IOT USE CASE : FIRE DETECTION PROTECTION SYSTEMS

WEBGILANT FIRE READY
PUMP ROOMS • ALARMS • EXTINGUISHERS KEEP YOUR FACILITY FIRE READY 24 X 7

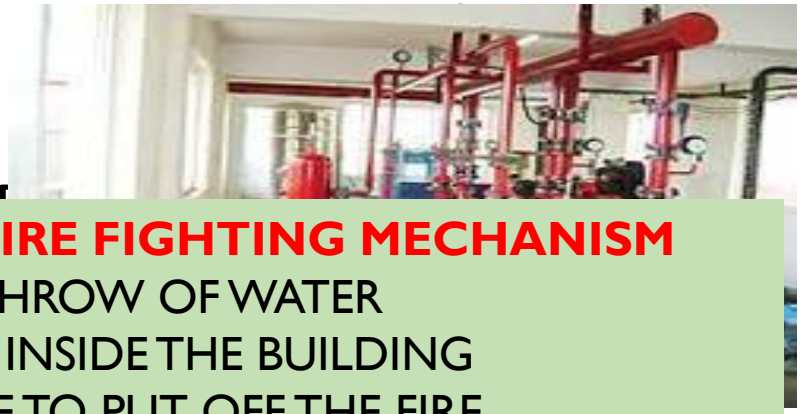
PYROX SAFELINE

- SCOPE LIMITED TO EQUIPMENTS AND DOES NOT COVER DISASTER MANAGEMENT PHYSICAL EVACUATION ETC

