross School Marg	K Villa Pool Jail taki to Naka
Castle Mill Circle To Golden Dyes Marg	Axadnagar 1 & 2, Muktainagar
Flower Valley to Runwal, Sidhhivinayak Society	Milindnagar Behind Cosmos Bank
Kattalkhana Marg, Rabodi	Rehmatnagar, Sanjay Gandhi Nagar

Wagle ward office



Wagle Ward Office – List of Low Line Area

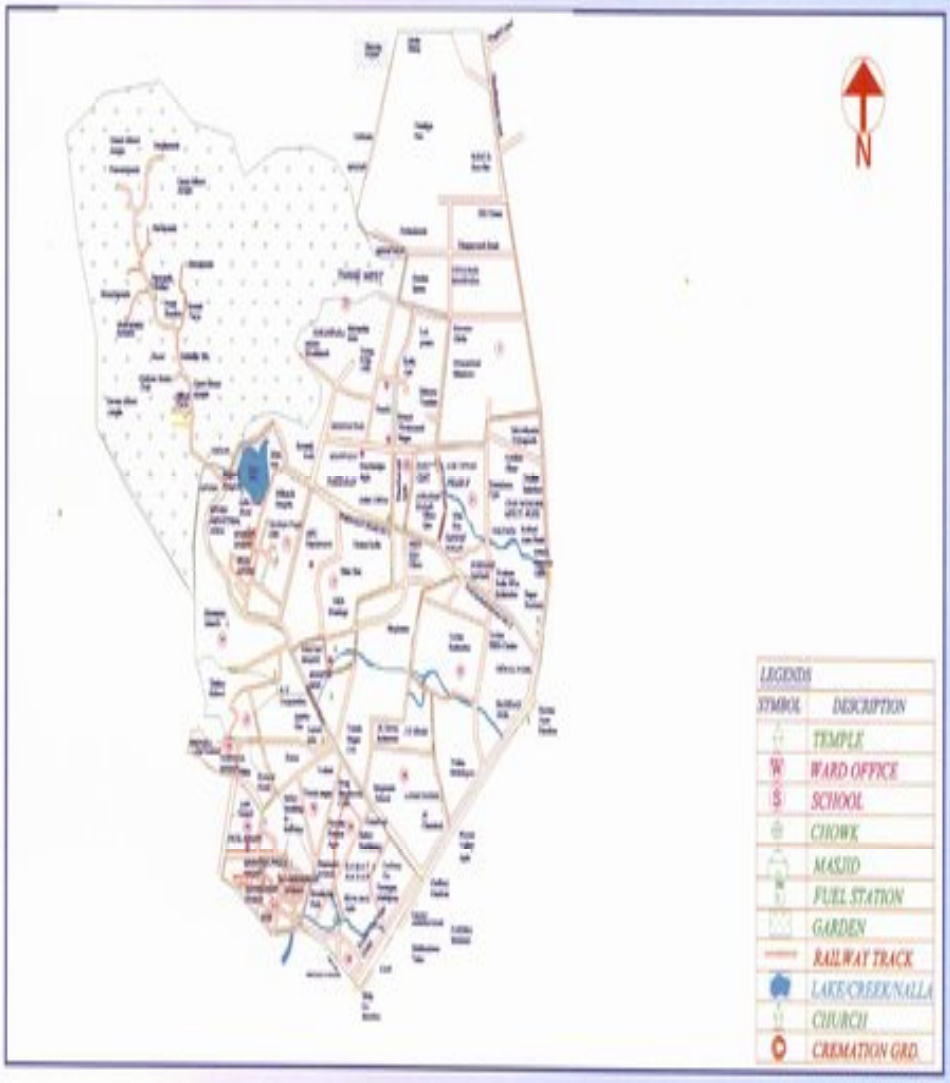
Lal Bahadur Shastri Marg	Teen Hath Naka (Near Krishna Hotel)
Radhunathnagar Marg	Near Sfoorti Vyayam School
Hajuri Gautamnagar	Near Footbridge (Rajdhani Caterers)
Dharmveer Nagar, Sathenagar	Sathenagar, Dharmaveernagar Nalla
Wagle Main Road	22 No. Circle
Road No. 22	
Bhatwadi	Ganesh Chowk
Bhatwadi	Jagdale Sadan
Road No. 27	Saibaba Peti
Road No. 16	Wadarwadi
Ratanbai Compound	Jyotirling Sadan
	Sairaj Nala
	Aashar Co. Nalla
	Kishannagar, Shivsena Shakha to Mumbai Mahapalika Pipe Line Nala, Gandhinagar
Bhatwadi Nala	Bhatwadi Bhangarwala, Road No. 16
Hajuri Nala	BMC Pipe Line, Hajuri, Radhunathnagar, Vidhyut Metallic
Jai Maharashtra Nagar	Modella Check Naka



Railadevi Ward Office – List of Low Line Area

Shrinagar Main Road	Hotel Garden Area
Warlipada	Near Water Tank
Road No. 16	I.T.I. Circle, In front of Datta mandir
Ward No. 31, 19, 21 Boundry Line	Walmiki Pada
Road No. 21, 32 Junction	Ambewadi, Ambewadi Market
Yashodhannagar, Sawarkarnagar	Snehabandhan Society, Manisha, Shanti, Saipooja, Rajmata, Sinhagarjana
Rajiv Gandhi Nagar Galli No. 1	Saibaba Mandir, Kamgar Hospital road
Jai Bhawani Nagar	Jai Bhawani Nagar Nala, Dnyaneshwarnagar Naka and Rajiv Gandhi Nagar
Sawarkar Nagar	Ganesh Galli No. 2, Plot No. 80, Plot No. 15, 16
Swami Vivekanand Marg	Saikrupa Society to Veer Hospital
Sawarkar Nagar	MSEB Office to Swami Samarth Chowk
	Zanjenagar
	Parera Nagar
	Sawant Chawl to Harisheth Talao, Lokmanyanagar
	Sulabha Sauchalaya to Raji Gandhi Naka
	Lokmanya Nagar Naka, Lokmanya Nagar Pada No. 4 to Mahatma Phule Nagar
Azad English School Nala	Sulabh Sauchalaya to Rajiv Gnadhi Naka

