

15 -ാം കേരള നിയമസഭ

13 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 3085

11-03-2025 - ൽ മറുപടിയ്ക്ക്

കോടഞ്ചേരി കക്കാടംപൊയിൽ മലയോര ഹൈവേ

ചോദ്യം		ഉത്തരം	
ശ്രീ എ. പി. അനിൽ കുമാർ		ശ്രീ പി.എ.മുഹമ്മദ് റിയാസ് (പൊതു മരാമത്ത്-വിനോദസഞ്ചാര വകുപ്പ് മന്ത്രി)	
(എ)	2017-18 ൽ കോടഞ്ചേരി കക്കാടംപൊയിൽ മലയോര ഹൈവേയുടെ നിർമ്മാണത്തിനായുള്ള ടെൻഡർ ഉറപ്പിച്ചതിന്റെ രേഖകളുടെ പകർപ്പ് ലഭ്യമാക്കുമോ; ടെൻഡർ പ്രകാരം കൂമ്പാറ ആനക്കല്ലുപാറ മുതൽ താഴെ കക്കാട് വരെ 6.700 കിലോമീറ്റർ നീളത്തിൽ പുതിയ റോഡ് നിർമ്മിക്കുന്നതിന് വ്യവസ്ഥ ചെയ്തിരുന്നോ; പുതിയ റോഡ് നിർമ്മിക്കുന്നതിന് നാറ് പാക്ക് പഠനം നടത്തിയിട്ടുണ്ടോ; ഉണ്ടെങ്കിൽ പഠന റിപ്പോർട്ടിന്റെ പകർപ്പും നാറ് പാക്ക് റിപ്പോർട്ടിന്റെ അടിസ്ഥാനത്തിൽ പുതിയ റോഡ് നിർമ്മാണത്തിനായി ഇറക്കിയ സർക്കാർ ഉത്തരവിന്റെ പകർപ്പും ലഭ്യമാക്കുമോ ;	(എ)	മലയോര ഹൈവേ കോഴിക്കോട് ജില്ലയിലെ കോടഞ്ചേരി മുതൽ കക്കാടം പൊയിൽ വരെയുള്ള റോഡിന്റെ നിർമ്മാണത്തിനായുള്ള എഗ്രിമെന്റ് പകർപ്പ് അനുബന്ധം - 1 ആയി ചേർക്കുന്നു. പ്രസ്തുത പ്രവർത്തിയുടെ ടെൻഡർ പ്രകാരം കൂമ്പാറ - ആനക്കല്ലുപാറ മുതൽ താഴെ കക്കാട് വരെ 7.217 കിലോമീറ്റർ നീളം ഹിൽ ഹൈവേ നിലവാരത്തിൽ നിർമ്മിക്കുന്നതിന് വ്യവസ്ഥ ചെയ്തിട്ടുണ്ട്. ഹിൽ ഹൈവേ അലൈൻമെന്റ് സംബന്ധിച്ച നാറ് പാക്കിന്റെ പഠന റിപ്പോർട്ട് അനുബന്ധം -2, 2എ ആയി ചേർക്കുന്നു. ഹിൽ ഹൈവേ അലൈൻമെന്റുകൾ അംഗീകരിച്ച സർക്കാർ ഉത്തരവുകളുടെ പകർപ്പുകൾ അനുബന്ധം - 3(എ), 3(ബി), 3(സി) ആയി ചേർക്കുന്നു.
(ബി)	മേൽ ഉത്തരവിന്റെ അടിസ്ഥാനത്തിൽ ആനക്കല്ലുപാറ മുതൽ താഴെ കക്കാടംപൊയിൽ വരെ 6.700 കിലോമീറ്റർ നീളത്തിലുള്ള റോഡ് നിർമ്മാണത്തിനായി ഭൂഉടമകൾ ആവശ്യമായ ഭൂമി സൗജന്യമായി വിട്ടു നൽകിയിട്ടുണ്ടോ; വ്യക്തമാക്കുമോ; പ്രസ്തുത ഭൂമി സർവ്വേ നടത്തി അതിർത്തി നിർണ്ണയിച്ച് പൊതു മരാമത്ത് വകുപ്പ് റോഡിന് ആവശ്യമായ സ്ഥലം ഏറ്റെടുത്ത് കെ.ആർ.എഫ്.ബി.യ്ക്ക് കൈമാറുകയും ആയതിന്റെ അടിസ്ഥാനത്തിൽ പ്രവൃത്തിയുടെ എർത്ത് വർക്ക് കരാറുകാരായ യു.എൽ.സി.സി.എസ് തുടങ്ങുകയും ചെയ്തതിനുശേഷം ആനക്കല്ലുപാറ താഴെ കക്കാടംപൊയിൽ റോഡിന്റെ പ്രവൃത്തി നിർത്തിവയ്ക്കാനുള്ള കാരണം വ്യക്തമാക്കുമോ;	(ബി)	കൂമ്പാറ ആനക്കല്ലുപാറ മുതൽ താഴെ കക്കാട് വരെ ഉള്ള ഭാഗത്ത് റോഡ് വീതി കൂട്ടുന്നതിനായി മുഴുവൻ സ്ഥലവും സൗജന്യമായി ലഭ്യമായിട്ടില്ല. ലഭ്യമായ സ്ഥലങ്ങളിൽ സർവ്വേ പ്രവൃത്തികൾ ആരംഭിച്ചിരുന്നു. റോഡിന്റെ Gradient IRC 52-2001 clause 12-2-1 പ്രകാരം 8% ൽ പരിമിതപ്പെടുത്തേണ്ടതുണ്ട്. DPR പ്രകാരം മേലെ കൂമ്പാറ താഴെകക്കാട് വരെയുള്ള ഭാഗത്ത് ചില സ്ഥലങ്ങളിൽ 58 മീറ്റർ വരെ ഉയരത്തിൽ earth cutting ആവശ്യമായിവരും. ചെങ്കുത്തായ പ്രദേശമായതിനാലും ഉരുൾപൊട്ടൽ സാധ്യതയുള്ള സ്ഥലമായതിനാലും ഇത്രയും ഉയരത്തിൽ കട്ടിംഗ് പ്രായോഗികമല്ല. Gradient കുറയ്ക്കുന്നതിന് 3 ഹെയർപിൻ വളവുകൾ ഉൾപ്പെടുത്തുകയും റോഡിന്റെ നീളം കൂടുകയും ചെയ്തെങ്കിലും IRC പ്രകാരമുള്ള Gradient ലഭിക്കുമായിരുന്നില്ല. ഈ കാരണത്താൽ മേലെ കൂമ്പാറ മുതൽ താഴെകക്കാട് വരെയുള്ള സെച്ച് കോടഞ്ചേരി മുതൽ കക്കാടംപൊയിൽ വരെയുള്ള മലയോര ഹൈവേയുടെ അലൈൻമെന്റിൽ നിന്നും