FIRE DETECTION AND PROTECTION: INTRO

FIRE DETECTION SYSTEM

- SMOKE DETECTORS
- FIRE ALARM PANEL
- HOOTERS
- MCP



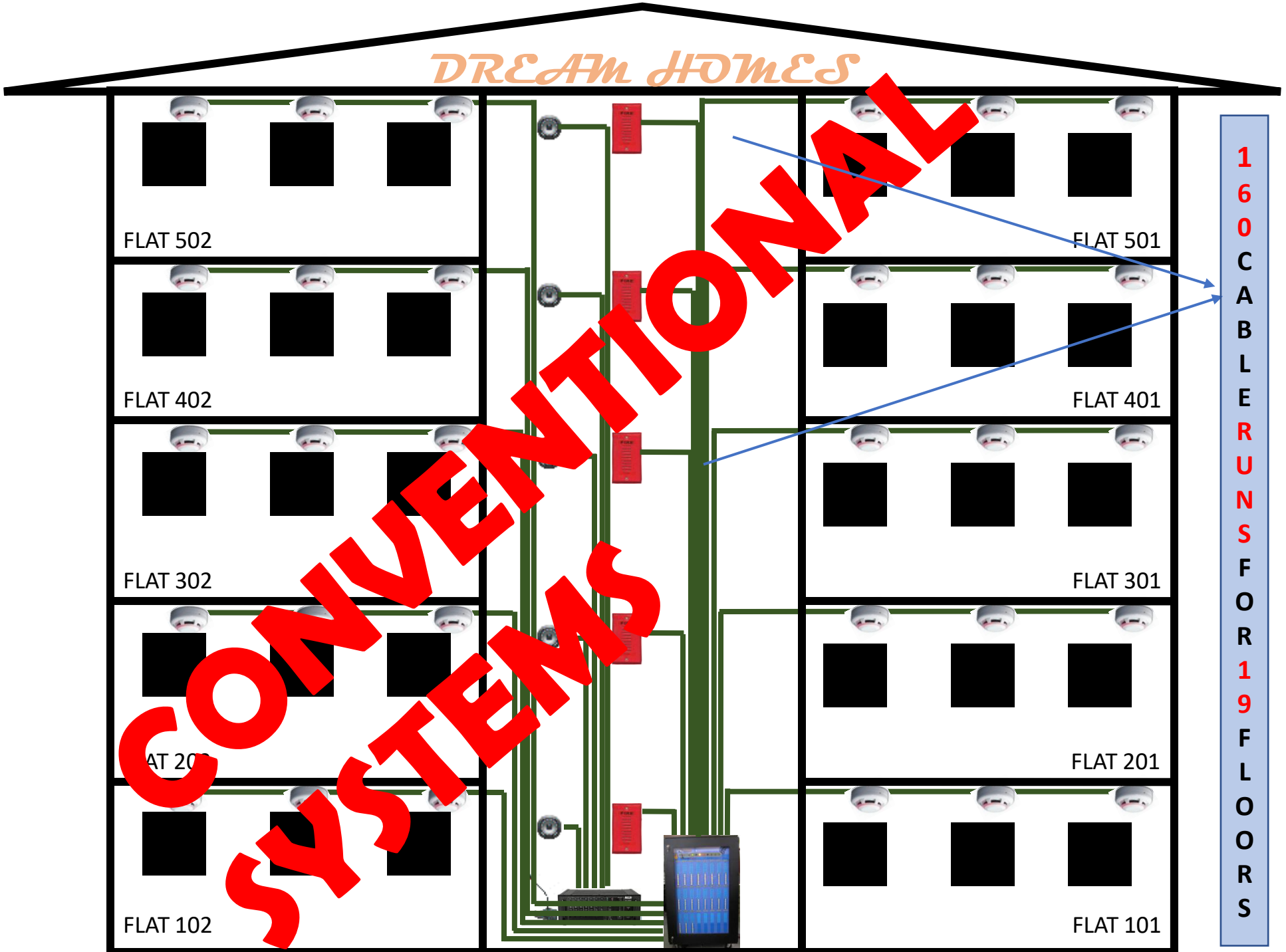
HOSE REEL DRUMS PROVIDE FIRST AID FIRE FIGHTING MECHANISM

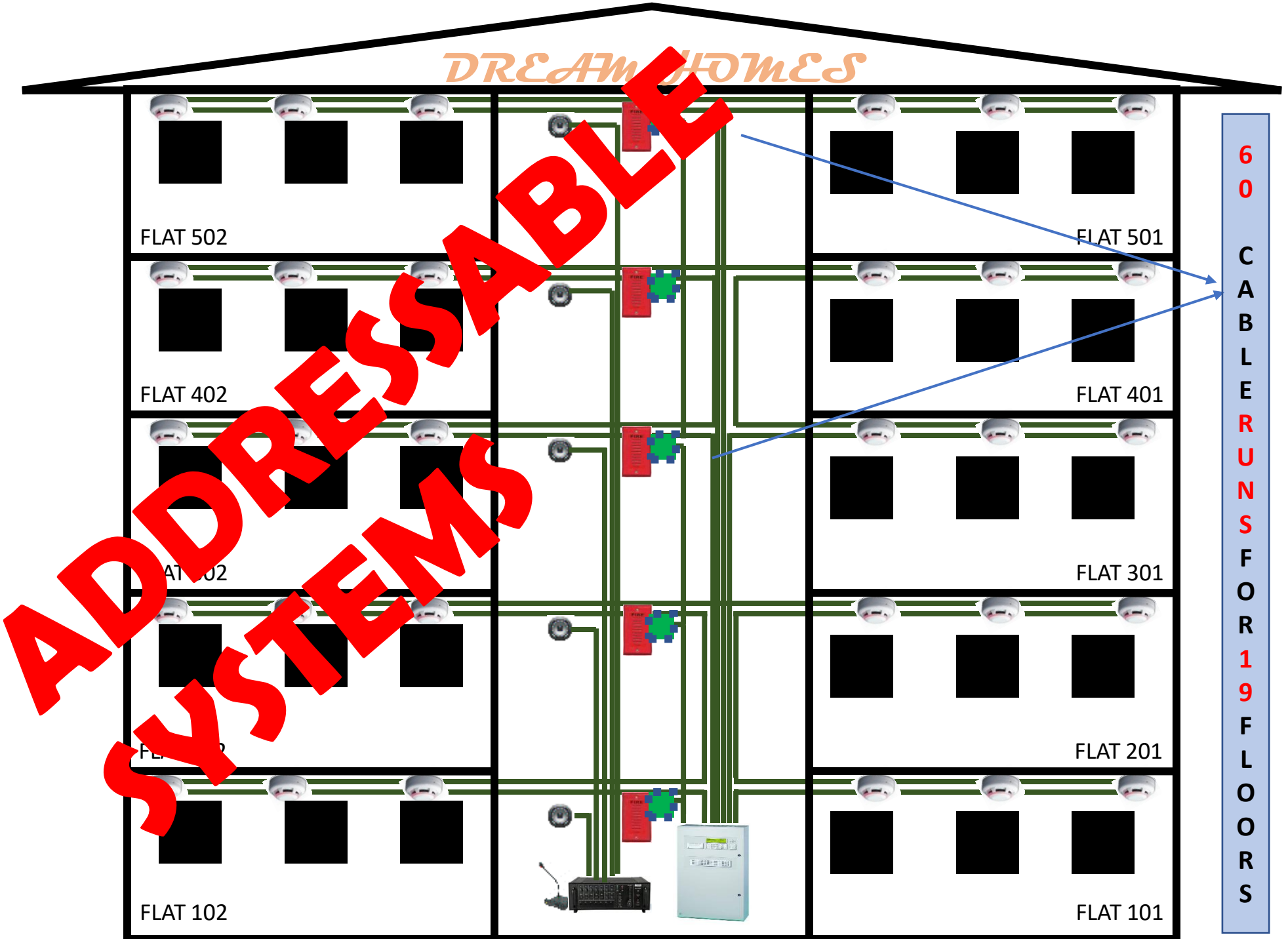