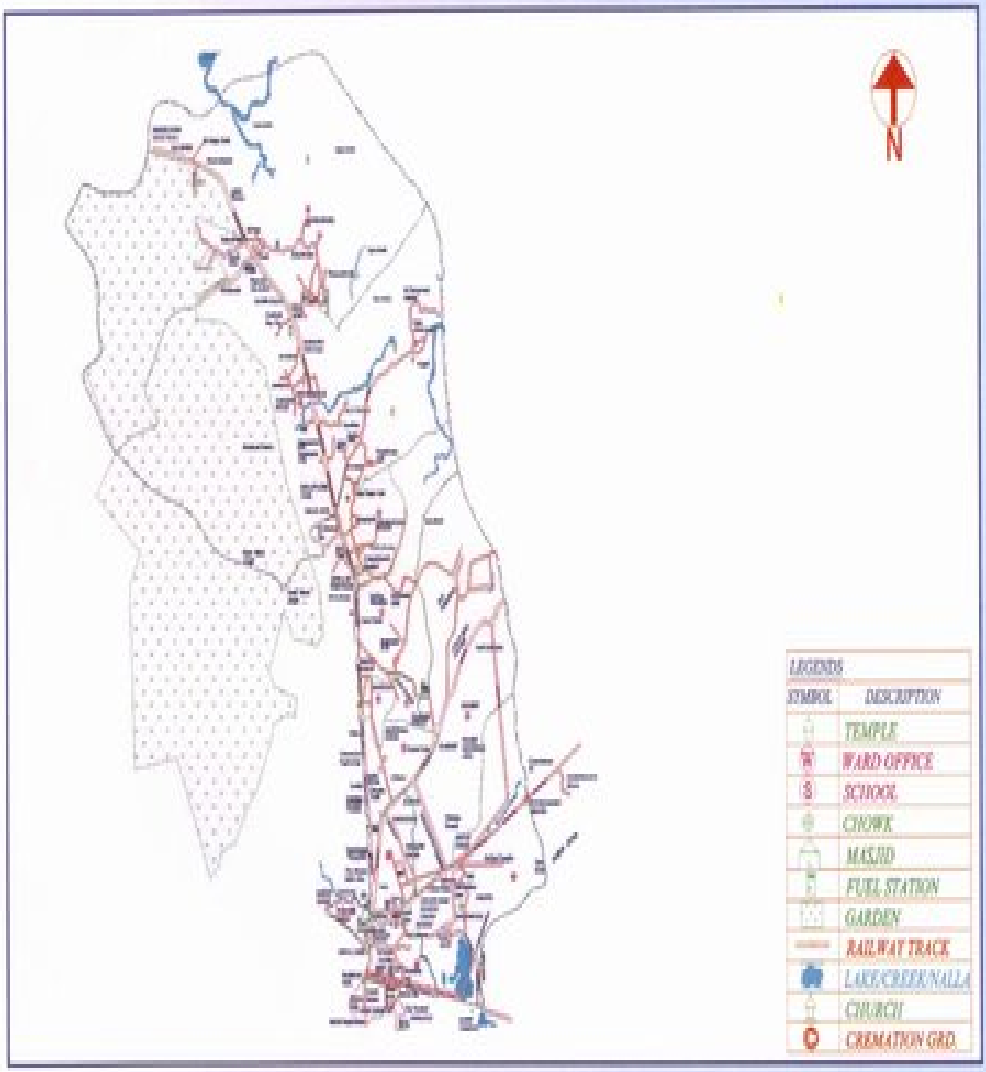
Vartaknagar ward office



Vartaknagar Ward Office – List of Low Line Area

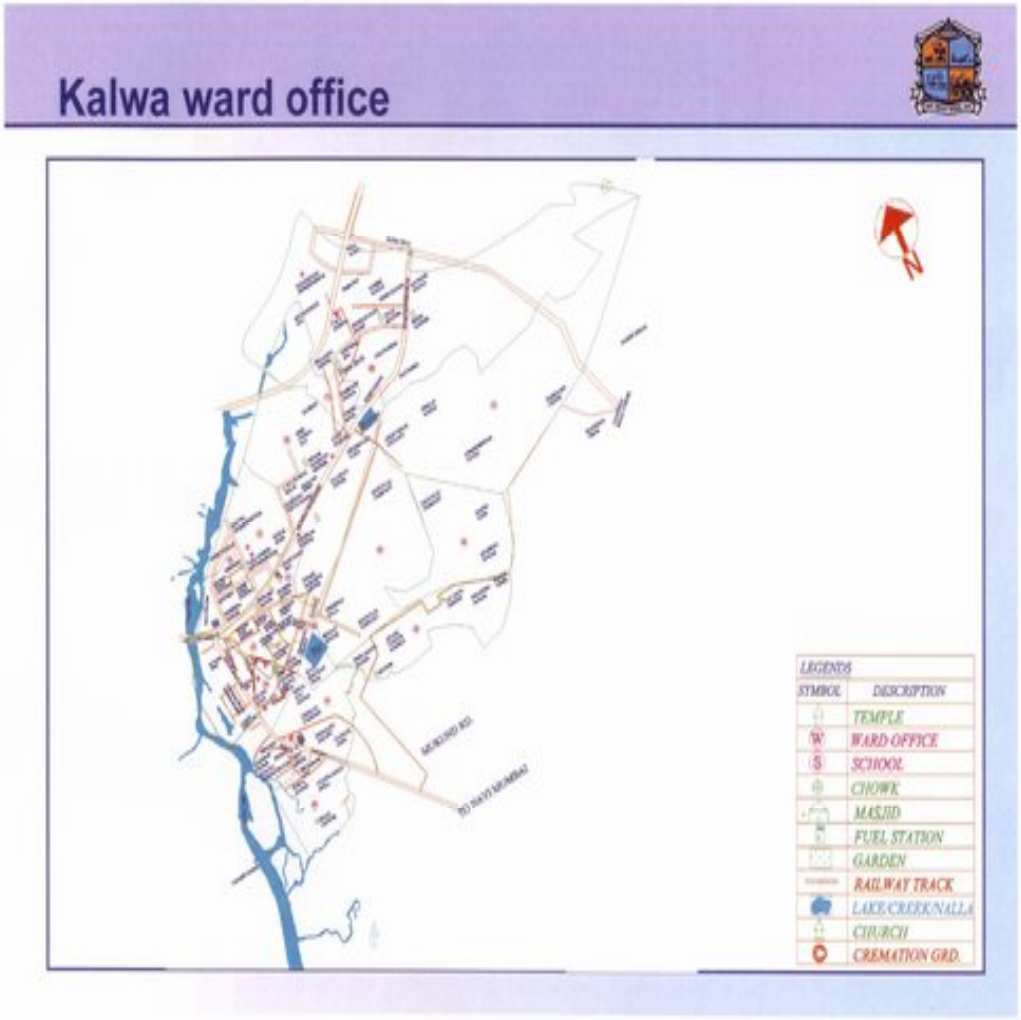
Service Road	Hardas Nagar, Chiragnagar
Bhimnagar	Mhada Colony, In front of Police Station Chawl
Service Road	Sambhajinagar, Kadav Chawl
Mahatma Phule Nagar	Mahatma Phule Nagar
Tikujiniwadi Road	Manpada
Vasant Vihar Road	Vasant Vihar Circle
Jai Bhawani Nagar Road	Jai Bhawani Nagar
Nalpada Road	Nalpada Colony
Glady Alwaris road	Lok Hospital, In front of Godrej Soc.

Manpada ward office



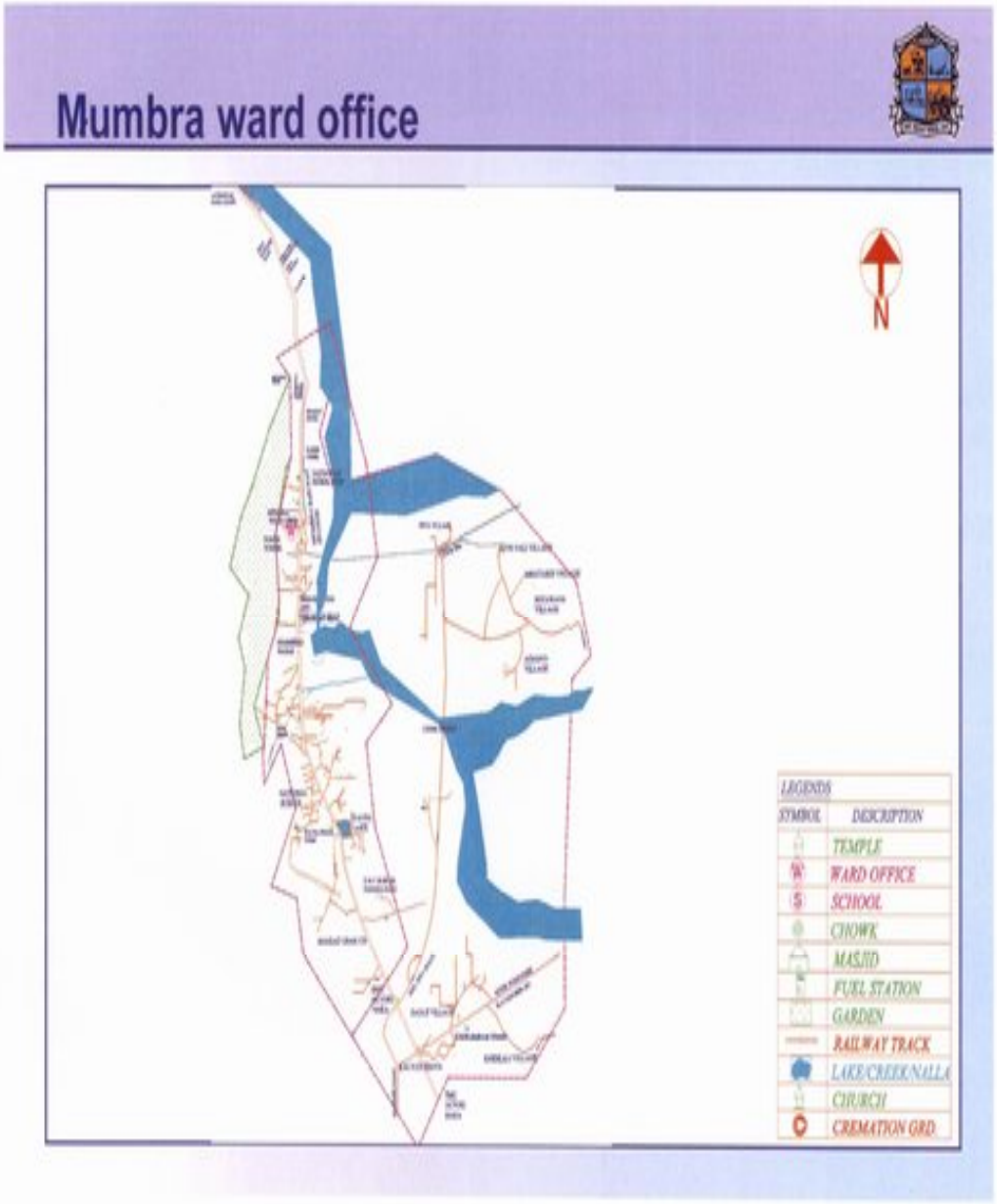
Manpada Ward Office – List of Low Line Area

