

15 -ാം കേരള നിയമസഭ

7 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 1946

09-12-2022 - ൽ മറുപടിയ്ക്ക്

ചാലക്കുടി മേഖലയിലെ പ്ലാനറ്റോറിയത്തിന്റെ നവീകരണം

ചോദ്യം		ഉത്തരം	
ശ്രീ. സനീഷ്കുമാർ ജോസഫ്		ഡോ. ആർ ബിന്ദു (ഉന്നതവിദ്യാഭ്യാസ-സാമൂഹ്യനീതി വകുപ്പ് മന്ത്രി)	
(എ)	<p>ചാലക്കുടി മേഖലാ ശാസ്ത്ര കേന്ദ്രത്തിലെ പ്ലാനറ്റോറിയം കെട്ടിടത്തിന്റെ മുകൾഭാഗത്തിലെ ചോർച്ച പരിഹരിക്കുന്നതിന് സ്വീകരിച്ച നടപടികൾ വിശദമാക്കുമോ;</p>	(എ)	<p>കേരള സംസ്ഥാന ശാസ്ത്ര സാങ്കേതിക മ്യൂസിയത്തിന്റെ ചാലക്കുടി മേഖലാ ശാസ്ത്രകേന്ദ്രത്തിലെ പ്ലാനറ്റോറിയം കെട്ടിടത്തിന്റെ ചോർച്ചയുടെ കാരണങ്ങൾ കണ്ടെത്തുന്നതിനും പരിഹാരമാർഗങ്ങൾ നിർദ്ദേശിച്ച് അവ നടപ്പിലാക്കുവാൻ വേണ്ട മേൽനോട്ടം വഹിക്കുന്നതിനുമായി 5 സാങ്കേതിക വിദഗ്ദ്ധർ അടങ്ങുന്ന ഒരു ടെക്നിക്കൽ കമ്മിറ്റി രൂപീകരിച്ചിട്ടുണ്ട്. കൂടാതെ ചീഫ് ടെക്നിക്കൽ എക്സിക്യൂട്ടീവ് പ്രസ്തുത നിർമ്മിതി പരിശോധിച്ച് റിപ്പോർട്ട് നൽകിയിട്ടുണ്ട്. ചീഫ് ടെക്നിക്കൽ എക്സിക്യൂട്ടീവ് സാങ്കേതിക സമിതിയുടെയും ശുപാർശകൾ അനുസരിച്ച് ചോർച്ച പരിഹരിക്കാനുള്ള നടപടികൾ പുരോഗമിക്കുന്നു.</p>
(ബി)	<p>പ്ലാനറ്റോറിയം കെട്ടിടത്തിന്റെ നിർമ്മാണം സംബന്ധിച്ച് ചീഫ് ടെക്നിക്കൽ എക്സിക്യൂട്ടീവ് പരിശോധന നടത്തി റിപ്പോർട്ട് സമർപ്പിച്ചിരുന്നോ; ഉണ്ടെങ്കിൽ പ്രസ്തുത റിപ്പോർട്ടിന്റെ പകർപ്പ് ലഭ്യമാക്കുമോ;</p>	(ബി)	<p>സമർപ്പിച്ചിരുന്നു. റിപ്പോർട്ടിന്റെ പകർപ്പ് അനുബന്ധമായി ചേർത്തിരിക്കുന്നു.</p>
(സി)	<p>ചോർച്ച പരിഹരിച്ച് വിദേശത്ത് നിന്ന് ഇറക്കുമതി ചെയ്ത ഉപകരണങ്ങൾ ഘടിപ്പിച്ച് പ്ലാനറ്റോറിയം എന്നത്തേക്ക് പൊതുജനങ്ങൾക്ക് തുറന്നു കൊടുക്കാൻ കഴിയുമെന്ന് വെളിപ്പെടുത്തുമോ?</p>	(സി)	<p>നിലവിൽ സയൻസ് മ്യൂസിയവും 3 ഡി തീയേറ്ററും പൊതുജനങ്ങൾക്കായി തുറന്നു കൊടുത്തിട്ടുണ്ട്. പൊതുജനങ്ങൾക്കാവശ്യമായ സൗകര്യങ്ങൾ ഒരുക്കുന്നതിനായുള്ള നിർമ്മാണ പ്രവൃത്തികൾ ആരംഭിച്ചിട്ടുണ്ട്. കെട്ടിടത്തിന്റെ പ്രശ്നങ്ങൾ പരിഹരിച്ചതിനു ശേഷം ഉപകരണങ്ങൾ സ്ഥാപിച്ച് പ്ലാനറ്റോറിയം എത്രയും പെട്ടെന്ന് പൊതുജനങ്ങൾക്ക് തുറന്നു കൊടുക്കുവാൻ വേണ്ട നടപടികൾ കൈക്കൊണ്ടിട്ടുണ്ട്.</p>

സെക്ഷൻ ഓഫീസർ

പ്രാഗ്വാഹി - 1



GOVERNMENT OF KERALA

No:InspTech-1/176/2022-Fin Finance (Inspection Wing-Tech) Dept.
Thiruvananthapuram
Dated:17-08-2022

Inspection Report

Sub:- KSSTM-RSC Chalakudy - Construction of Planetarium Building
- leakage issues-reg.

1.Introduction:-

Hon'ble Minister for Higher Education desired this wing to examine the case of faulty construction of planetarium building at RSC Chalakudy and Director KSSTM has referred the case through Finance , for examination of the case and for fixing the responsibility and to settle the issue at the earliest .