HYDRANTS USED FOR LARGER THROW OF WATER

SPRINKLERS WORK AUTOMATICALLY INSIDE THE BUILDING

WATER IS SPRAYED AT HIGH PRESSURE TO PUT OFF THE FIRE

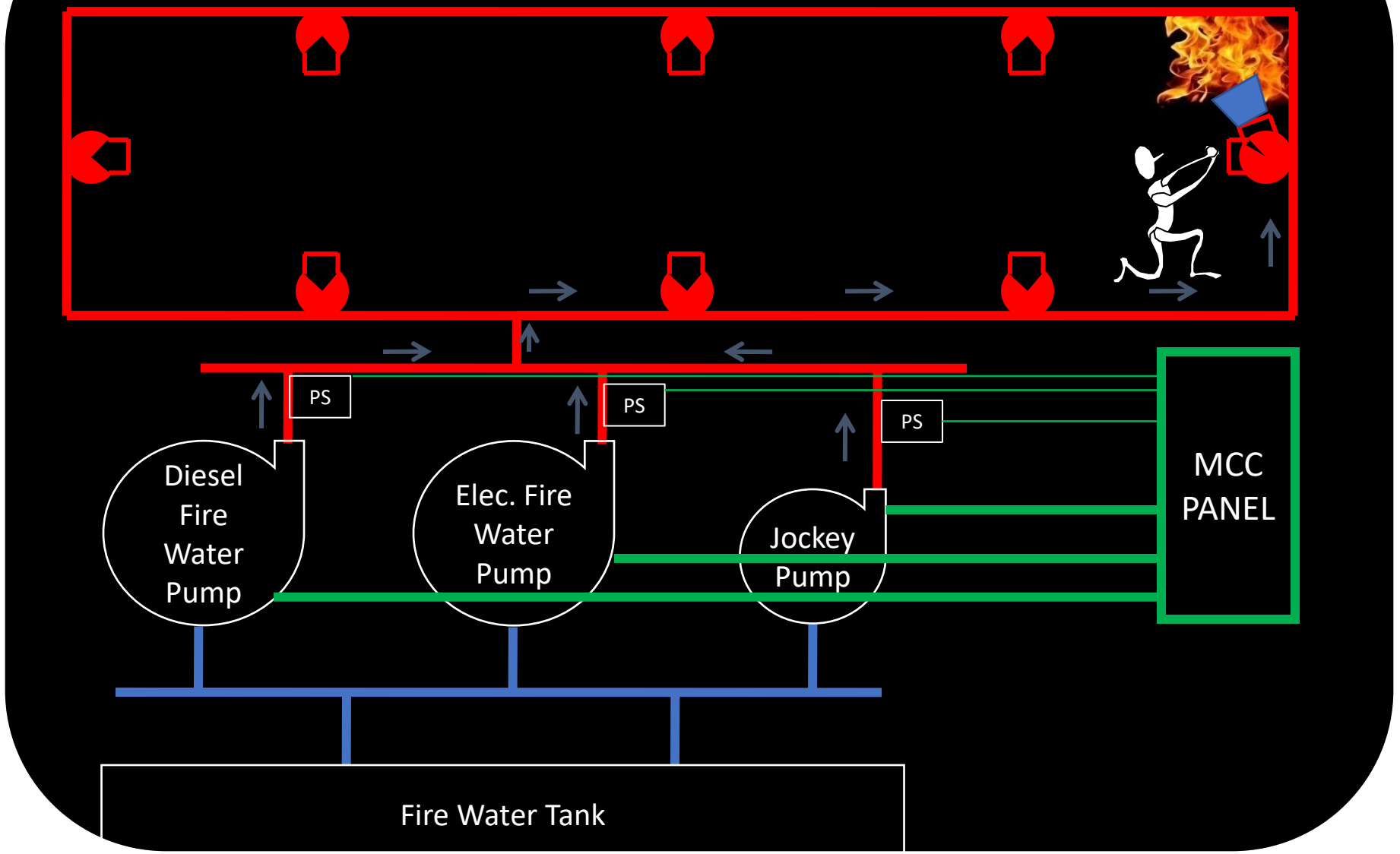
CAPTIVE FIRE FIGHTING SPECIFIED PROVIDES NECESSARY & SUFFICIENT MEANS TO DOUSE THE FIRE