BMC Pipe Line Pool, Kapurbawadi Road	Natpada Path Pool to Anil Colany
Majiwada Gaon Path	Jay Bhawani Nagar Marg, Ganpati Workshop
Service Road	Shivneri Soc. Siddharthanagar Parisar
Goitamnagar Road	Goitamnagar Parisar
Majiwada Gaon (Atil Road)	Behind Lodha Builders, Pilai Chowl
Saket Marg	Ambedkar Marg, Balkum Pada No. 1
Dadlani Park Marg	Dadlani Parisar
Shruti Park Marg	Yashaswinagar Parisar, Mumbai Mahapalika Pipe Line
Manorama Nagar	Nirmal Anandnagar, Ashoknagar, Near Colany, Manorama Nagar
Manpada Path	Manpada MAnsai (Near Petrol Papa)
Mogharpada Path	Garibnagar, Mogharpada Parisar
Kasar Wadwali Path	Shivsena Shakha Parisar, Kasar Wadwali Naka
Sainath Nagar, Ghodbandar Marg	Sainagar Colany PArisar
Anandnagar, Ghodbander Marg	Anandnagar Colany Parisar



Kalwa Ward Office – List of Low Line Area

Belapur Road	Belapur Railway Pol
Mahatma Phule Nagar,	Sukurpark
Sahyadri Society	Near Mumbai Pune Mahamarg
New Shivaji Nagar	Kalwa Railway Station, East Side
Janki Nagar	Near Manishanagar
Kharegaon	Vitthal Mandir Area
Gaondevi	Gaondevi mandir Area



Mumbra Ward Office – List of Low Line Area

	Station To Simla Park
	Kailasnagar
	Suhana Nagar
Mumbra Dumping Road	Sonaji Nagar
	Rashid Compound
	Thakurpada
Archana Nagar Marg	Khadi Machine Marg
Khadi Machine Marg	Khadi Machine Marg

FIREBRIGAD

COMMAND

Municipal Commissioner
↓
Additional Municipal Commissioner
↓
Chief Fire Officer

Head Clerk	Dy. Chief Fire Officer	Ex. Engineer (W)
↓	↓	↓
Clerk	Divisional Officer	Dy. Engineer (W)
↓	↓	↓
Peon	Station Officer	Jr. Engineer (W)
	↓	
	Sub Officer	
	↓	
	Sub Officer (non qualified)	
	↓	
	Leading Fireman	
	↓	
	Driver	
	↓	
	Fireman	

FIREBRIGAD

6 - C's FOR ANY DISASTER

- Command
- Consistency
- Communication and co-ordination
- Capacity
- Capability
- Camaraderie

FIREBRIGAD

Steps Taken

- Weekly Off canceled
- 12/12 hour's duties
- Contract base
- Trainees of N.F.S.C. and S.F.T.C.
- Civil Defense
- Home Guard

FIREBRIGAD

CONSISTENCY

Sr. No.	Name of Equipment	Total	Sr. No.	Name of Equipment	Total
1	Portable Pumps	17	13	Stretchers	30
2	Rosenbaur Pump	04	14	Battery	100
3	Life Jacket	40	15	Rubber Tubes	30
4	Rescue Rocket Launcher	02	16	Ropes	1000 Mtrs.
5	Saw Cutter	12	17	Spreaders	03
6	Twin Saw Cutter	04	18	Combi. Tools	02
7	Wireless Sets	59	19	Bolt Cutters	100
8	Boats	06	20	Door Openers	02
9	B.A. Sets	49	21	Hy. Concrete Hammer	03
10	Foam Compound	1500 ltrs.	22	Mega Phone	05
11	Rescue Tools	02	23	Hammer, Shovel etc.	200
12	Inflatable Lights	02	24	Axe and Cleaver	100

FIREBRIGAD

COMMUNICATION and CO-ORDINATION

- VHF sets
- Walky-Talky
- Ham Radio
- Telephone numbers of all Officers, Hospitals, nearest Fire Stations.

