

A REPORT SUBMITTED
BY
THE COMMITTEE OF ENQUIRY
ON
THE FIRE DISASTER
AT
OKAISHIE-MAKOLA
ON
MONDAY, 5TH JULY, 2021

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BACKGROUND AND INTRODUCTION

In the early hours of Monday 5th July, 2021, the entire Nation through the orthodox electronic and social media was traumatized with an unfortunate news of a fire outbreak that gutted a three (3) storey building at Okaishie - Makola market. The incident created an alarm in the city of Accra which resulted in a huge crowd of onlookers, sympathizers as well as the instant assembly of disaster management organizations and their personnel. At that initial stage of the outbreak, the Metropolitan Chief Executive of Accra, the Metro Coordinating Director and a good number of the Management team of the Accra Metropolitan Assembly were present at the scene to assist in the mobilization of other important personnel and logistics for a faster extinguishing of the fire. Even though the fire could easily have spread to other adjacent buildings on the account of the combustible nature of items or wares that were traded in, the joint hard work and relentless efforts of the Greater Accra Fire service and disaster management teams successfully contained it in the first day and finally put it off by the late hours of Thursday 8th July, 2021.

Apart from the Mayor of Accra, there were Ministers of State as well as Officers of National and Regional organizations that also visited the scene on many occasions till the disaster ended.

The affected building has a basement with few shops, a ground floor, first, second and third floors. While the second and third floors were utterly destroyed, the first floor slightly, the ground and the basement did not experience any burning but suffered from watering as a result of the firefighting process.

To establish a scientific record on the incident and to provide a well-grounded recommendation for the way forward in the management of the particular disaster and other unforeseen fire incidents, the Metropolitan

Chief Executive constituted a seven (7) member committee from various relevant organizations with the powers to co-opt other institutions to conduct an investigation into the fire outbreak and to submit a report on it for necessary action to be taken.

THE CONSTITUTION OF COMMITTEE OF ENQUIRY AND TERMS OF REFERENCE

On Friday 9th July, 2021 a day after the fire was completely extinguished, at the disaster site, the Metropolitan Chief Executive Constituted a seven Member committee under the Chairmanship of the Metro Director of NADMO to investigate and make appropriate recommendations:

NAME OFFICER	POSITION	DESIGNATION	INSTITUTION
1. Mr. Henry Plange	Chairman	Metro NADMO Director	AMA
2. Mr. Julius Azumah	Secretary	Assist. Director Admin.	AMA
3. Mr. Collins Owusu	Member	District Commercial Officer	G.W.C.L
4. Ing. Enoch A. Sowah	Member	District Engineer	E.C.G/Makola
5. D.O.I Lily A. Robertson	Member	District Fire Commander	G.N.F.S
6. D.O.I Ofori- Adjei	Member	Ag. Assist. Director of Operations	G.N.F.S
7. Supt.Freeman Kumashie	Member	Rapid Deployment Force Commander	Ghana Police

CO-OPTED MEMBERS

8. Mr. Gilbert Ankrah	P.R.O	A.M.A
9. Mr. J. A. Okine	M/Sec Coord.	A.M.A
10. Mr. OKOE Samora	Quantity Surveyor	A.M.A
11. Nyamekye Pinamang.		N.I.B

COMMITTEE'S TERMS OF REFERENCE (TOR)

The Metropolitan Chief Executive further outlined the TOR for the committee's engagement as:

- a) To determine Cause(s) of the fire outbreak
- b) To ascertain the Number of shops affected by the incident
- c) To ascertain the Number of victims affected by the disaster
- d) The probable value of wares that were destroyed by the fire
- e) To assess the Structural Integrity of the building and to determine whether or not the building should be demolished.
- f) To recommend clear and possible solutions and way forward activities, programs, policies and solutions to forestall future occurrences
- g) The committee had one week to complete their investigations and submit report.

COMMITTEE'S METHODOLOGY AND PROCEDURE

The committee employed site visitation, interview of some affected victims and non-affected persons, review of specialized data gathered and written reports of agencies as well as on the ground observations to gather facts. It further analyzed information gathered to draw conclusions its six (6) day's meetings.

- The first day meeting on Monday 12th July, 2021 discussed the terms of reference, the relevant and necessary personnel and institutions to be co-opted. Through the secretary, the property owners were invited to meet the committee.
- The second day meeting on Tuesday 13th July, 2021 including its co-opted members visited the disaster scene and made thorough walk through in the building to have a first-hand information on the level of destruction that occurred. It also interviewed some affected victims and invited same to meet the committee the next day for a formal interview. The committee on the same day met the owners of the property.
- On Wednesday, 14th July, 2021, the committee took turns to interview the selected affected victims and some traders believed to have some vital information on the disaster.
- The fourth day, Thursday 15th July, 2021 the committee discussed the preliminary report of the Metro NADMO office on the disaster.
- On Friday 16th July, 2021 the committee discussed the preliminary observations of GWCL, EGC and GNFS in relation to the NADMO report.

OFFICIALS THAT WERE PRESENT

Hon. Mohammed Adjei Sowah, the Metro Chief Executive and his Coordinating Director, Mr. Benjamin Armah as expected, were always available to assist in the mobilization of needed personnel and logistics to fight the fire.