DREAM HOMES
FLAT 502
FLAT 501
FLAT 402
FLAT 401
FLAT 302
FLAT 301
FLAT 201
FLAT 102
FLAT 101
CONVENTIONAL SYSTEMS
160 CABLE RUNS FOR 19 FLOORS


DREAM HOMES
ADDRESSABLE SYSTEMS
FLAT 502
FLAT 501
FLAT 402
FLAT 401
FLAT 301
FLAT 201
FLAT 102
FLAT 101
60 CABLE RUNS FOR 19 FLOORS


DREAM HOMES
IADAC SYSTEMS
FLAT 501
FLAT 402
FLAT 401
FLAT 302
FLAT 301
FLAT 202
FLAT 201
FLAT 102
FLAT 101
90 % CABLE REDUCTION

FIRE FIGHTING SYSTEM OVERVIEW



IN ALL CASES SYSTEMS INSTALLED AS PER RECOMMENDATION OF THE REGULATORY STANDARDS ARE SUFFICIENT TO TACKLE THE EMERGENCY IN CASE OF FIRE

SYSTEM STANDARDS DEFINE EQUIPMENT TO BE INSTALLED BASED ON HAZARD ANALYSIS OF THE INFRASTRUCTURE

CLASSIFICATION

NATIONAL BUILDING CODE INDIA

- CONNECTED SYSTEMS
- SEPARATE STANDARDS FOR EVERY SYSTEM USED
  - HYDRANTS
  - SPRINKLERS
  - FIRE DETECTION
- SEPARATE STANDARDS FOR PRODUCTS
  - HYDRANT VALVES SPRINKLERS DETECTORS PANEL VALVES PIPES

NFPA LPCB ETC

- STAND ALONE DEVICES
- CONNECTED SYSTEMS
- SIMILAR STANDARDS AS INDIA

IOT OPPORTUNITY AND OBJECTIVES

- TO HAVE A SAFER WORLD
- BY
  - KEEPING INSTALLED SYSTEMS OF FIRE DETECTION AND FIRE PROTECTION HEALTHY AND READY CONDITION
  - REACTING EXPEDITOUSLY TO EMERGENCY BY CHANNELISING OPTIMAL RESOURCES
  - IOT CAN PLAY A MAJOR ROLE IN AUTOMATIC SYSTEM HEALTHINESS CHECKS IN SPECIALLY IN DEVELOPING NATIONS
  - IOT CAN GIVE TRUE DATA ANALYTICS TO TACKLE THE FALSE ALARM MENACE THROUGH AI

NOTE ON DIFFERENT NATIONS

HAZARD LEVELS

1. TYPES OF CONSTRUCTION
2. AWARENESS LEVELS TO GIVE IMPORTANCE TO MAINTENANCE
3. DENSITY OF FIRE TENDERS PER SQKM
4. AVERAGE OF QUALITY OF FIRE TENDERS
5. CAPABILITY OF FIRE TENDERS TO TACKLE HIGH RISE FIRES

PRIORITY SUGGESTION

1: SYSTEM HEALTHINESS MONITORING
2: IMPLEMENTING DEDICATED CHANNEL FOR EMERGENCY COMMUNICATION

NOTE ON DIFFERENT COMMUNICATON METHODOLOGIES

GPRS LAN LoRa

1. HEALTHINESS MONITORING
2. EMERGENCY REPORTING

CONSIDERATIONS

- TOPOGRAPHY TRAFFIC HIGH RISES
- RELIABIITY OF GPRS/LAN NETWORK
- AVAILABILITY OF A NETWORK LIKE LoRa
- HIGH BANDWIDTH NOT A MUST