FIREBRIGAD

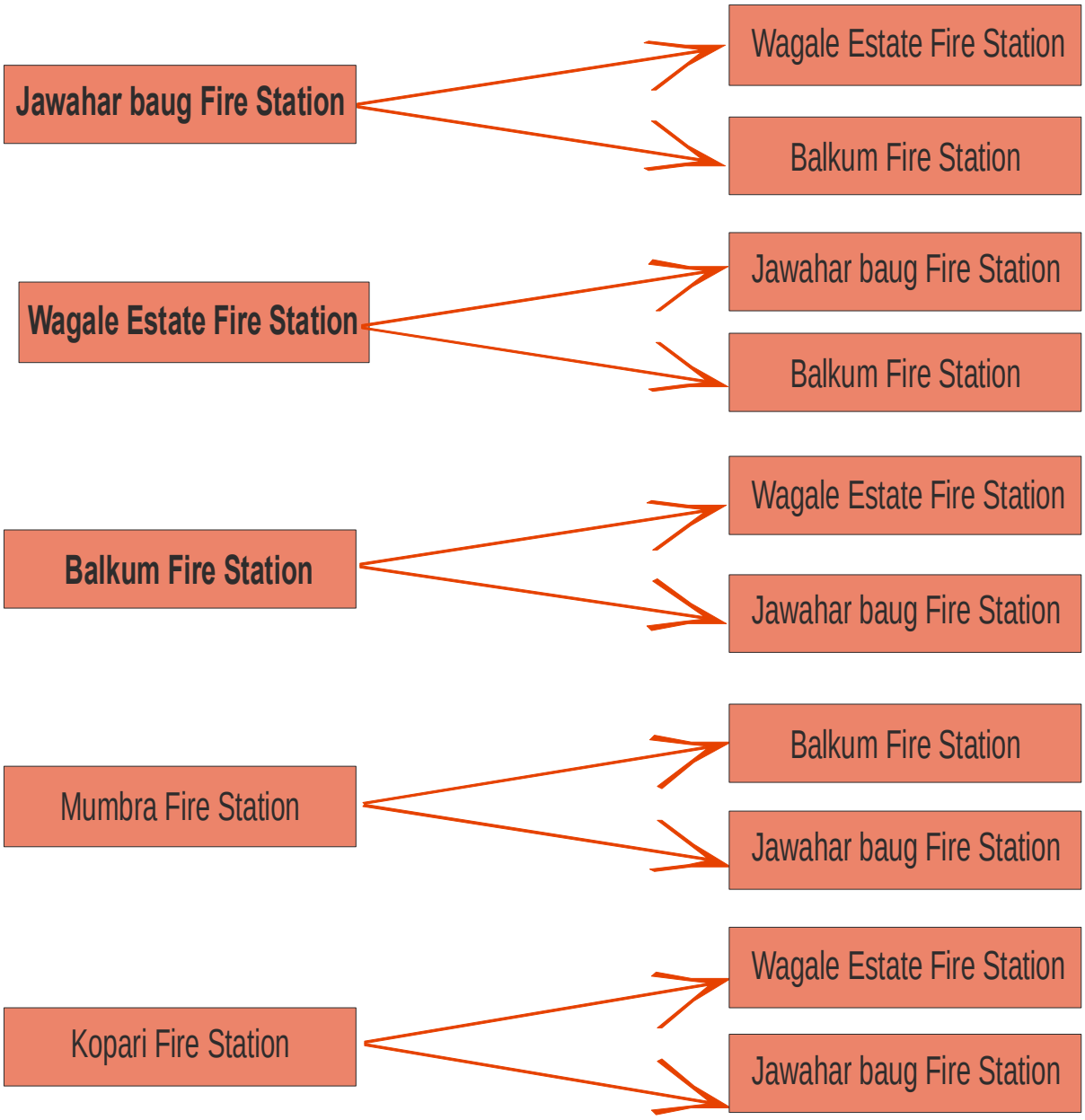
CAPACITY

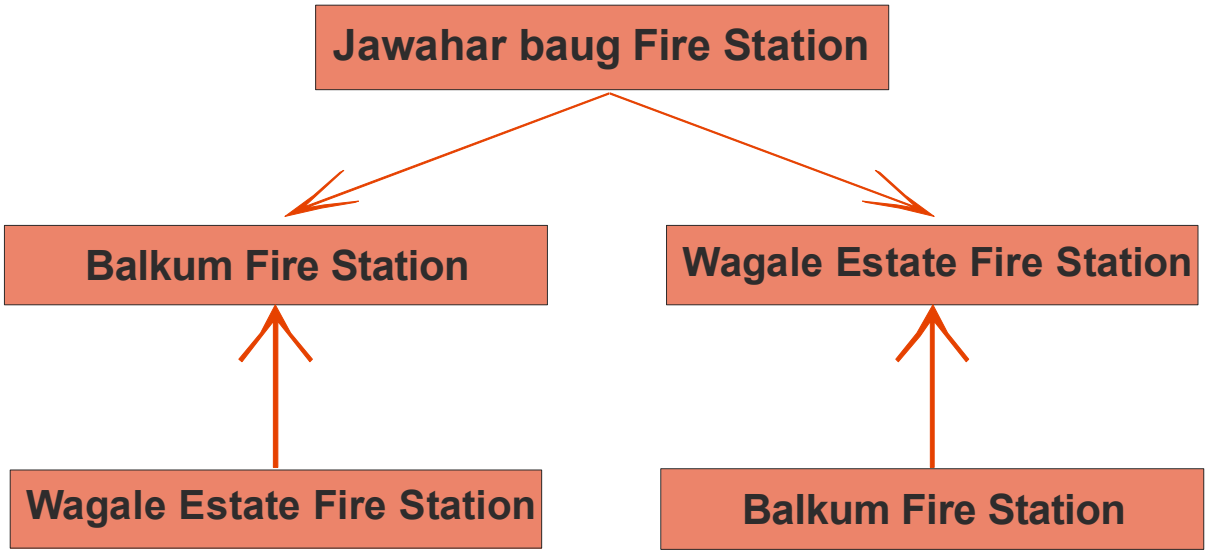
Sr. No.	Type of Vehicle	Total
1	Fire Engine (High Pressure)	11
2	Mini Fire Engine	02
3	Water Tankers	04
4	Emergency Tender	03
5	Arial Ladder (40 Mtrs.)	01
6	Foam Tender	01
7	Towing Vehicle	02
8	Jeep	05
9	Car	01
	Total	30

