

BANGALORE UNIVERSITY, BANGALORE.



MAINTENANCE MANUAL **(Release: Jan. 2014 Version 1.0)**

University Engineer / Executive Engineer:

1. The executive unit of the Department is the division in charge of the Executive Engineer, who is responsible to the Superintending Engineer for the execution and management of all works within his division.
2. He can receive positive orders only from his own departmental superiors, the head of the administration or other civil officers duly authorized.
3. He is responsible for the proper measures to be taken to preserve all buildings and other works in his division and to prevent encroachment on Government lands in his charge. He should keep accurate plans of all Government lands borne on Departmental registers and supply tracings/Auto Cads there from to his subordinates, when it is necessary to acquaint them with the boundaries.
4. It is the duty of the University Engineer / Executive Engineer to report immediately to the Chief Engineer, through the Superintending Engineer under intimation to the deputy commissioner of the district, any serious damage to or loss of immovable property of Government caused by any accident or unusual occurrences.
5. The University Engineer / Executive Engineer can initiate any proposal for carrying out improvements to an existing structure or to take up new constructions or additions or alterations, if it is in the public interest. In case of buildings belonging to other Departments, he should conduct joint inspection with the concerned officer of that Department, identify the repairs or improvement works to be carried out, prepare priority lists and take action to prepare Estimates either for inclusion in the budget or for taking under lump sum grants, if feasible. In case of roads and bridges, he shall take action to prepare Estimates for repairs, renewals, improvements, or even new alignments, acquisition of buildings for providing the sight distance as per standards or improving the alignment or widening of formation etc., He should have a shelf of estimates ready, so that even they can be recast adopting current schedule of rates and submitted to the concerned authorities. One copy of all such Estimates must be available in the office library for ready reference. However the University Engineer / Executive Engineer shall ensure that in case of new building works unless the land is available, no estimate shall be prepared or technically sanctioned or tender floated.
6. As soon as the works are included in the budget, the University Engineer / Executive Engineer shall verify the works and any discrepancies shall be reported to the Government within a week's time.
7. He is responsible for the upkeep of surveying and mathematical instruments in his division and will report on their condition to the Superintending Engineer at the end of each working season. Any damage done to the instruments due to neglect or carelessness should be made good at the expense of the persons responsible for the same.
8. It is the duty of the University Engineer / Executive Engineer to furnish treasury and sub-treasury officers, after the inspections, with the certificate regarding the security of strong rooms used or proposed to be used for storage of Currency/ cash or other valuable property as required under article 34(a) of the Karnataka Treasury code. The University Engineer / Executive Engineer may depute for this purpose any selected sub-Divisional officers.

9. He is held responsible for the correct assessment of such items of revenue as are collected through the Department and should maintain the necessary records and accounts for the purpose in the register of revenues etc.
10. The Executive Engineer, in addition to his other duties is the ex-officio professional adviser of all departments in his jurisdiction and it is his duty to perform this function in a useful manner without allowing undue formalities to interfere with it.
11. It is incumbent on the University Engineer / Executive Engineer to ensure that sufficient precautions are taken by the officers concerned to prevent accidents at the work sites and to take precautionary measures to prevent chances of accidents to labour, officials and passers by in the vicinity of blasting operations.
12. It is the duty of the University Engineer / Executive Engineer to inspect periodically all major road works, bridges, buildings etc., and to see that they are maintained in an efficient condition.
13. The University Engineer / Executive Engineer shall not commence the construction of any work or spend public funds without the sanction of competent authority. (See paragraph 314 of KPWA Code.)
14. University Engineer / Executive Engineer shall close the accounts within two months after the work is finished and submit the completion report in the prescribed form to the Accountant General and ensure that the work gets deleted from the subsequent year's budget book.
15. University Engineer / Executive Engineer shall take necessary steps to obtain funds for the works under his control and keep his accounts and submit them punctually to the audit office as per rules in force.
16. University Engineer / Executive Engineer shall exercise a thorough and efficient control and check over his Divisional accountant and carefully examine the books, returns and papers from which the monthly accounts are compiled.
17. University Engineer / Executive Engineer is responsible for the correctness in all respects of the original records of cash and stores receipts and expenditure and for seeing that complete vouchers are obtained. (Ref paragraph 44 of KPWA Code).
18. He shall watch the progress of expenditure under each sub-head of work in contrast to the sanctioned Estimate. He shall see that a revised estimate is prepared when necessary and submitted to the sanctioning authority.
19. It is the responsibility of the University Engineer / Executive Engineer to hand over the buildings of other Departments immediately after their completion. If the user Department does not take over the same, it shall be deemed to have been handed over and a letter be addressed to the user Department accordingly.
20. University Engineer / Executive Engineer should examine at least once a year the books of his subordinates to see that the primary accounts fairly represent the progress of each work and that the accounts are personally attended to, by the sub Divisional officers.
21. The Divisional officer is primarily responsible for affording information in cases of probability of excess of actual over estimated cost of work and is expected not to allow any delay to occur in reporting to the Superintending Engineer, any such probability. In such cases, as well as