The following high level government officials also came to lend their support to the Mayor and to sympathize with the traders:

- Hon. Alan Kwadjo Kyeremanteng, the Minister of Trade
- Hon Henry Quartey, the Greater Accra Regional Minister
- Mr Amo Yartey, Director of Factory Inspectorate, NADMO
- CFO Edwin Ekow Blankson, Chief Fire Officer, GNFS
- DCFO James Owusu Adjei, the Director of Operations, Ghana National Fire Service.
- DCFO Julius Kunnor, Director of Admin and Finance, (GNFS)
- DCFO Emmanuel James Quao, Greater Accra Regional Commander, (GNFS)
- ACFO Doris Lamptey, Deputy Regional Commander, Greater Accra
- DOI Kofi Forson, Assistant Director Operations, (GNFS)
- DOI Stephen Pobee, Assistant Director of Operations (GNFS)
- DOI Evans Osei Wusu, Regional Safety Officer, GNFS, Accra
- Mad. Felicia Dapaah, the Greater Accra Regional Coordinating Director
- Mr Archibald Cobbinah, the Greater Accra Regional Director of NADMO
- Mr Henry Plange, Metro Director of NADMO AMA
- Ing. Seth Dekpor, Regional General Manager ECG, Accra-East
- Ing. Bismark Otoo, Regional Engineer ECG, Accra-East
- Mrs. Emma Kwofie, the District Manager ECG, Makola
- Supt. Florence Owusu, acting Ministries Divisional Commander
- Supt. Bonsu, District Commander, Central Police Station
- Dsp. Sulemana Sulley, Alpha SWAT Commander, Greater Accra
- Dsp. Mohammed Keita, Bravo SWAT Commander, Greater Accra

KEY FIRE FIGHTERS

- Ghana National Fire Service (GNFS), National Head Quarters
Ghana National Fire Service, National Training School–Central
Mechanical Workshops
- Ghana National Fire Service, Greater Accra Regional Head
Quarters
- Ghana National Fire Service, Accra Metro Station
- Ghana National Fire Service, all adjoining Municipalities
- Ghana Armed Forces Fire Department
- Ghana Prison Services
- Electricity Company of Ghana
- Ghana Water Company Limited
- National Intelligence Bureau
- Ghana National Police

INFORMATION ON THE AFFECTED BUILDING AND NATURE OF DAMAGE

Brief on ownership

Per a short historical fact, the affected Building was originally an uncompleted storey building and owned by the late Alhaji Abdulai Alawiye and put under a 50year leasehold to the late Anis Scaram.

Anis Scaram suffered litigation after the death of Alhaji Abdulai Alawiye by the family and therefore transferred his leasehold right to Madam Abena Birago Sarpong some 20 years before the expiration of the 50year leasehold to end in 2017.

The Sarpong family then developed the building into a three-storey building for which ownership and management of 1st, 2nd and 3rd floors rested on the Sarpong Family while the ground floor and its basement was reserved for the Alawiye family. The leasehold was extended to the

Sarpong family after 2017 and which still runs until the unfortunate fire outbreak.

Breakdown of Shops in the Building, Ownership and State of Damage

i.	Basement	6	shops	Alawiye Family - fully salvaged
ii.	Ground floor	28	shops	Alawiye Family - fully salvaged
iii.	First floor	30	shops	Sarpong Family -Partially salvaged
iv.	Second floor	36	shops	Sarpong Family - Total burnt
v.	Third Floor	<u>22</u>	shops	Sarpong Family-Total burnt
	TOTAL	122		

Out of the 122 shops in the building, 84 shops had their wares completely burnt

The Estimated Cost of the Building and Damaged Wares

The cost of damage on the building was estimated at millions of Ghana Cedis while the cost of damages on the wares amounted to Ninety-Seven million, Two Hundred and Thirteen Thousand, Six Hundred Ghana Cedis (GH¢97,213,600.00) as per the figures from the affected traders. The ages of affected persons ranged between 25 and 50 years.

Breakdown of affected persons per business type in size

- Shop owners 84
- Container owners 7
- Table top owners 16

Fifty-three (53) petty traders were identified as affected people.

Some of the affected shops operated as wholesales for which wares were kept for bulk breaking purposes for the retailers.

Most common type of wares traded in

- Fabrics
- Perfumes and deodorants
- Bags
- Wigs
- Cosmetics
- Jewellery
- Hair products
- Readymade dresses and second-hand clothing among others

Onset of the Fire Outbreak and the Duration of Fire Fighting

The exact time the fire outbreak was not known. However, it was rather estimated to have started between 7:45 to 9:14 a.m. While some traders indicated 7:45am others 8:30am. There was an evidence that the traders initially fought the fire with their own Fire extinguishers which never worked and later had to call on the Ghana National Fire Service for assistance. According to the fire master control room, GNFS Headquarters, the call was received at 9:14am

Even though the fire was put under strict control right from the onset and did not allow its spread to the adjoining buildings, it took the combined team four (4) days to completely put it off due to the highly combustible nature of the wares.

Equipment Assembled for the Fire Fighting

A total of eleven (11) fire appliances made up of nine (9) tenders and two (2) turntable ladders respectively were used to extinguish the fire. The operation was executed by a team of Ghana National Fire Service (GNFS) personnel, Ghana Army, the Prison Service which also supplied

water. Officers from the NADMO headquarters and the Greater Accra Regional Operations unit were also in attendance to help douse the fire. They used their specialized tools to break in locked shops which enabled the firefighters to have access. They used their site lights to illuminate the scene at night for smooth operations. Earlier, officers of the Electricity Company of Ghana were called in to disconnect the power supply within the building and general power supply in the Makola enclave.