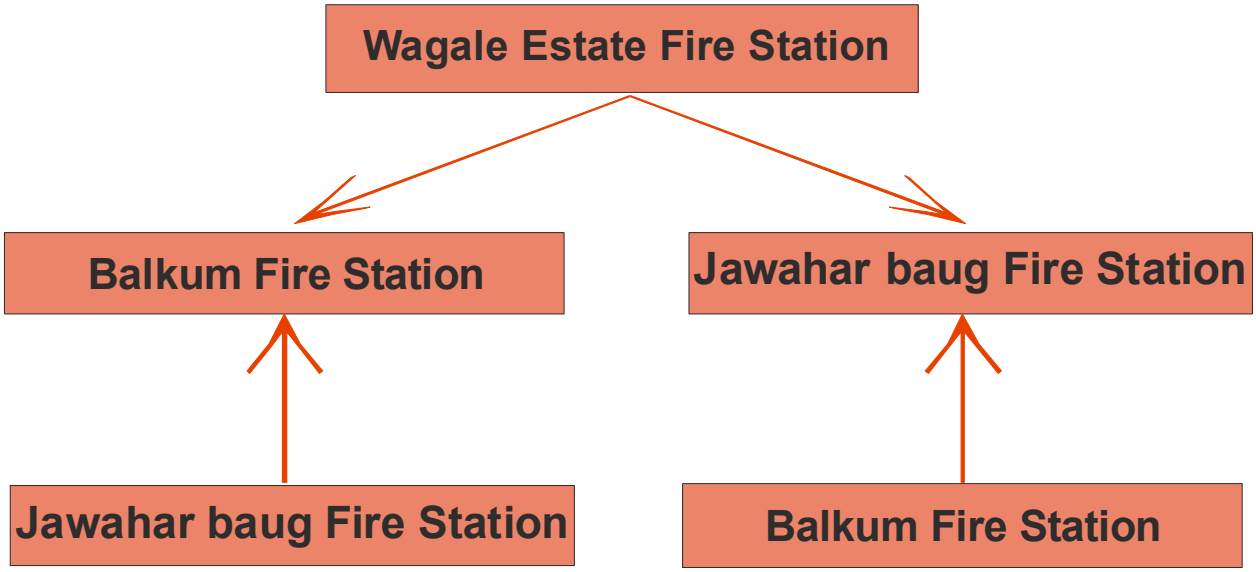
FIREBRIGAD

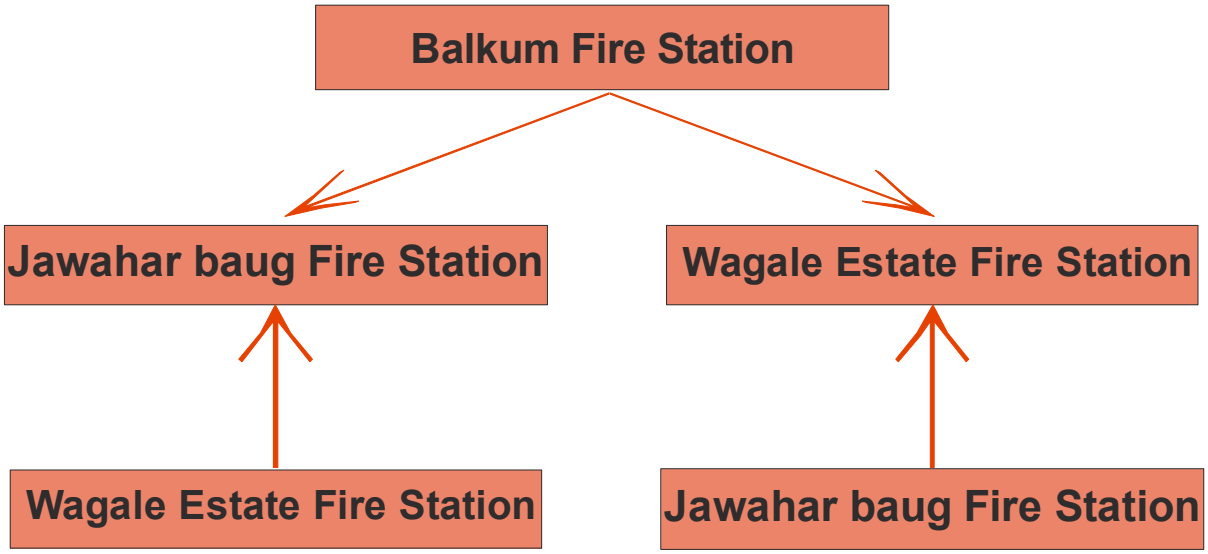
CAPABILITY

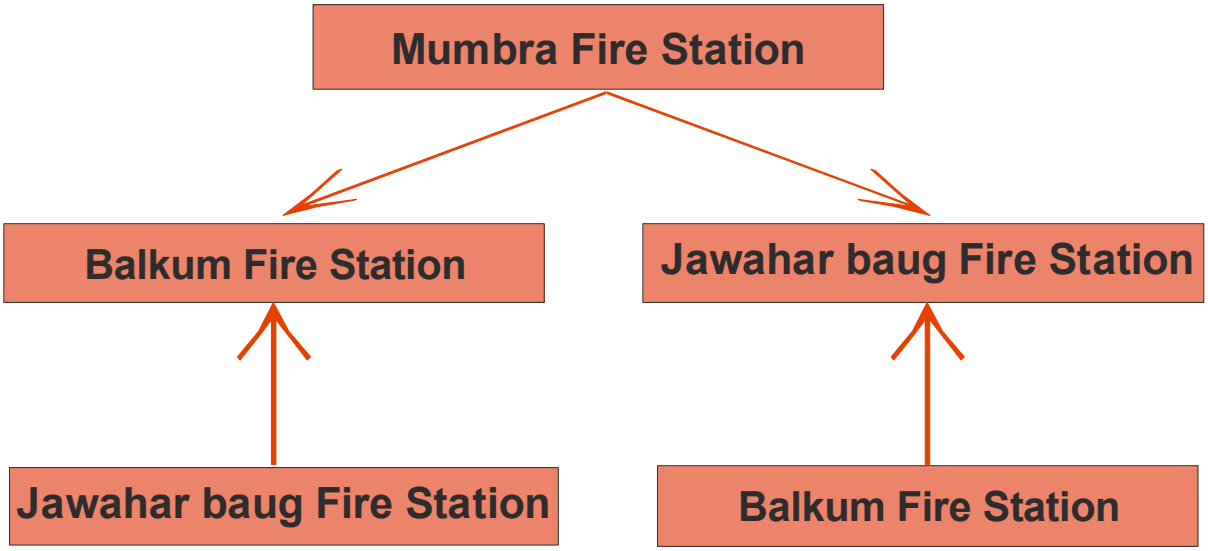
- MARG between all the adjoining fire services of TMC (i.e. Mumbai, Navi Mumbai, Mira – Bhayander, Bhiwandi and Kalyan Dombiwali, Air Force, Thane)
- Machineries and extinguishing media available with the industries which are within the limits of TMC.
- Swimmers and Divers
- NGO's

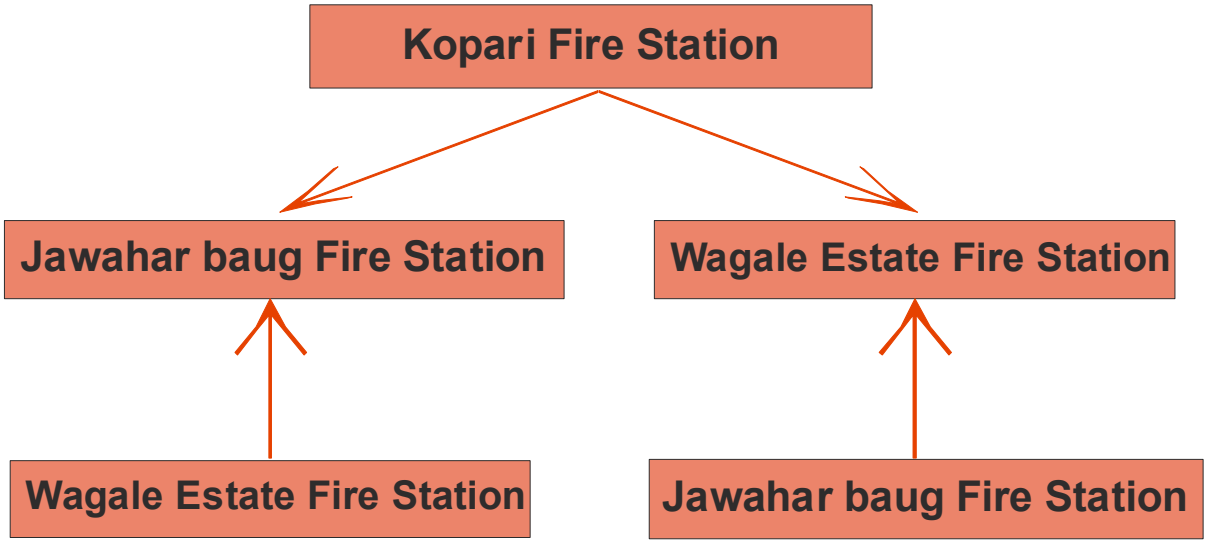


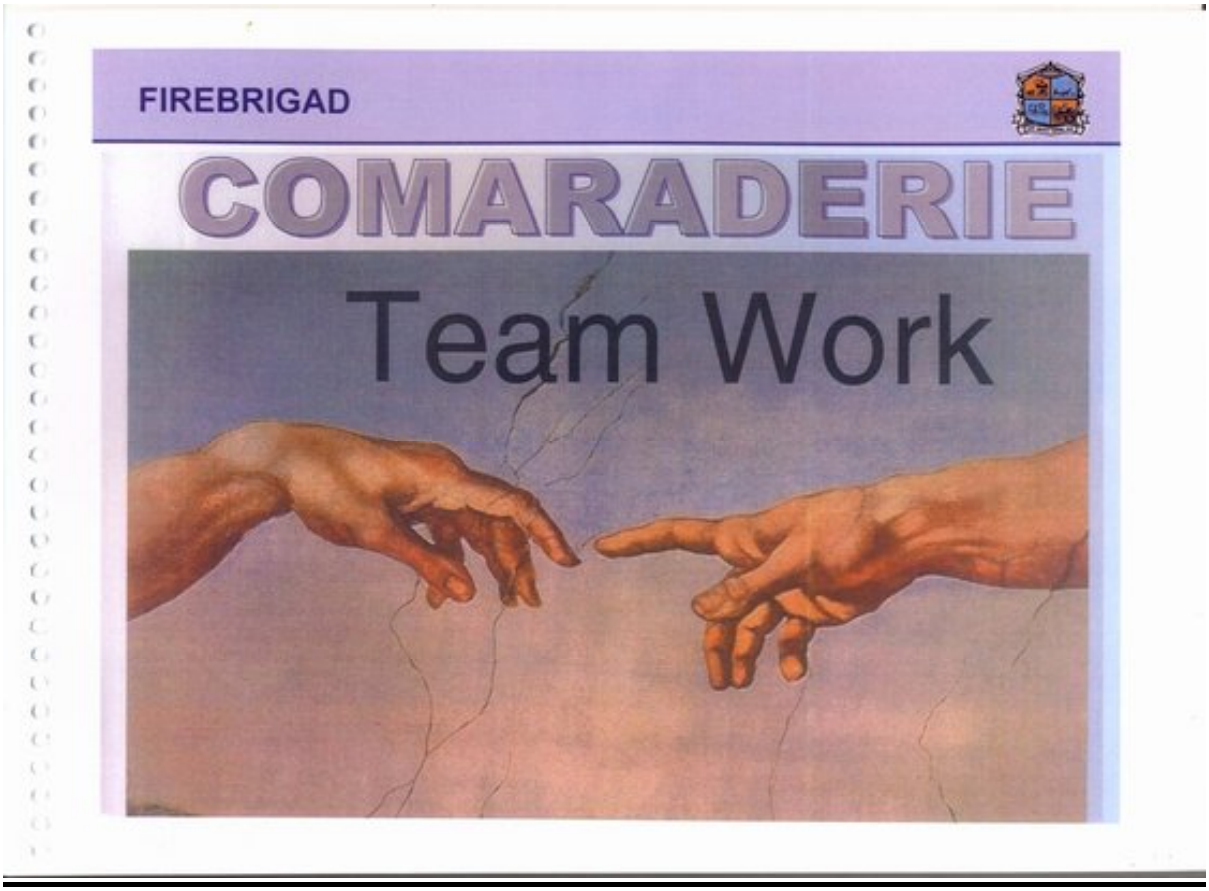












Annexure – O

Plan for availing Mutual Aid with any Central or other State Government Authority for conducting fire & rescue operations

RESTRICTED

APO 244

APPENDIX 'D'

(Refers to APO 244/77 para 35)

MUTUAL AID ASSISTANCE BETWEEN CIVIL AND DEFENCE FIRE FIGHTING ORGANISATION

Government of India, Ministry of Defence, Office Memoranda No. F256/31/D(IS) dated 18th April, 1955 and No. 5(3)/56/D(IS)/4456/CG(Admin) dated 18th May, 1959 are reproduced below:—

2. Officers Commanding I.A.F. Station/Units, in liaison with the local civil authorities, are to fully implement this scheme.

3. In joint fire fighting operations involving both the civil and I.A.F. Fire Services, the Officer of the Civil Fire Brigade will be in overall command of the fire fighting operation.