those relating to irregularities in the rates or cost of a sub-head which are beyond the powers of the Divisional officer to sanction, work slips should be submitted for orders. All the important liabilities not brought to account should also be noted in the work slip.

22. It is mandatory on the part of the University Engineer / Executive Engineer to review all budgeted works, minor works, works taken up under deposit contribution or for that matter any work taken up with or without sanction, once a month along with his Assistant Executive Engineers to ensure that the works are progressing according to agreed program; and in case any bottle-necks / problems are met with, to initiate such measures as are necessary to solve those problems. Cases requiring intervention of higher officers should be brought to their notice at the earliest. Wherever necessary, timely action should be taken to find solutions within the framework of the contract agreement, for claims raised by the contractors, after conducting proceedings in the presence of both the parties.
23. It shall be his duty that in case grants allocated are not adequate, to draw up a priority list of works wherever necessary in consultation with other Departmental officers who have countersigned the Estimates. He shall endeavor to utilize the budgetary allocations only for such priority works and to order stoppage of other works, if there are absolutely no other alternatives, till such time financial allocations are received. Before taking this extreme step which may adversely affect contractual obligations, the matter shall be brought to the personal knowledge of his Chief Engineer / Superintending Engineer. Where such stoppages are likely to result in higher cost due to escalation or other reasons, then such facts shall be reported well in advance not only to his immediate superior but also to the concerned officer of the user Department. In exceptional cases, if carrying out civil works is likely to result in utilization of machinery / equipment already procured by other Departments, then he shall take action to appraise not only to the immediate superior but also to the head of the Department, the imperative need to carry out such works to avoid loss to Government or to prevent costly equipments remaining idle and take up the work after obtaining the orders in writing from his official superior. On the whole, the University Engineer / Executive Engineer shall make all efforts to inform the concerned authorities about the need for adequate financial allocations; the likely consequences if allocations are not received in time; shall not proceed on oral assurances but proceed only when grants are conveyed in proper form.
24. He can authorize outsourcing of survey work, soil investigation; structural designs in case these facilities are not available in the Department.
25. The University Engineer / Executive Engineer shall review all works in his jurisdiction at-least every month with AEEs by meeting at Head Quarters or Sub -Divisions by rotation.

Assistant Executive Engineer:

1. A Division is divided into sub-divisions placed in charge of Assistant Executive Engineers or sub-Divisional officers, who are responsible to the University Engineer / Executive Engineer incharge of the division for the efficient management and satisfactory execution of all original works and repairs and the collection of materials and for the correct maintenance of the accounts pertaining to them. Sub-divisions can be constituted only with the sanction of Government.