CRITICAL OBSERVATIONS

i. Erratic power outages

Even though Electricity Company of Ghana reported that there was no power outage in the national grid at the Makola area, the traders both in the burnt building and outside reported three (3) different outages in the earlier hours of the incident day.

ii. The use of smaller generator sets

A popular report was gathered that due to erratic power outages a good number of individual shops in the burnt building had smaller generator sets that were used any time there was power outage from the national grid. It was confirmed that 90% of the shops had it and it was even so with the other buildings in the market.

iii. Exposure and disorganised wiring system

After the disaster, the committee walked through the building, and it was visibly observed that most electrical wires were not properly installed in the building and therefore haphazardly exposed. By those unorganised arrangements, it was obvious that any spark of fire could not be easily controlled. The described

scenario of electrical wiring in the affected building could be said to be exact situation in the adjoining buildings in the Makola-Okaishie enclave

iv. The use of Multiple Electricians and Uncertified Electricians

The interview of the traders revealed that each shop owner had his or her own electrician who repaired or resolved any perceived electrical problems encountered in the individual shops. The professional certification of every electrician engaged individually could not be ascertained and vouched for. The obvious sub-standard installation of electrical appliances was suspected. Perhaps this could be the result of the pre-disaster fire incidents that was experienced by some of the shop in the early months of 2021 when there were sparks from some wires in the building. The sparks were put off and electricians called in to fix the problem.

v. Difficulty of access to water

Per the report of Ghana Water Company Limited, the Makola area on the day of the incident was supposed to have normal flow of water in the pipelines with the required pressure. However, the reality of the day saw that the pipelines were virtually empty and not flowing. The Ghana National Fire Service suffered the situation to collect water from the hydrants in the area to fight the fire and therefore had to travel to North Kaneshie, La and other adjoining municipalities before they could fight the fire. Even in the direct opposite building which is the Makola Shopping Mall, the pressure of their installed hydrant could not support the replenishing of the tenders and therefore could not be used.

It appeared that apart from the hydrants that could be located in the offices of the Makola branch of the Ghana Fire Service, all other hydrants were covered and hidden and could not be available for public use in matters of fire outbreaks. It was also hinted that the affected building was situated on one of such hydrants and therefore could not be used at that critical moment of the fire outbreak.

vi. Untimely reaction of GNFS to fight fire

The traders that were interviewed disappointedly complained about the attitude and the demeanour of the personnel of the Ghana Fire Service in their reaction to the fire outbreak. While some said the service was not ready at any given time to fight the fire, others saw their actions and comments as political. Specifically, it was stated that at the initial stage of the fire outbreak, a call on the Metro Officers fell flat because the Officers indicated that there was no fuel and water in the tender.

In responding to the traders' allegations, the Metro and Regional Fire Officers debunked the allegations and stated that at the start when they heard of the outbreak some Officers rushed to the scene to assist the traders by the use of their individual fire extinguishers to prevent the spread while the fire tender available was dispatched to the scene. They stated a move was made to mobilize fire fighting appliances from other stations, the Ghana Armed Forces and the Prison Service.

vii. Expired fire Extinguishers and lack of Knowledge of use of fire extinguishers

The traders indicated they had in almost every shop fire extinguisher which was acquired on the advice of the Ghana National Fire Service. They were however not happy about the quality of the extinguishers and intimated that they could be expired. They requested the Ghana Fire Service to investigate the supplier to verify the quality of it.

In reaction, the Ghana Fire Service stated the possibility of expiration of the extinguishers since the life time for replacement was a maximum of twelve months and which may not have been known to the traders.

viii. The absence of Fire Warden System

The building had 122 shops with other types of businesses. It portrayed a huge business patronage of the public on daily basis. However, there was not any trained fire Officers that would frequently check on safety issues in the building. The absence of the fire warden system could possibly may have contributed to the fire outbreak.

ix. The absence of Insurance Policy underwriting

It was observed with regret from the traders as well as the joint owners of the building that they did not insure neither the building nor their wares in shops. The consequences were that, the loses were not going to be compensated in any way to aid the victims. In alerting some of the victims and the owners of the need to insure both building and their business, they openly expressed regret and indicated their interest to do so.

CAUSE(S) OF FIRE

Generally, there was a consensus by the traders that the fire outbreak emanated from the connection of a generator and electricity. They noticed a smoke coming in front of one of the shops (Afia 1 2 3 enterprise) on the second floor of the building after the third erratic power outage in the morning when the said shop switched on its generator set. The attendant in reaction to the shout of the public in alerting him of the fire spark, attempted to use their fire extinguisher to douse the inferno but was not successful. The frame of the spark fire caught up a hanged banner which further spread the fire to other shops on that floor and later to other parts of the building.

Checks from the Control Room of the Electricity Company of Ghana and their Fault Office records could not confirm the power outages.

Technically, the engineers of Electricity Company of Ghana could only suggest the possible causes of the fire outbreak since it was not clear exactly how it really started as below.

Possible Causes

- The generator set could be faulty. A faulty generator after working for some time becomes heated and could catch fire. Since the operator said he was in a different shop when the generator was working, any such fault will go unnoticed.
- A fuel leakage from the generator set or from a nearby Gas cylinder.
- A faulty or sub-standard change-over switch could also cause fire outbreak when it was not operated properly.
- Human Error, this meant that the operator had forgotten to engage the change-over to match the incoming supply.
- The use of manual or an improvised change-over switch, which sometimes involve the removal of fuses to prevent ECG's mains from feeding back to the generator set was not operated properly.

CASUALTY

There were no injuries nor deaths recorded.