COMMUNICATION FAILURE CHECKS

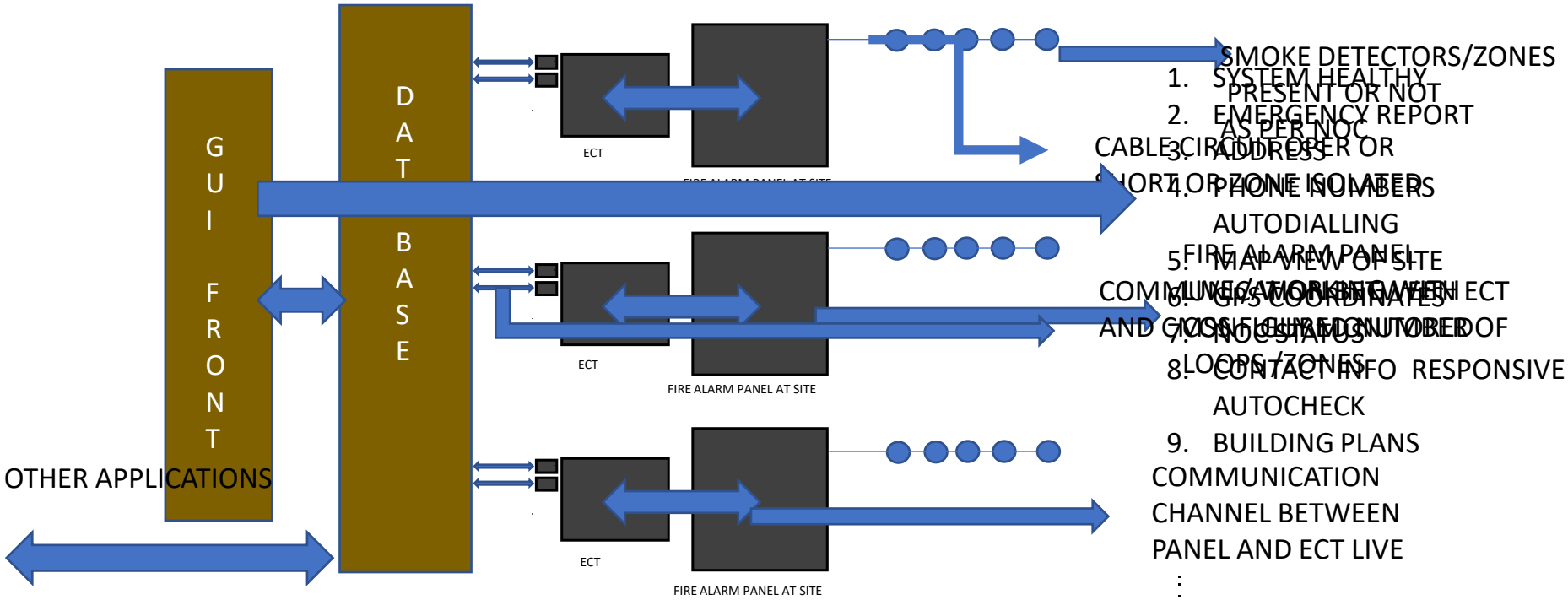
IMPLEMENTING COMMUNICATION CHANNEL FAILURE SHOULD BE MADE OBLIGATORY BY THE AUTHORITIES