2. The sub-Divisional officer is held personally responsible for the correctness of all initial cash and stock accounts require to be maintained in the sub-Divisional office. He shall examine the transactions relating to all such accounts and other important records and see that they are correct and conform to the rules in force, in all respects. It is his responsibility to see that all cash and stock accounts including all the important records are maintained up-to-date and their extracts wherever necessary are submitted to the Divisional office, on due dates.
3. It is incumbent on the sub-Divisional officer to ensure that all subordinates working under him are well posted in the work of correctly maintaining their primary accounts of works, i.e., measurement books, materials-at-site accounts, Tools and Plant accounts and the progress report of all works in their charge.
4. It is the duty of the sub-Divisional officer to inspect periodically all works in his charge and see to their proper maintenance. He shall also inspect all other road works, bridges and building works in his charge and see that they are also well maintained.
5. It is incumbent on sub-Divisional officer to see that all revenue due in his charge is assessed and collected, auction sales of all old and surplus materials and other revenue yielding property is conducted under orders of competent authority, well in time.
6. The sub-Divisional officer is also the professional adviser to the municipalities and other local bodies in his jurisdiction. When he is consulted by such local bodies, it is incumbent on him to comply, in so far as it does not interfere with his legitimate duties.
7. The sub-Divisional officer is primarily responsible for execution of work in accordance with prescribed specifications, approved designs and for adopting quality control measures and maintenance of records in a systematic manner. He along with the Field Engineer is responsible for the quality of works under execution. It is his responsibility to report in writing details of progress achieved in execution of works, shortfalls / malpractices noticed or apprehended.
8. The sub-Divisional officer shall always maintain up-to-date records of all works under execution, plan, non-plan and other schemes.
9. Sub-Divisional officer shall take effective action to prevent commencement of works without sanction / competent approval.
10. He shall take effective action to prevent encroachment of Government lands adjoining buildings, roads and bridges.
11. He shall take prompt action on every subordinate, particularly where issues like preparation of Estimates I revised Estimates / designs and drawings sought are delayed.
12. He shall along with his University Engineer / Executive Engineer shall inspect all buildings and roads and bridges in his jurisdiction and take steps to prepare Estimates for all repairs and improvements. He shall keep a shelf of Estimates ready, so that the works can be taken up with least delay when funds are made available.
13. He shall maintain an accurate and reliable map of all the roads in his charge. He shall also maintain Road History register, Property register and ROW register in respect of all category of roads in his jurisdiction.

Field Engineer / Assistant Engineer / Junior Engineer:

1. The duties and responsibilities Field Engineer / Assistant Engineer / a selection grade Junior Engineer/ Junior Engineer / section officer or engineering subordinate in the Department are one and the same. The head of the office is at liberty to assign such duties and responsibilities as he may deem fit in the proper discharge of Government work. The Assistant Executive Engineer in-charge of the subdivision shall allocate the work to the field engineers keeping in view, their educational qualifications and basic training prescribed for the job; technical knowledge, experience, initiative, attention to detail, enthusiasm and willingness to work with a sense of involvement and responsibility; mental skill and efforts necessary for performing the functions and duties of the job; responsibility whether supervisory or non-supervisory attached to the job and working conditions including risks and hazards. Any differences about the allocation of duties and jurisdictions, appeal shall lie with the University Engineer / Executive Engineer whose decision in all cases keeping the above guidelines in view, shall be generally final and binding on all concerned.
2. The field engineer shall be primarily responsible for the custody of Government land, buildings, machinery and other Government property vesting with the Department; for keeping Government road boundary lands and buildings free from encroachment and unauthorized occupations; for keeping in proper custody all Government machineries, tools and plants, and materials-at-site account. In case of any theft of machineries, a FIR shall be lodged with the police under intimation to Assistant Executive Engineer and University Engineer / Executive Engineer about the theft of Government property and materials and damage to Government properties.
3. He shall submit occupational reports of buildings under his charge and reports of unauthorized occupations of Government buildings, and shall initiate prompt action to prevent unauthorized occupations or misuse of Government buildings.
4. He shall carry out pre and post-monsoon inspection of buildings and submit reports periodically to the sub-Divisional officers for further action and for entry in the registers of buildings. He shall be answerable for the general conditions of buildings, roads, bridges, culverts and also construction materials at site, and shall immediately bring the structural weaknesses and deficiency if any, to the notice of the sub-division officers.
5. He shall carry out pre and post monsoon inspections and timely inspections of all culverts/bridge works in his sections as prescribed from time to time.
6. He shall also maintain the registers of buildings, bridges, and CDs with details of departmental inspections conducted; and similarly register of all lands including right of way of roads vested with Government under the charge of Department.
7. He shall conduct surveys including leveling and investigations for preparation of plans and estimates for the works entrusted, point out in writing to the sub Divisional officer any mistakes/ discrepancies in the sanctioned plans, variations in the conditions of the sites and plans; and any other anomaly that may be noticed.