THE STRUCTURAL INTEGRITY ASSESSMENT OF THE AFFECTED BUILDING



Introduction

On the 20th of July, 2021 the Committee of Enquiry with the support of Sarpong and Alawiye Families contracted Domach Company Limited to perform a structural integrity investigation on their building situated at Makola (Kwame Nkrumah Avenue) in the Greater Accra Region of Ghana.

The assessment was conducted to assess the structural integrity of the building and determine whether the existing structure was in a structurally sound condition after the fire outbreak.

This was the report on the findings of the structural integrity assessment of the scorched structure.



Figure 1.1 Overview of the Structure

The Structural Integrity Assessment

The test and activities conducted for assessing the structural integrity of the structure included: -

- Visual inspection of the structure
- Measurement of dimensions of structural concrete parts
- Exploration of reinforcement's details
- Assessment of the as built Foundation
- Non-destructive tests of the structural concrete parts of the structure
- Structural analysis of typical elements of the structure

Visual Inspection

The status of the structure could be seen in photo gallery and on the cover page of the report. There was no built plan provided during the assessment of the building, as such, the existing structure was the only point of reference.

Currently, the building was splited into two sections/wings, namely the eastern and western sections. Four floors occupy the eastern section of the building whiles three occupy the western. Most of the damages sustained by the structure during the fire outbreak, was sustained on the upper floors of the building with the ground floor having minimal damage. The most severe of the damage caused by the fire was relatively isolated to the south of the eastern wing. Here, significant damage had been caused to the structural members of the building with visible cracks present everywhere.

This visible and extensive cracks in the structural members of the building was an indicator that several members present within the structural framework were on the verge of collapse.



Figure 2.1 Pre-existing and Fire related Cracks

Measurement of the Dimensions of Structural Concrete Parts

The sizes and arrangement of the structural frame of the structure as seen on site were measured. Inspection of the built structure revealed the external and internal layout of columns and beams.

In the case of the columns, large 60x60 columns occupy the basement and the external perimeters of the building while smaller size columns occupied the internal sections of the building. This same pattern was seen

in the sizes of the beams, with 60x20cm sized beams tapering to 45x20cm beams from the exterior to the interior section of the framework.

Although the sizes and arrangement of the various members of the structural framework were adequately spaced on all floors, the damage caused by the fire had compromised the strength of these members and as such could not be identified as good enough to prevent overloading or a structural failure.

The table below contained the various structural members identified on the various floors of the building.

Table 1.1 Sizes of structural Members

Sizes of Structural Members			
Floors	Column	Beam	Slab
Basement	60x60	60x20	15
Ground Floor	60x60	60x20	15
	45x45	45x20	
1 st Floor	60x60	45x20	15
	30x30		
2 nd Floor	60x60	45x20	15
	30x30		
3 rd Floor	60x60	30x20	15
	30x30		

Exploration of the Reinforcements Details

The micro cover meter was used to locate the positions of steel rods in the structural members. Parts of the respective members were chiseled to confirm the size of the steel rods and the cover to the steel.

From the tests conducted, it was observed that the various columns present within the existing structure contained 16mm bars with 10mm stirrups at 150mm c/c arrangements. A concrete cover of about 25mm had been provided as cover for the mild steel rods used in the reinforcement.