Accordingly, the Officers of this wing inspected the site in the presence of the concerned officials of RSC Chalakudy and the following observations are noted based on site inspection and perusal of the available documents/reports.

Observations:-

1. AS for the construction of Planetarium was accorded vide order dated 13.07.2015.The design and estimate was reported as prepared by M/s Habitat Group.
2. The standing committee of KSSTM held on 16/02/2016 has decided to award the above work to M/s HITES as PMC.
3. The above decision was modified and standing committee of KSSTM held on 23/05/2016 decided to award the above work to M/s Habitat as PMC.
4. But it is seen that the work was awarded to M/s Habitat Group for direct execution at an agreed PAC of ₹1,90,73,423/- with a professional fee of 6.50% and KSSTM awarded the structural

design to LBS for an amount of ₹1.25Lakhs, **which is noted as a serious irregularity.**

5. The agreement of the work was seen executed on 23.09.2017 with ToC of 13 months.
6. Initially, the construction was reported as planned to accommodate 15m diameter horizontal dome from Thiruvananthapuram Planetarium. When the construction reached roof level, the then director changed the horizontal dome into tilted one in order to cope with modern technology with the approval of executive committee.
7. Hence the dome which was originally was planned at a height of 10m was reported as raised into a height 11.50m and concreting was done without modifying the structural design, which is noted as as irregular.
8. The concreting of the dome was carried out in January 2019 and the waterproofing was reported as completed in October 2019 by M/s Habitat.
9. Subsequently KSSTM carried out acoustic paneling through another agency (using steel screws fastened to roof ceiling) in the first quarter of 2020 (even though a similar item was reported as available in the BoQ with M/s Habitat). **This action is also noted as a serious irregularity.**
10. The then AEE of KSSTM had noted on 13.06.2019 that "there is considerable water seepage of the construction joints of the dome during recent rains which will be stopped only plastering and water proofing. Hence it is advised to execute the work of under deck acoustic works only after water proofing works and fully arresting water proof works since the exact locations of water seepage, if persists even after water proofing will not visible once the underside is covered" in accordance with the reports of the Director, KSSTM
11. KSSTM carried out acoustic paneling (which was against the advise of AEE) using rock wool fastened to the roof ceiling of the dome screwing at several places by another agency during February 2020 (noted from the files as reported by the Director). **This action of the Director is also noted as an irregularity.**
12. The leakage was reported on 03.06.2020 after acoustic paneling was done. Leakage was again reported after rectification by M/s Habitat Group and the matter was reported to Govt.
13. Plastering of dome over concrete surface was not carried out as per

15390806/2022

- BoQ, which was noted during July-2020 and the agreement with M/s Habitat Group expired on 30.09.2019. M/s Habitat carried out plastering work in October 2020 and the agreement extended up to 15.11.2020 and the construction of building was reported as completed in January 2021
14. Severe leakage was reported in the building during the rains in July 2021. During the joint inspection with the M/s Habitat Technology Group on 17/8/2021, it is reported that heavy leakage was noted by the side of all ring beams of the dome structure. On an inspection of the outer side, of the dome reveals that the plastering surface was seen delaminated from the concrete surface and water is leaking through the space in between the surfaces.
 15. The M/s. Habitat Technology has reported that the root cause and major reason for the leakage as the drilling and fixing of approximate 800 screws to the roof slab by KSSTM for fixing acoustic paneling. The acoustic paneling at the bottom of the dome became wet and seen bulged due to the leakage.
 16. A technical committee was constituted on 20.11.2021 to examine the reasons for leakage and to suggest suitable methodology for arresting the leak permanently and formation of technical committee by the director is seen ratified by the Govt.

Findings:-


1. It is evident that leakages are reported by the then AEE before commencing the underside acoustic panel by another agency and before doing Plastering work and Water Proofing work by M/s Habitat.
2. The leakage issue is reported as still existing even after completion of finishing works by M/s Habitat.
3. As under side acoustic paneling work is seen arranged through another agency (avoiding M/s Habitat who has been awarded the main work having an item in BOQ for the work) , **the responsibility of leakage cannot be pinpointed on a particular agency at this stage in view of the execution of various works on the dome by multiple agencies.**

Recommendations:-


1. The rectification of leakage may be finalized by the Technical committee constituted and rectification works may be arranged as

I/5390606/2022

- per the recommendations of the technical committee (without any loss to Govt. as far as possible.)
2. As there were structural changes in dome from the structural design by M/s LBS as reported by the Director, KSSTM, AD may be advised to ensure structural stability of Planetarium structure before opening into the public.
 3. AD shall direct the KSSTM to ensure the public works are arranged strictly according to the rules and regulations in force especially arranging the works through the accredited agencies since it is reported that the work was awarded to M/s Habitat for direct execution which was contrary to the decision of standing committee of KSSTM held on 23/05/2016 (which had decided to award the work to M/s Habitat as PMC) and for making separate payment for the structural design by LBS.
 4. It is advised that the then Director who is responsible for the irregularities noted above may be admonished for his actions noted above.


 HARIKUMAR S
 Chief Technical Examiner &
 Ex officio Secretary to Government

To,
 The Principal Secretary, Higher Education Department


 സെക്രട്ടറി ഹൈ എഡ്യൂക്കേഷൻ