8. He shall ensure that the works are carried out according to the specifications, approved plans and estimates with required quality at all levels of construction and also timely efficient execution of works entrusted to him.
9. He shall maintain measurement books, permanent measurement books and other relevant documents, in proper condition and shall not handover them to others concerned without an acknowledgement.
10. He shall be responsible for keeping in official custody of cash received from the subdivision office and render accounts as per rules and within due dates.
11. He shall preserve and take care of tools and plants, stock and other articles kept under his charge.
12. He shall submit financial budget and performance budget accounts in the prescribed proforma in time to the sub-Divisional officers.
13. He shall keep detailed accounts of works, consumption of material and item wise works expenditure of all plan and non-plan works.
14. He shall assist in preparation and checking of Estimates including analysis of rates, preparation of drawings, and project reports by the Assistant Executive Engineer.
15. He shall submit periodical progress reports describing in detail, the extent of work done, and bottlenecks if any.
16. He shall prepare plans, Estimates, layout plans as well as elevations of buildings under his charge in accordance with the prescribed standards.
17. He shall not only look after the requirement of machinery but also maintain all the required primary records such as log books, history sheets etc., in up-to-date condition.
18. He shall frequently check the registers of circuit house, inspection bungalow, travelers bungalows in his jurisdiction and arrange to deposit collections of rent in treasury or sub-Divisional office as per rules.
19. He shall assess the revenue due to Government correctly and ensure proper collections.
20. He shall build up records such as land statements, land schedules, for acquisition of lands and take effective action to prevent encroachment of Government lands in his charge.
21. He shall report immediately any unusual, extraordinary or peculiar occurrences including heavy rains, flooding and resultant damages relating to his sections, to his respective sub-Divisional officer.
22. He shall collect authenticated data with corroborative records and other necessary documents for preparations of projects.
23. It is the duty of the Field Engineer / Assistant Engineer / special grade Junior Engineer/ Junior Engineer of the quality control sub division to collect the materials from site for testing. 24. He shall take measurements himself and assist the sub-Divisional officers and Divisional officers in checking of measurements. He shall also maintain standard measurement of works. 25. He shall keep vigilant control over the expenditure and ensure that the works are

carried out within the sanctioned cost and provisions, and to submit advance reports whenever alterations in the costs are likely.

26. He shall prepare timely running bills every month and final bill of all works within a month of completion, and submit the same to the Assistant Executive Engineer.
27. He shall, if necessary, work out abstract quantities in the measurement books so that the bill in proper form can be prepared in the office of the sub-Divisional officer.
28. He shall be responsible for timely submission of variations (E.I.R..L), work slips supplementary estimates, revised estimates, completion reports etc., to the higher authorities.
29. He shall maintain site order books which shall be presented to the inspecting officers invariably for recording their orders at site. It shall also be the duty of the field engineer to submit draft inspection notes for confirmation by the concerned inspecting officers.
30. He shall maintain daily diary giving details of journey performed, results of supervision and inspections conducted, and submit extracts to the sub-Divisional officers periodically as prescribed.
31. He shall keep field book / site book at every site/field and enter daily or during inspection and make the same available to inspecting officers for their remarks.
32. He shall report to superiors and local Police all cases of accidents, damages to Government property, roads/culverts occurring either to workmen or to the public in the case of works under execution.
33. He shall remain at the site of work throughout the day if necessary and attend office of the Assistant Executive Engineer the afternoon or attend to any specific work in office or whenever called for. 34. He shall not leave the headquarters without prior approval of the immediate superior. 35. He shall ensure that all the materials used in the work are tested for their quality in the quality control lab before use. He shall append the test results while submitting the work bills.