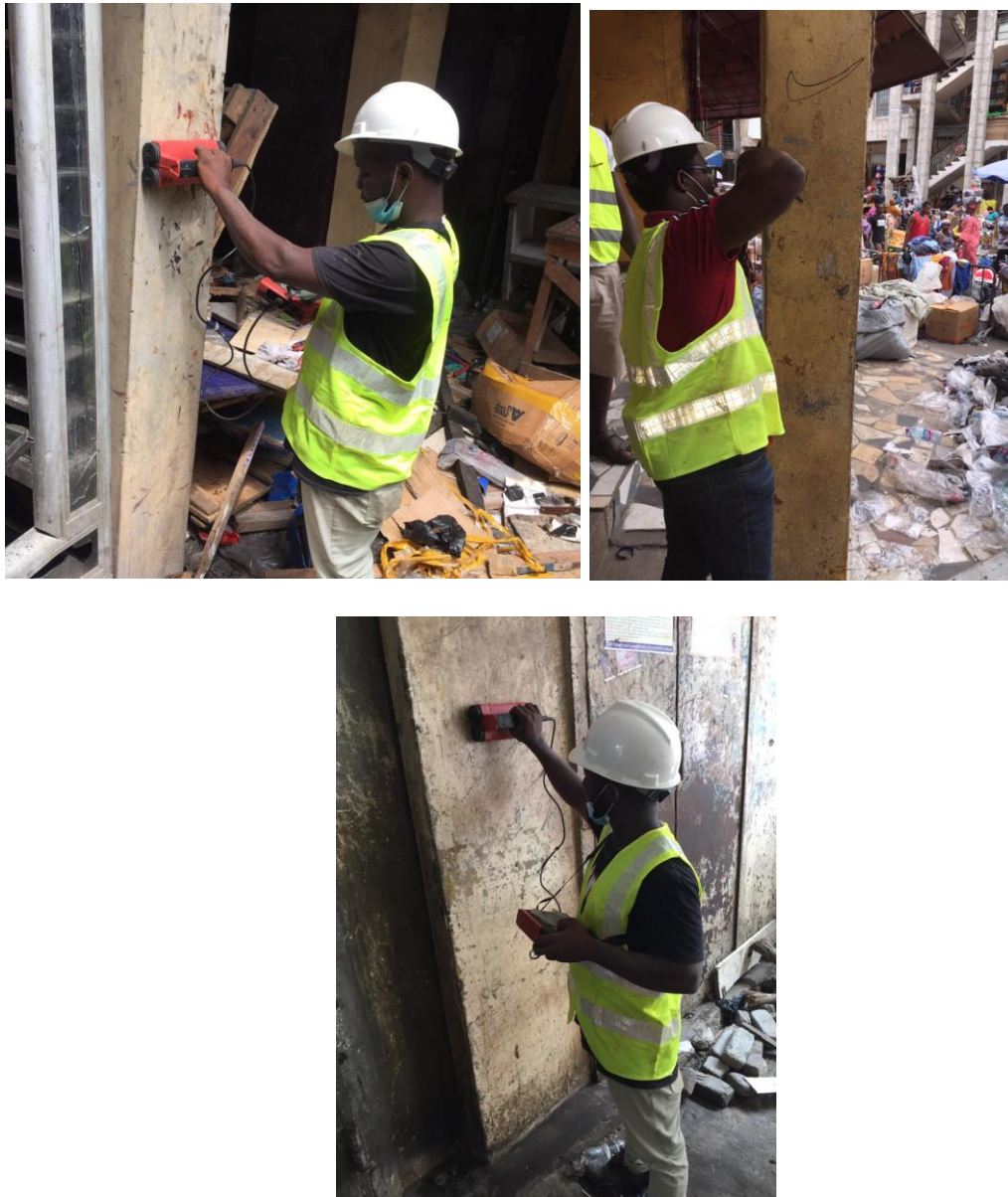


Figure 2.2 Determining the reinforcement used on members

Non-Destructive Test of Concrete Parts

The compressive strengths of the various structural elements on site were measured using Schmidt Hammer. Ten (10) tests each were done on each selected member. The average readings for each set of 10 tests were used

to estimate the most probable strength of the part of the member tested. A summary of the test results is presented in the APPENDIX. The table below contains the average compressive strength of the various structural members identified on each floor.

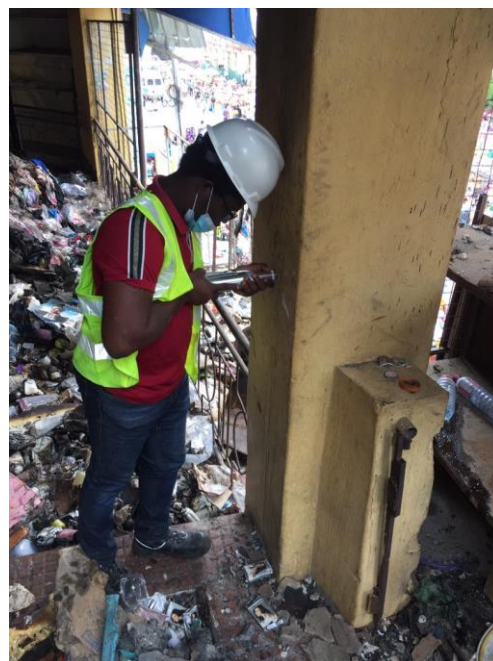


Figure 2.3 Determining the compressive strength of members

Table 1.1 Compressive strength of structural Members

Compressive Strength of Structural Members						
Floors	Column	Compressive Strength	Beam	Compressive Strength	Slab	Compressive Strength
Basement	60x60		60x20		15	
Ground Floor	60x60		60x20		15	
	45x45		45x20			
1 st Floor	60x60		45x20		15	
	30x30		0			
2 nd Floor	60x60		45x20		15	
	30x30		0			
3 rd Floor	60x60		30x20		15	
	30x30		0			

Structural Analysis of the Typical Elements of the Structure.

Analysis of typical element of the structures was made in conformity to international standards and codes for reinforced concrete design. The following codes were used:

- B.S 8110- British Standard Codes
- Ghana Builders Code-Code of practice on live loads for the Design of Structures and Structures in West Africa.

The structure was analyzed and designed using excel spread sheets. References were made from textbooks to aid in the calculations.

Analysis Methodology

The whole process of structural Analysis comprised of the determination or selection of the strengths and dimensions of the materials of various components and elements of the structure for the resistance of stresses and/or deformation arising from any or all of five basic forces to which the structure may have been subjected to. The five basic forces were

- Compressive
- Tension
- Torsion
- Moment
- Shear

The analysis was based on the Limit State Design Method which multiplied characteristics loads on a structure by partial factors of safety and divided the structural materials ultimate strength by further partial factors of safety.

Design Parameters

Fire Rating

Fire rating for the structure had been taken as 1.5 hours.

+Durability

The following exposure classification had been adopted:

- Members in contact with ground- Moderate
- Members in interior environment- Moderate
- Members in above ground environment- Moderate

The minimum cover to reinforcement selection was based on the durability requirements and protection of steel against corrosion due to location and fire resistance.

Minimum covers to reinforcements in the columns and foundation on site were less than the prescribed 20mm for the columns and the 40 mm for the foundations.

Concrete Grade

The concrete test indicated an average concrete compressive strength of 25N/mm² for all structural elements on site.

Conclusion and Recommendation on the Structural Assessment Report.

From the various tests and analysis conducted on the existing building, it could be concluded that although the placement of the building, its various structural members were adequate, their sizes, reinforcements and compressive strength coupled with the placement of the foundation on relatively weaker soils, the existing structure could not support the additional loads the proposed two floors would introduce without significant recommendation taking place under expert supervision.