Government of India, Ministry of Defence Office Memorandum No. F256/31/D(IS), dated the 18th April 1955

"The undersigned is directed to state that a scheme for mutual assistance between Civil and Defence Fire Brigades has been formulated by the Ministry of Home Affairs in consultation with this Ministry and circulated to all parts A, B and C states under their No. 20/49/52-CD(OSD) dated the 11th January, 1955. A set of instructions as finalized is placed below for reference. The services Headquarters and the D.G.O.F. are therefore requested to direct the local defence authorities concerned to take up the matter directly with the local Civil Authorities for finalising and implementing the scheme.

This is issued with the concurrence of the Ministry of Finance (Defence)".

SET OF INSTRUCTIONS FOR THE MUTUAL AID SCHEME BETWEEN CIVIL AND DEFENCE FIRE FIGHTING BRIGADES

1. The object of the scheme is to ensure that wherever a fire breaks out all locally available fire fighting resources,

369

RESTRICTED

both Defence and Civil can be mobilised so that danger to life may be reduced to the minimum and the maximum protection offered against loss of property.

2. The scheme will apply to all fire brigade organisations, Civil or Defence, in the states participating in the scheme. It will cover (i) cases where Civil and Defence Fire Brigades are located in contiguous or nearby area as well as (ii) cases where only a Civil Fire Brigade or only a Defence Fire Brigade exists.

3. The normal zone of operation of each Civil/Defence Fire Brigade will be determined by the respective local Civil/Defence authorities at the level of officers nominated by the concerned authorities as laid down in clause 6 below.

4. Assistance rendered by Civil/Defence Fire Brigades when called out by the competent Defence/Civil authorities to quell outbreaks of fire inside the normal zone (as described in clause 3 above) will be free of charge.

5. For assistance rendered to private parties or to Government institutions situated outside the normal zone (as described in clause 3 above), charges may be levied, limited to the actual cost of turn out, in the following cases:—

(a) Where the fire station is located within the municipal limits and assistance is rendered in any place at a distance of five miles outside the municipal limits and

(b) Where the fire station is situated outside the municipal limits and assistance is rendered in places situated more than five miles away from the station.

The rates at which charges for actual cost of turn out will be levied will be determined by the respective state Government in the case of Civil Fire Brigades and by the Ministry of Defence in the case of Defence Fire Brigades.

6. The State Government concerned and the local Defence Authorities will, in consultation with each other,

designate on an ad hoc basis the officer or officers who will be authorised to ask for assistance from any particular station where a fire brigade is located.

They will also determine the quantum of assistance that each Fire Brigade will be called upon to render after ensuring that this does not lay bare the particular risk which the responding Fire Brigade is normally expected to cover. In case of fire breaking out simultaneously at a Civil and Defence installation, each fire brigade would attend to its installation first before going to the help of of the other party.

7. While conducting a joint fire fighting operation involving both the Civil and Defence fire brigades, the Officer-in-Charge of the Brigade which has asked for assistance shall be in overall command of the fire fighting operation.

Annexure – P

Detailed address and telephone numbers if any of all the personnel in the Fire Station.

Panchpakhadi Fire Station

Sr.No.	Names
1.	Shri. Arvind P.Mandke
2.	Shri. Yashwant R.Bhalekar
3.	Shri. Sanjay Ganpat Kadam
4.	Shri. Girish Zalke
5.	Shri. Nilesh N.Vetal
6.	Shri. Maruti Narayan Khetade

Kopri Fire Station

Sr. No.	Names	Sr. No.	Names
1.	Shri. Kundlik G.Thorat	20.	Shri. Sunil Ramchandra Veer
2.	Shri. Ashok Yashwant Patil	21.	Shri. Sanjay Thamke
3.	Shri. Hashya Rama Patil	22.	Shri. Govardhan A.Dhoke
4.	Shri. Suryabhan R.Darade	23.	Shri. Anil Chauhan
5.	Shri. Damodhar P.Talole	24.	Shri. Imam Pathan
6.	Shri. Vijaykumar T.Gaikwad	25.	Shri. Ashok Bhelware
7.	Shri. Ganpat Bhagwan Gadekar	26.	Shri. Deepak Vinayak Sonavane
8.	Shri. Prakash Gopinath Thakare	27.	Shri. Madhukar Laxman Koli
9.	Shri. Anil D.Kine	28.	Shri. Balkrishna R.Vaiti
10.	Shri. Gautam Mukund Waghchowde	29.	Shri. Dilip N.Yadav
11.	Shri. Sandip Eknath Kadam	30.	Shri. Deepak Damodhar Patil
12.	Shri. Shankar Juwatkar	31.	Shri. Pramod Mohan Patil
13.	Shri. Shaikh Shafik Adam	32.	Shri. Prashant G. Salve
14.	Shri. Chandrakant Dhawale	33.	Shri. Rajesh Devram Bande
15.	Shri. Mangesh Dhuri	34.	Shri. Balu Gangaram Karvande
16.	Shri. Pandurang Bhagat	35.	Shri. Avinash D. Bhoye
17.	Shri. Govind Maharao	36.	Shri. Durgesh Krishna Tare
18.	Shri. Kashinath Zirva	37.	Shri. Milind Laxman Patil
19.	Shri. Padmakar Patil	38.	Shri. Mahendrasing A.Rajput

BALKUM FIRE STATION

Sr.No.	Names	Sr.No	Names
1.	Shri.Pandrang R. Raskar	29.	Shri. Devraj E. Mudaliyar
2.	Shri. Hari Vithu Pornok	30.	Shri. Vishvas N. Koli
3.	Shri. Vishwanath P. Godbole	31.	Shri. Ganesh T. Shinde
4.	Shri. Ramesh K.Patil	32.	Shri. Vasant D. Patil
5.	Shri. Shivaji D.Bapardekar	33.	Shri. Ganesh R. Vaiti
6.	Shri. Ramdas N. Barve	34.	Shri. Rajesh N. Patil
7.	Shri. Mahedra P.Singh	35.	Shri. Eaknath V.Patil
8.	Shri. Nathuram Daji Chavan	36.	Shri. Ashok Rajaram Parab
9.	Shri. Sunil Salvi	37.	Shri. Pratap Bhanudas Patil
10.	Shri. Ajay D. Lad	38.	Shri. Sanjit Shamuvel Gavit
11.	Shri. Jeetendra Churmure	39.	Shri. Jagan Keshav Kuvara
12.	Shri. Raosaheb Namdeo Pawar	40.	Shri. Devidas Motiram Pawar
13.	Shri. Suresh S.Thakare	41.	Shri. Shivraj Suryabhan Katkar
14.	Shri. Dinesh Manohar Patil	42.	Shri. Mangalsingh K. Rajput
15.	Shri. Samadhan Deware	43.	Shri. Pravin Dangal Bhoi
16.	Shri. Hindurao Bhondawe	44.	Shri. Ramkrushna D.Sable
17.	Shri. Babaram Raghunath Gujar	45.	Shri. Ramesh Laxman Sawar
18.	Shri. Ravindra Mandawakar	46.	Shri. Mahadeo Mohan Warang
19.	Shri. Dattaram Krushna More	47.	Shri. Sachin Vithal Khedekar
20.	Shri. Narendra Ingale	48.	Shri. Sudhir Gangaram Tatkare
21.	Shri. Raju Waghchoure	49.	Shri. Sandip Prabhakar Randive
22.	Shri. Bhagwat Kadu Deshmukh	50.	Shri. Ajay Motiram Welke
23.	Shri. Mohan Keru Kadam	51.	Shri. Kailas Rajmal Choure
24.	Shri. Madhukar Thakur	52.	Shri. Sandesh Raghunath Bhoir
25.	Shri. Rajkumar M. Chatole	53.	Shri. Nitin Ramchandra Sawant
26.	Shri. Prakash Madhukar Sonavane	54.	Shri. Bhavesh Naredra Pawar
27.	Shri. Rajendra E. Mudaliyar	55.	Shri. Babaji Popat Jagtap
28.	Shri. Ashok S. Purnekar		

