

# **MONSOON PREPAREDNESS ACTIVITIES** **ONGOING CONSTRUCTION SITES**

## **PRESS RELEASE**

As part of monsoon preparedness activities, instructions have been issued to all the Deputy City Planners / Asst. City Planners of Circle No.1 to 30, GHMC with regard to the Precautionary and Standard Safety Measures to be taken up by the Builders during excavation of Cellars and to inspect and take suitable action on all the ongoing cellar excavation works in GHMC area.

In view of onset of monsoons shortly and several collapses of buildings under construction taking place in the past, GHMC is giving safety advise to all Builders, Architects, Structural Engineers and Contractors including Site Engineers and Supervisors to take up precautions at site to prevent any falling of frame work & scaffolding; failing which action will be initiated to issue show cause notice calling for the reasons as to why the building permission and builder license issued should not be cancelled besides filing criminal case of negligence upon the builder / developer / owner for failure.

The following are the general precautionary measures advised to be taken at site during the formwork and scaffolding works and during excavation of cellars:

### **1. Measures to be taken for formwork and scaffolding works:**

It is well known that even though the formwork and scaffolding is a temporary structure it has to support its own weight plus the freshly placed concrete and any construction live loads (including materials, equipment and personnel).

It has been observed that the main causes of formwork and scaffolding failure are because of – Improper stripping and shore removal, inadequate bracing, Vibration, Unstable foundation under the supports, plumb not being maintained and inadequate control of concrete placement including lack of attention to formwork details.

In view of the above, the following special instructions were given:

- a. Special attention is to be paid to scaffolding works such as props, outrigger beams, brackets, poles, uprights, posts, frames, or similar rigid support even though they are temporary works. Due care is required to be taken especially while erecting slabs and beams above sloped ramps and on Double height structures.
- b. The structural members, poles, legs, posts, frames, and uprights, must be plumb and braced to prevent swaying and displacement.
- c. Proper checking is to be done at site before concreting. All employees must be trained by a qualified person to recognize the hazards associated with the type of scaffold being used and how to control or minimize these hazards. The training must include fall hazards, falling object hazards, electrical hazards, proper use of the scaffold, and handling of materials.
- d. Supported scaffolds poles, legs, posts, frames, and uprights must rest on base plates and mud sills, or other adequate firm foundation. Wherever it is needed placements using guys, ties, and braces. If required install guys, ties, or braces at the closest horizontal member to the 4:1 height and repeat vertically with the top restraint no further than the 4:1 height from the top. Supported scaffolds with a height to base width ratio of more than 4:1 must be restrained by guying, tying, bracing, or an equivalent means. These basic requirements were not observed at site.
- e. No scaffolding should be allowed without a base plate. Cross braces must be provided at every 1.5m intervals. The soil or concrete below on which base plate is resting must be capable of supporting the loaded scaffold without settling or displacement. Unstable objects should not be used to support scaffolds. In order to assure stability, supported scaffolds must be set on base plates, mud sills or, other adequate firm foundation.
- f. To control the risk of a scaffold falling or collapsing, all Builders, Architects, Structural Engineers and Contractors including site engineers and supervisors must ensure that scaffolds are built with IS standards relating to strength and structural integrity.

- g. To maintain Quality in terms of material, strength, rigidity, position, and dimensions of the forms including Maintaining and Coordinating Tolerance must be ensured. The Safety for both the workers and the concrete structure must be taken care of.

## **2. Measures to be taken during Cellar Excavations:**

- a. The owners and the contractor executing the work should pay attention to slope stability and earth retention in the site. The areas where Slope Stability is at Risk on all sides, the following methods are suggested to improve the lateral stability of the excavation and prevent further collapse.
- b. No dumping of heavy loads, movement of heavy vehicles should be allowed close to the excavations.
- c. The existing excavated portion should be stabilized temporarily by a “grouted Soil anchor / nail with pad system for temporarily stabilizing the slope” with proper design and execution.
- d. Only after doing the above, shall construct the retaining wall.
- e. Do not place/store any foreign or heavy materials/equipment on the top of excavated portion.
- f. Ensure that drainage is directed away from the excavation.
- g. Inspect excavation regularly for any signs of weakness.
- h. If any sloughing or slippage is observed in the site; have the excavation inspected by a professional engineer and take immediate steps to ensure safety & stability.
- i. If any Cracks and /or ground settlements are noticed in the site, immediate remedial steps to be taken.
- j. Immediate action shall be taken, if any erosion that is causing soil or other ground cover to slide or slough away, soils moving away from the existing building foundations and settlement or cracking of Sidewalks or driveways near the excavation.
- k. If any Soils moving to/from your property or to/from a neighbouring property, immediate restoration and prevention action should be taken on war footing basis, without any negligence.

Notices are being served upon the builders / developers / owners of the sites where ongoing constructions and cellar excavation works are undertaken, for taking upon the above precautionary measures.

In addition to above, the concerned Deputy City Planners / Asst. City Planners of Circle No.1 to 30, GHMC will also inspect the ongoing sites and take up the following action:

1. In case of already dug cellar and work in progress, notices will be issued upon the builders to take up all standard safety precautionary measures.
2. In case of non-compliance with the notice, action will be initiated to cancel the permission and license of the builder besides filing of criminal case of negligence upon the builder.
3. In case of unauthorised dig cellar or already dig cellar and no work in progress, the safety of the surrounding structures will be checked first and take necessary precautionary measures. Immediate action for closure of the cellar with the help of C&D waste will be taken up with the assistance of Sanitary Wing.
4. They will also identify sites where there are sloppy terrains or rock cutting being carried upon where there is chance of slide and initiate immediate action to issue notices for taking required precautionary measures.
5. They will also verify the labour camps provided within the site and check the safety of the same in case they are placed adjoining the dig cellar. Notices will be issued upon the builders to take up safety measures or shifting the same.

**Commissioner,  
GHMC**

**Date: 30.04.2022  
Hyderabad**