Based on the various aspects of the structural assessment conducted it was realized that the built structure although having had a good arrangement and size distribution of all structural members on all floors, the strength of the materials used on some aspects of the arrangement, 2nd and 3rd floors, the casting of these members were sub-par and fail a minimum compressive strength of 25KN/m² designated for a structure as this.

A visual representation of these weaknesses could be seen in the presence of pre-existing cracking prior to the fire. The development of new cracks from the fire outbreak further compromised the strength of the structural members. It was safe to then conclude that the structural integrity of the 2nd and 3rd floor were compromised and could not be refurbished for the structure's commercial purposes.

In the case of the 1st floor, moderate to severe damages to the structural

members of the floor could be seen in the south of the eastern wing of the floor. There were various cracks identified and the compressive strength tests of those members' revealed relatively low results as seen in table 2.1. The 1st floor like the 2nd and 3rd floors was also compromised and as such had come to the end of its service life.

With compressive strengths greater than or slightly below the recommended 25KN/mm² and emerging relatively unscathed in the fire outbreak the structural members of the ground floor and the basement were structurally sound and only needed some renovation works to have it functioning again.

As seen in the preceding paragraphs it could be concluded that of the five levels present in the structure, only the members of the ground floor and the basement retained their functionality with the 1st, 2nd and 3rd floor members haven been compromised. It was therefore recommended that either the 1st, 2nd and 3rd floors of the building be removed completely and rebuilt or the entire structure be completely demolished and built anew.

COMMITTEE'S RECOMMENDATIONS

After various committee meetings to discuss the issues, interview with affected and non-affected traders within the incident zone and the review of the Structural Integrity Assessment Report, the Committee of Enquiry found and recommended as follows:

1. That as per the result of the structural integrity assessment test on the current nature of the burnt building, it should be pulled down for reconstruction since its current state was a risk to those who would like to occupy it and to the general public who may have to do business there.
2. The estimated cost of the initial assessment on the financial loss to

the affected traders in the building should be further assessed through a well-structured investment program to ascertain the exact loss so that Central Government could assist the victims by providing both financial and non-financial program to ameliorate their economic conditions.

3. As a matter of urgency, the Metropolitan Assembly in partnership with the Ghana Fire Service should ban the use of small generator sets in all buildings within the market to forestall future occurrence of fire outbreak due to improper use of small generator sets during power outages. Instead, all buildings should be mandated to own central plants that could power the entire building in times of power outages.
4. To reduce the risk of easy fire outbreak due to exposed wiring system as well as very outdated wires within the buildings, the Metropolitan Assembly in collaboration with Ghana Fire Service, Electricity Company of Ghana and the National Disaster Management Organization should undertake a rigorous assessment of the wiring systems of all buildings within all the markets in the Metropolis as soon as practicable.
5. Fire fighting water hydrants should be properly maintained and clearly demarcated with fence to prevent encroachment by the public and building developers within the localities for easy access. The Assembly should advise the big commercial building owners at the various markets to apply for Fire Hydrant to be installed in their shops, since the public Hydrant may be distant away from their shops.
6. The Assembly, as a matter of urgency should remove all illegal extensions attached to buildings in the market that have created

congestions and inaccessibility for quick emergency response to emergency situations in the market.

7. To ensure that electrical faults and related repair works in the buildings of the market conform to standards, the committee recommended that the Electricity Company of Ghana should assign a certified professional electrician to each building as a supervisor or a care taker of all electrical works in that building. This move would reduce the multiple hands of unstandardized electrical works that resulted in intermittent electrical sparks.
8. The Assembly through Ghana Union of Traders Associations (GUTA) should organize sensitization programs for the traders on the need to undertake insurance policies to cover their businesses. The benefit of such program would help the traders to appreciate the pooling of their individual risks in times of unforeseen disasters and specifically fire outbreaks. In the same direction the Assembly should enforce that all commercial building owners insure their property against possible disasters.
9. It was also recommended that the Assembly should impress on commercial building owners to liaise with Ghana National Fire Service to train and position fire fighting Officers in every building on daily basis to check on fire safety requirements of the building. This is expected to alert the owners and the occupants of the commercial buildings of any impending fire hazards.

APPENDIX (DISASTERS SCENE PHOTOGRAPHS)

PICTURE 1:



Officers of the Ghana National Fire Service (GNFS) extinguishing the fire with an aerial platform on Monday 5th July, 2021

PICTURE 2:



Hon. Mohammed Adjei Sowah, Mayor of Accra addressing the media on the

Constitution of a Committee of Enquiry on Friday, 9th July, 2021

PICTURE 3:



Hon. Alan Kojo Kyeremanteng, Minister of Trade and Industry in the company of Hon. Mohammed Adjei Sowah, Mayor of Accra and some other officials engaging some victims of the fire disaster on Tuesday 6th July,2021.

PICTURE 4:



The Greater Accra Regional Minister, Hon Henry Quartey flanked by the Mayor of Accra, Mohammed Adjei Sowah and some other officials whilst he addresses victims of the fire disaster on Tuesday 6th July,2021.

PICTURE 5:



The Committee of Enquiry at the scene of the disaster to assess the level of damage and also interview some victims on Tuesday, 13th July, 2021

PICTURE 6:



The Committee of Enquiry at the scene of the disaster to assess the level of damage and also interview some victims on Tuesday, 13th July, 2021

PICTURE 7:



Members of the Committee of Enquiry at the scene of the disaster to assess the level of damage on Tuesday, 13th July, 2021

PICTURE 8:



Exposed wiring on the building that caught fire captured on Tuesday 13th July, 2021

when members of the committee of enquiry visited the disaster scene.