Wagle Fire Station

Sr. No.	Names	Sr. No.	Names
1.	Shri. Pundlik L.Patil	31.	Shri. Laxman Handage
2.	Shri. Nilakantha R.Patil	32.	Shri. Deodas N. Nikalje
3.	Shri. Annasaheb R.Vanave	33.	Shri. Govind Hari Pawar
4.	Shri. Dastagir D.Shaikh	34.	Shri. Mangal P. Solanki
5.	Shri. Lalchandra N.Mishra	35.	Shri. Munirshaikh U. Mullah
6.	Shri. Bapurao S. Khedkar	36.	Shri. Vaijnath Narayan Vaiti
7.	Shri. Barku Hari Bhagat	37.	Shri. Rohidas K.Vaiti
8.	Shri. Raghunath R.Desle	38.	Shri. Santosh R. Umbrekar
9.	Shri. Dhau Bhagoji Mohape	39.	Shri. Prabhakar B. Kadam
10.	Shri. Hanumant B. Jadhav	40.	Shri. Sanjay S.Gavare
11.	Shri. Gokul S. Patil	41.	Shri. Deepak Dalal Pawar
12.	Shri. Ramchandra B. Saple	42.	Shri. Ananda Shankar Pavane
13.	Shri. Bansi B. Shinde	43.	Shri. Devram Budha Patekar
14.	Shri. Vasant L. More	44.	Shri. Sandeep Balu Mahale
15.	Shri. Rajan Vaidya	45.	Shri. Mangalsing A.Rajput
16.	Shri. Bhagwan R. Vekhande	46.	Shri. Rafik Amir Tadavi
17.	Shri. Hemant V. Patil	47.	Shri. Dinesh Shankar Warghade
18.	Shri. Umakant Sonawane	48.	Shri. Prashant Shyam Mulya
19.	Shri. Dayaram Dhengale	49.	Shri. Sunil P. Patil
20.	Shri. Sanjay Mane	50.	Shri. Vilas Ghanshyam Pawar
21.	Shri. Suresh Shiswal	51.	Shri. Jayesh Lahu Shelke
22.	Shri. Baliram N. Shinde	52.	Shri. Samir Sadanand Jadhav
23.	Shri. Sunil Gaikwad	53.	Shri. Manish P. Sable
24.	Shri. Madhukar G. Pisal	54.	Shri. Kiran Dilip Chaure
25.	Shri. Kishor Bhoir	55.	Shri. Rakesh C. Bhoye
26.	Shri. Rajendra Raut	56.	Shri. Mayur Tare
27.	Shri. Sanjay Barkate	57.	Shri. Vikram Madhav Kakade
28.	Shri. Datta Khadya	58.	Shri. Khemraj B.Gahane
29.	Shri. Balu Vanawe		
30.	Shri. Dhanaji Kakade		

Jawaharbaug Fire Station

Sr. No.	Names	Sr. No.	Names
1.	Shri. Digambar D. Shinde	31.	Shri. Pramod K. Kaklij
2.	Shri. Deepak S. Bhise	32.	Shri. Umesh Yadav
3.	Shri. Sudam D. Late	33.	Shri. Anil Prabhakar More
4.	Shri. Maruti Abaji Gare	34.	Shri. Arvinda Anant Sadre
5.	Shri. Rajaram R. Gharat	35.	Shri. Vijay Dinkar Rane
6.	Shri. Laxman Hari Pardhi	36.	Shri. Rajendra Ghosalkar
7.	Shri. Satish Shankar Shinde	37.	Shri. Suresh Shaniwar Salvi
8.	Shri. Sitaram Shankar Raut	38.	Shri. Namdeo D. Dhayarkar
9.	Shri. Madan Maruti Otari	39.	Shri. Kaluram P. Patil
10.	Shri. Bharat Bhimrao Ruke	40.	Shri. Ramchandra N. Sigwan
11.	Shri. Balkrushna H. Mhatre	41.	Shri. Sharad Ganpat Kadam
12.	Shri. Surendra V. Kokate	42.	Shri. Dhanaji Rasal
13.	Shri. Dilip Kisan Bhelake	43.	Shri. Premji Hari Solanki
14.	Shri. Vilas D. Dound	44.	Shri. Chandrakant R. Ghadasi
15.	Shri. Sunil Shankar Wagh	45.	Shri. Kishor Damodar Bhoir
16.	Shri. Chandrakant G. Jadhav	46.	Shri. Ravindra D. Falke
17.	Shri. Shivaji Mormare	47.	Shri. Popat Nivruti Gejage
18.	Shri. Balasaheb S. Shingade	48.	Shri. Pradeep G. Koli
19.	Shri. Ravindra Soma Pawar	49.	Shri. Sanjay B. Waghmode
20.	Shri. Bhagwan K. Bhalerao	50.	Shri. Prasad Ashok Sali
21.	Shri. Thorat D. Gundu	51.	Shri. Parish B. Madhavi
22.	Shri. Ganesh N. Khetade	52.	Shri. Balu Namdeo munde
23.	Shri. Chand Dagadu Shaikh	53.	Shri. Deepak B. Sargar
24.	Shri. Manohar Vasant Mogare	54.	Shri. Shivaji D. Mengal
25.	Shri. Vijay Waman Parab	55.	Shri. Sunil Rajmal Choure
26.	Shri. Gautam Keshav Jadhav	56.	Shri. Hitesh Patil
27.	Shri. Dipak Arvind Mayekar	57.	Shri. Sudhir Darade
28.	Shri. Vasant Govind Adak	58.	Shri. Kumesh S. Patil
29.	Shri. Shyam Sadashiv Ambre	59.	Shri. Navnath B. Khedkar
30.	Shri. Baban Nashik Patil	60.	Shri. Kishor D. Mahale

Mumbra Fire Station

Sr. No.	Names	Sr. No.	Names
1.	Shri. Rakhma Ramji Waghmare	29.	Shri. Ravindra Jayram Shelar
2.	Shri. Baban Waman Padwal	30.	Shri. Manohar Govind Utekar
3.	Shri. Ratan Gotiram Pardeshi	31.	Shri. Vinayak Sitaram Kherade
4.	Shri. Balwant Sonba Date	32.	Shri. Babarao Mahajan Yade
5.	Shri. Pratap Girish Jadhav	33.	Shri. Raju Menkudale
6.	Shri. Sunil Raghunath Bombe	34.	Shri. Anant Ingle
7.	Shri. Uday Bhandilkar	35.	Shri. Leelaram G.Walmiki
8.	Shri. Ramesh Kadam	36.	Shri. Sandip Manohar Lanjekar
9.	Shri. Gopinath Dinkar Kadam	37.	Shri. Ashok N. Walmiki
10.	Shri. Kasam Kadbuddin Kazi	38.	Shri. Subhash D.Mhatre
11.	Shri. Shankar Ladhe	39.	Shri. Ashok Halya Patil
12.	Shri. Sanjay Ramchandra Malekar	40.	Shri. Suryakant T.Patil
13.	Shri. Suresh Ishte	41.	Shri. Lala L.Patil
14.	Shri. Baliram Kanoje	42.	Shri. Sakharam Savla Gulig
15.	Shri. Prakash Nandaram Bagul	43.	Shri. Arun Janardan Patil
16.	Shri. Babasaheb Ananda Mane	44.	Shri. Bhai Chandra B.Thanekar
17.	Shri. Pandurang Giri Gosavi	45.	Shri. Deepak K.Kaklij
18.	Shri.Anil Bhaurao Sonawane	46.	Shri. Arun Madhukar Raut
19.	Shri. Dipak Dwarkanath kathe	47.	Shri. Laxman Rama Bhoir
20.	Shri. Pramod J. More	48.	Shri. Tanay Prabhakar Patil
21.	Shri. Krushna Khambe	49.	Shri. Jaywant Pandurang Wagh
22.	Shri. Krushna Kumbhar	50.	Shri. Anil Bhika Bhoi
23.	Shri. Shankar Rama Nipurte	51.	Shri. Umesh D.Mohare
24.	Shri. Tambeshwar Mishra	52.	Shri. Swapnil N.Sahare
25.	Shri. Nitin Yashwant Shinde	53.	Shri. Nandkishor D. Bagul
26.	Shri. Pradip Dayaram Patil	54.	Shri. Laxman Sakharam Sable
27.	Shri. Prakash Raut	55.	Shri. Sambhaji B. Thakre
28.	Shri. Gangaram Ambre	56.	Shri. Suresh H. Gosavi

Annexure – Q

Details of Officers & Staff attached to Fire & Emergency Service :