ARCHITECTURE FOR IOT CMS

FIRE DETECTION

FIRE PROTECTION

ONLINE SOLUTION FOR MANTENANCE OF FIRE ALARM SYSTEM



NOTE ON CONFIGURATION CHANGES IN FIRE ALARMS

CONFIGURATION CHANGE

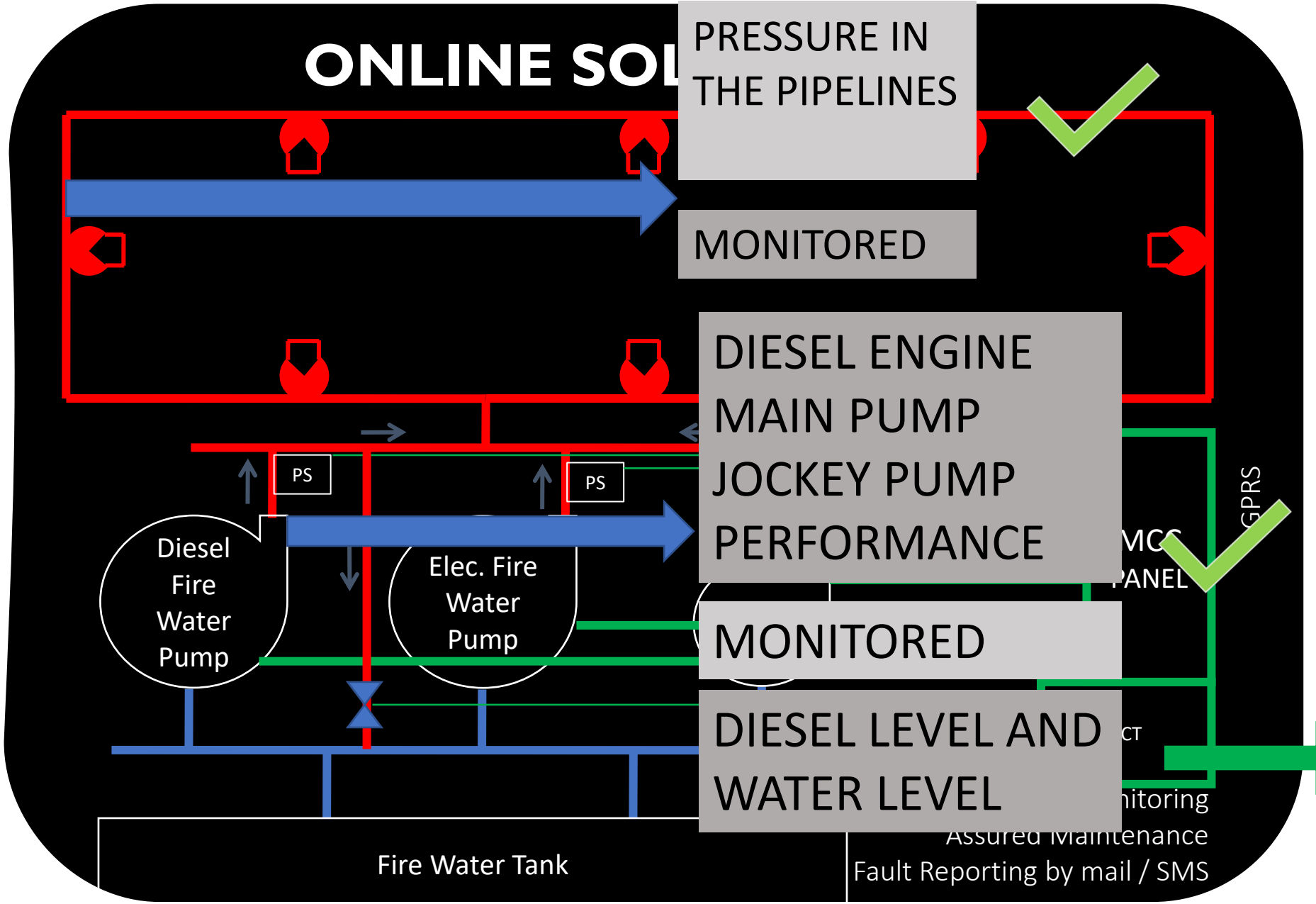
ANY CHANGE OF CONFIGURATION HAS TO BE PUT THROUGH AND APPROVAL PROCESS BY THE AUTHORITIES

NOTE ON HIGH SENSITIVITY DETECTORS FOR CRITICAL/SPECIAL ZONES

NATIONAL DATA CENTERS ETC

ANY CHANGE OF CONFIGURATION HAS TO BE PUT THROUGH AND APPROVAL PROCESS BY THE AUTHORITIES

MONITORING FIRE READINESS OF PUMPS



FIRE DEPARTMENT SERVER

NOTE ON CLASSIFICATION OF BREAKDOWNS

CRITICAL / NON CRITICAL BREAKDOWN

ANY ONE OF THE MAIN PUMP OR DIESEL ENGINE IS IN WORKING CONDITION THEN IT IS A NON CRITICAL BREAKDOWN

NOTE ON OTHER FIRE PROTECTION SYSTEMS

WATER/GAS/FOAM/OTHERS

TRANSFORMERS CABLE GALLERIES OIL STORAGES OIL CARRYING PIPELINES

THANK YOU

WEBGILANT FIRE READY

PUMP ROOMS ● ALARMS ● EXTINGUISHERS

KEEP YOUR FACILITY FIRE READY 24 X 7

PRASAD PARASURAMAN

CEO PYROX I-CITY PVT LTD

MANAGING DIRECTOR

PS TECHCOM PVT LTD

BANGALORE