PICTURE 9:



A shot of one of the series of meetings held by the Committee of Enquiry. Addressing the committee were victims of the fire disaster, notable among them was entrepreneur and owner of Special Ice Company Limited, Dr Ernest Ofori Sarpong.

Date: Tuesday, 13th July, 2021

PICTURE 10:



A front view shot of the three (3) storey building at Okaishie - Makola Market that got gutted by fire. Date: 5th July, 2021.

THE LIST OF VICTIMS OF OKAISHE - MAKOLA FIRE DISASTER

	NAME	SHOP NO	CONTACT	TYPE OF GOODS DESTROYED	COST GHC
1	Augustina Amoako	10	0244735032	Assorted Goods	100,000.00
2	Gyamfi Shirley	20	0244793290	Insecticides	150,000.00
3	Samuel Sasu Omare	31a	0544226360	Fabrics	400,000.00
4	Danquah Castro Ampadu	86	0201111250	Mattresses	40,500.00
5	Baffour Awuah Kofo Omari	13	0554263978	Fabrics	300,000.00
6	Comfort Bondah	35	0207049944	Fabrics	50,000.00
7	Alex Twum	19	0244665608	Cosmetics	70,000.00
8	Samuel Kweku Bonsu	15	0243422292	Fabrics	3,000,000.00
9	Isaac Baah	B1	0243538685	Bags	150,000.00
10	Asamoah Odum	B11	0242253540	Bags/Jewels	850,000.00
11	Grace Gyamfua	27	0208177374	Assorted Goods	3,000,000.00
12	Susan Takyiwah	29	0243589914	Assorted Goods	2,000,000.00
13	Michael Oduro Asare	16	0244950999	Assorted Goods	1,500,000.00
14	Afia Takyiwah	1	0202110343	Cosmetics	7million Dollars
15	Amudat Musara	17	0242265092	Cosmetics	35,000.00
16	Sarfo Gyamfi	4	0246995199	Fabrics	Took goods home
17	Susubian Cosent	18	0244637088	Cosmetics	500,000.00
18	Samuel Sowah-Boye	3	0262316910	Mother care products	600,000.00
19	Philomina Aboagye	14	0248503552	Mother care	100,000.00
20	Janet A Adjetey Klu	25	0277587065	Assorted Goods	250,000.00
21	Victoria Willson Quaye	31A	0545732492	Wigs	30,500.00
22	John Appiah	24	0242101097	Assorted Goods	300,000.00

26	Naomi Obour	79	0557554651	Assorted Goods	700,000.00
27	Joyce Ketu	46	0248108559	Assorted Goods	200,000.00
28	Afia Konadu	15	0208160842	Cosmetics	17,400,000.00
29	Dinah Joyce Addo-Yobo	33	0244059040	Assorted Goods	464,000.00
30	Tayibati Raji	34,35	0244683129	Assorted Goods	2,000,000.00
31	Asumaru Ibrahim	5	0244201474	Assorted Goods	4,000,000.00
32	Rakia Ali	36	0244668662	Assorted Goods	2,000,000.00
33	Mohammed Jamhu Sakaradi	31	0266703966	Cosmetics	120,000.00
34	Richard Debrah	77,78	0240170373	Cosmetics	500,000.00
35	Ramatu Ayiub Ali	47	0244161177	Assorted Goods	100,000.00
36	Annette Marfo	7,73	0244206538	Assorted Goods	464,000.00
37	Madinat Rashid	50	0242524239	Cosmetics	900,000.00
38	Rose Nartey	23,30	0244625724	Dresses ,bags	3,000,000.00
39	Tomjoan Ent	75	0208180726	Assorted Goods	900,000.00
40	Mary Boakye	6	0244292591	Assorted Goods	500,000.00
41	Anita Ofori	2	0243455000	Cosmetics	600,000.00
42	Barikisu Nettewy	4	0549449235	Jewels	500,000.00
43	Laureta Investment	14,45	0244105533	Cosmetic	1,800,000.00
44	Theresa Kwaw-Oppong	74,81	0243129124	Jewels	3,500,000.00
45	Florence Nsiah	64	0202634092	Assorted Goods	150,000.00
46	City Gold	12	0208184716	Jewels	130,000.00
47	Grace Owusu	9	0558716401	cosmetics	700,000.00
48	Grace Kusi	55	0243681485	Assorted Goods	300,000.00
49	Diana Akrofi	1	0244248196	Hair Access	200,000.00
50	Abena Birago Sarpong	72	0244773200	Beads	600,000.00