SL.	Designation	Name	Office Address	Contact Details
1.	Chief Fire Officer	Shri. Arvind Prabhakar Mandke	Panchpakhadi Fire Station, Thane	Telephone (O): 25361264 Telephone (R): Mobile No.:9969201541 Fax No.: 25361264 E Mail: mandkea@yahoo.co.in
2.	Divisional Officer	Shri. P.L. Patil	Panchpakhadi Fire Station, Thane	Telephone (O): 25331399 Telephone (R): Mobile No.:9969201542 Fax No.: E Mail:
3.	Divisional Officer	Shri. A.M.Raut	Panchpakhadi Fire Station, Thane	Telephone (O): 25440797 Telephone (R): Mobile No.:9969201544 Fax No.: E Mail:
4.	Divisional Officer	Shri. D.D.Shide	Jawahar Baug Fire Station, Thane	Telephone (O): 25365202 Telephone (R): Mobile No.:9969201543 Fax No.: E Mail:
5.	Station Officer	Shri. D.B. Mohpe	Wagle Fire Station, Thane	Telephone (O): 25823477 Telephone (R): Mobile No.:9969201545 Fax No.: E Mail:
6.	Station Officer	Shri. R.G.Pardeshi	Mumbra Fire Station, Thane	Telephone (O): 25462001 Telephone (R): Mobile No.:99692015 Fax No.: E Mail:
7.	Station Officer	Shri. A.R. Parab	Balkum Fire Station, Thane	Telephone (O): 25366401 Telephone (R): Mobile No.:9167386050 Fax No.: E Mail:
8.	Station Officer	Shri. G.M. Zalke	Panchpakhadi Fire Station, Thane	Telephone (O): 25440797 Telephone (R): Mobile No.: 9167386060 Fax No.: E Mail:

9.	Station Officer	Shri. G.S. Patil	Wagle Fire Station, Thane	Telephone (O): 25823477 Telephone (R): Mobile No.: Fax No.: E Mail:
10.	Station Officer	Shri. S.D. Late	Jawahar Baug Fire Station, Thane	Telephone (O): 25365202 Telephone (R): Mobile No.:9969201546 Fax No.: E Mail:
11.	Station Officer	Shri. A.Y.Patil	Kopri Fire Station, Thane	Telephone (O): 25325313 Telephone (R): Mobile No.: Fax No.: E Mail:

Annexure – R

Sr. No.	Name Of Fire Station	Pumping Units	Appliance Area	DSR Rate (2010)	Total Appliance Cost	Remark
1	Nitin	03	1200 m^2	9500 / m^2	1,14,00,000	Already Constructed.
2	Vartak Nagar	03	2000 m^2	9500 / m^2	1,90,00,000	This cost is exclusively for the construction of the fire station in which land cost is not included.
3	Voltas	03	2000 m^2	9500 / m^2	1,90,00,000	
4	Kalwa	03	2000 m^2	9500 / m^2	1,90,00,000	
5	Owala	04	2000 m^2	9500 / m^2	1,90,00,000	
6	Kolshet	03	2000 m^2	9500 / m^2	1,90,00,000	
7	Parsik	03	2000 m^2	9500 / m^2	1,90,00,000	
8	Diva	03	2000 m^2	9500 / m^2	1,90,00,000	
9	Dahisar	03	2000 m^2	9500 / m^2	1,90,00,000	
				TOTAL	**15,20,00,000**	

MANPOWER FOR 03 PUMPING UNIT AS PER S.F.A.C. NORMS :

Sr. No	Cadre	Per Appliance (Per Shift)	Per Appliance (3 Shift)	For 3 Appliances (3 shift) (1 FS of 3 Pumping Unit)	For 8 Fire Station each of 3 pumping Unit	Additional		Total	L.R. & Training 35 % of Total	Grand Total
						Per Fire Station	For 8 Fire Station			
1	Fireman	06	18	54	432	1. FAD ï 1 2. HID ï 2 3. DISP-1 4. Watch Room ï 4 08	64	496	124	620
2	Leading Fireman	01	03	09	72	For station duty & Out door duty 01	08	80	20	100
3	Driver	As per S.F.A.C. norms for 3 appliance for 1 shift 4 driver		12	96	--	--	96	24	120
4	Sub Officer	As per S.F.A.C. norms for 3 appliance for 1 shift 02 sub officer		06	48	--	--	48	07	55
5	Station Officer	As per S.F.A.C. norms for 3 appliance for 1 shift 01 Station Officer		03	24	--	--	24	04	28

MANPOWER FOR 04 PUMPING UNIT AS PER S.F.A.C. NORMS :

Sr. No.	Cadre	Per Appliance (Per Shift)	Per Appliance (3 Shift)	For 4 Appliances (3 shift) (1 FS of 4 Pumping Unit)	Additional	Total	L.R. & Training 35 % of Total	Grand Total
					Per Fire Station			
1	Fireman	06	18	72	1. FAD ï 1 2. HID ï 2 3. DISP-1 4. Watch Room ï 4 08	80	20	100
2	Leading Fireman	01	03	12	For station duty & Out door duty 01	13	03	16
3	Driver	As per S.F.A.C. norms for 4 appliance for 1 shift 06 driver		18	--	18	05	23
4	Sub Officer	As per S.F.A.C. norms for 4 appliance for 1 shift 02 sub officer		06	--	06	15 % of Total is 02	08
5	Station Officer	As per S.F.A.C. norms for 4 appliance for 1 shift 02 Station Officer		06	--	06	15 % of Total is 02	08

TOTAL EXPENDITURE OF REQUIRED MANPOWER :

Sr. No.	Cadre	Required Nos of post	Per Cadre per month expenditure	Per Cadre per annual expenditure	All Cadres per months expenditure	Total
1	Fireman	720	10,511.00	1,26,132.00	75,67,920.00	9,08,15,040.00
2	Leading Fireman	116	11,867.00	1,42,404.00	13,76,572.00	1,65,18,864.00
3	Driver	143	11,264.00	1,35,168.00	16,10,752.00	1,93,29,024.00
4	Sub Officer	63	13,967.00	1,67,604.00	8,79,921.00	1,05,59,052.00
5	Station Officer	36	16,982.00	2,03,784.00	6,11,352.00	73,36,224.00
	Total					14,45,58,204.00

TOTAL EXPENDITURE OF REQUIRED MACHINERIES:

Sr. No.	Type Of Vehicle	Excising Vehicle	Required Vehicle	Gap Analysis	Test Cost	Total Cost of Vehicle
1	Water Tender	14	26	12	57,34,969.00	6,88,19,628.00 (NH-30)
2	Water Tanker	04	14	10	99,22,500.00	9,92,25,000.00 (NH-40)
3	A.L.P. (56 M)	02	03	01	8,52,68,804.00 (56 M)	8,52,68,804.00
4	T.T.L.	--	02	02	8,00,44,826 (56M)	16,00,89,652.00
5	Hazmat Van	--	01	01	3,32,64,000.00	3,32,64,000.00
6	Emergency Tender	03	07	04	34,07,188.00	1.,36,28,752.00
7	Control Post Van	--	01	01	20,00,000.00	20,00,000.00
8	B.A. Gallery	--	01	01	1,50,00,000.00	1,50,00,000.00
9	O.B. Van	--	01	01	1,00,00,000.00	1,00,00,000.00
10	Radio Trunking	--	01	01	5,00,00,000.00	5,00,00,000.00
11	Wireless Addressable System	--	01	01	20,00,00,000.00	20,00,00,000.00
				Total		**73,72,95,836.00**

SUMMARY

Sr. NO.	Name Of Head	Tentative Expenditure
1	Construction Of Fire Station	15,20,00,000.00
2	Machineries	73,72,95,836.00
3	Manpower	14,45,58,204.00
	Total (A)	**103,38,54,040.00**
4	Capacity Building (Training)	1,00,00,000.00
5	Misc. (To conduct mock drills, evacuation drills etc)	25,00,000.00
	Total (B)	1,25,00,000.00
	Total (A) + (B)	**104,63,54,040.00**

- Construction cost is calculated on the basis of DSR 2010.
- Above mentioned cost is excluding the cost of Land / Land acquisition.
- Establishment expenditure is calculated on the basis of existing pay scale of the employee.
- Machinery cost are evaluated on the basis of market value of the vehicle / machineries.
- Escalation cost is not included in the above budget.