51	Veronica Commodore Mensah	26	0244382656	Assorted Goods	900,000.00
52	Mary Addo	23,44,62	0243105101	Cosmetics	3,000,000.00
53	Jane Boakye- Yiadom	30	0246416575	Cosmetics	500,000.00
54	Mavis Addo	48	0243820362	Assorted Goods	200,000.00
55	Wilhemina Amonoo	42	0243210 740	Beads	500,000.00
56	Angela Ama Konadu	17	0244561678	Assorted Goods	700,000.00
57	Yaa Aantewaa	66,68	0558044039	Jewels	600,000.00
58	Anita Brobbey	39	0244251019	Assorted Goods	200,000.00
59	Agatha Tackie	56	0247696006	Cosmetics	500,000.00
60	Dorcas Anim	40	0243361817	Cosmetics	300,000.00
61	Sandra Adoma Opoku	41	0244252530	Jewelry	150,000.00
62	Adjoa Mansa	54	0208132187	Perfume	600,000.00
63	Arat Pedro	11	0244237557	wigs	150,000.00
64	Zarawmah Ventures	21	0244148191	Cosmetics	400,000.00
65	Olivia Locoh	18	0244762550	Hair Access	300,000.00
66	Doreen Omari-Antwi	52,16,53	0244202177	Hair Access	10,000,000.00
67	Georgina Akua Kissiedu	19,20,49	0277984330	Assorted Goods	5,000,000.00
68	Georgina M. Afua Nyarkoa	22	0208211837	Women and men briefs	500,000.00
69	Paulina Boadu	32	0555379921	Ear rings	700,000.00
70	Helena Addo	4 shops	0244798535	Assorted Goods	400,000.00
71	Mary Akweley Addo	2	0243226083	Mother care	10,000.00
		CONTAINER			
1	Anthony Asiamah		0244258274	Assorted Goods	80,000.00
2	Abiba Usman		0263309757	Jewelry	800,000.00
3	Mary Osarfo		0243618378	Cosmetics	400,000.00

4	Bernice Owusu		0245171929	Cosmetics	20,000.00
5	Mohammed Namawu		0247220665	Assorted Goods	50,000.00
6	Osuman Grusi	watchman	0261893645	Assorted Goods	6,000.00
7	Yvonne Tey		0248129686	jewelry	500,000.00
TABLE TOP					
1	Janet Ofosu		0555247184	Underwear	500,000.00
2	Vivian Quartey		0549227155	Assorted Goods	25,000.00
3	Matilda Okine		0246402190	Soaps	20,000.00
4	Dora Kwakye		0507745297	Assorted Goods	20,000.00
5	Paulina Nunoo		0277646119	Spray	5,000.00
6	Vida Esi Aggrey		0249175469	Underwear	5,000.00
7	Grace Sackey		0557009377	Assorted Goods	10,000.00
8	Mawusi Akoto		0242512557	Panties	5,000.00
9	Esther Baah		0557441367	Belt	5,000.00
10	Mary Awotwe		0545247910	Assorted Goods	6,000.00
11	Letecia Esibu		0246751129	Jewelry	10,000.00
12	Victory Bennin		0551711449	Fan	2,000.00
13	Comfort Serwaaa Frimpong		0245397441	Slippers	2,500.00
14	Sarah Arkorfa		0271323035	Assorted Goods	3,500.00
15	Charles Anim Asamoah		0243102212	Assorted Goods	6,000.00
16	Theophilia Beawu		0248858222	Textiles	10,000.00
17	Cynthia Koree		0547083663	Ladies shoes and bags	2,000.00
18	Issifu Zakari		0551437881	Textiles	15,000.00
19	Gladys Dugah		0243016406	Ear rings/ hair	40,000.00
20	Anita Adarkwah		0557013234	Jewels	4,000.00

21	Naadu Lartey		0593059664	Assorted Goods	6,000.00
22	Victoria Akweley Dzane		0279688139	Wigs	4,000.00
23	Joyce Owusuwaa		0550460604	Assorted Goods	2,000.00
24	Salome Ansa		0248050929	2 nd hand cloth	600.00
25	Faustina Akuffo		0242381374	2 nd hand cloth	600.00
26	Vera Martey		0244348147	2 nd hand cloth	600.00
27	Victoria Aidoo		0244932506	Detergents	10,000.00
28	Gladys Botchway		0248393769	2 nd hand fabrics	4,000.00
29	Cecilia Mensah		0544769355	Assorted Goods	40,000.00
30	Gifty Adei Kotey		0249749125	Assorted Goods	500.00
31	Ophilia Odoley Odoi		0246784525	Assorted Goods	5,000.00
32	Daniel Borkwei		0244747955	Assorted Goods	1,500.00
33	Dora Owui Agbosu		0243421873	Assorted Goods	4,000.00
34	Sarah Sowu		0542291135	Assorted Goods	2,500.00
35	Georgina Alehoza		0545761512	Assorted Goods	3,000.00
36	Hasan Basira		0244237557	Assorted Goods	4,000.00
37	Abdul Nasir		0243530360	Fabric	6,000.00
38	Awudu Tahiru		0244178967	Fabrics	20,000.00
39	Doris Quaynor		0244594827	Mother care	30,000.00
40	Debora Quaynor		0208491404	Beads	35,000.00
41	Sulemanu Funeini		0244098695	Fabrics	150,000.00
42	Florence Dansoa		0549717880	Assorted Goods	5,000.00
43	Philomena Tetteh		0249680642	2 nd hand cloth	6,000.00
44	Juliana Tagoe		0548454949	Cosmetics	5,000.00
45	Viglo Yaavi		02488518464	Ladies dress	5,000.00
46	Rita Nketia		0245998866	Fabrics	2,700.00

47	Charlotte Nelson		0274743832	Assorted Goods	1,000.00
48	Zina Mahmud		0543798237	Fabrics	2,500.00
49	Evelyn Addo		0240842235	Jewelry	5,000.00
50	Kofi Mante		0242693317	Perfumes	7,500.00
51	Daamia Frimpong		0243917175	2 nd hand cloth	700.00
52	Adorkor Allotey		0592758242	Shoes	2,500.00
53	Martha Aboagye		0246769871	Jewelry	30,000.00
54	Abena Wahab		0570403370	Textiles	Smoke Damages