			ഒഴിവാക്കുകയും പകരം ഒരു Jeepable Track ആയി നിർമ്മിക്കുന്നതിനായി 26.50 കോടി രൂപ വകയിരുത്തുകയും ചെയ്തു.
(സി)	<p>കോടഞ്ചേരി താഴെ കക്കാടംപൊയിൽ വരെയുള്ള മലയോര ഹൈവേ റോഡിൽ കൂമ്പാറ ആനക്കല്ലംപാറ മുതൽ അകമ്പുഴ താഴെ കക്കാടംപൊയിൽ വരെ 16/10/2018 ലെ സർക്കാർ ഉത്തരവ് പ്രകാരം നിർമ്മിക്കേണ്ട 6.7 കി.മീ റോഡ് ഒഴിവാക്കി മറ്റൊരു ഫണ്ട് ഉപയോഗിച്ച് നേരത്തെ പ്രവൃത്തി നടത്തിയ കക്കാടംപൊയിൽ റോഡിലൂടെ താഴെ കക്കാടം പൊയിലിലേക്ക് മലയോര ഹൈവേ ജോയിന്റ് ചെയ്ത് ഏത് സാഹചര്യത്തിലാണെന്ന് വ്യക്തമാക്കുമോ; ഇപ്രകാരം 6.7 കിലോമീറ്റർ റോഡ് നിർമ്മാണം ഒഴിവാക്കിയ ഇനത്തിൽ കരാർ തുകയിൽ കുറവ് വരുത്തിയിട്ടുണ്ടോ; ഉണ്ടെങ്കിൽ എത്ര രൂപയുടെ കുറവ് വരുത്തി; ഇല്ലെങ്കിൽ കാരണം വ്യക്തമാക്കുമോ;</p>	(സി)	<p>കൂമ്പാറ ആനക്കല്ലംപാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള പ്രദേശം പരിസ്ഥിതി ലോലവും കുത്തനെയുള്ള കയറ്റിറക്കങ്ങളോട് കൂടിയതുമായ പ്രദേശമാണ്. പ്രസ്തുത ഭാഗത്ത് മലയോര ഹൈവേ നിലവാരത്തിലേക്ക് ഉയർത്തുന്നതിന് ആവശ്യമായ Right of way ലഭ്യമല്ല. ഈ വസ്തുതകൾ കണക്കിലെടുത്ത് മലയോര ഹൈവേയുടെ കോടഞ്ചേരി കക്കാടം പൊയിൽ റോഡിൽ മേലെ കൂമ്പാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള ഭാഗം മലയോര ഹൈവേയിൽ നിന്ന് ഒഴിവാക്കുകയും പകരം ഒരു Jeepable track ആയി നിർമ്മിക്കുന്നതിന് 26.50 കോടി രൂപ വകയിരുത്തുകയും ചെയ്തു. പ്രസ്തുത ഭാഗം മലയോര ഹൈവേയിൽ നിന്നും ഒഴിവാക്കി പുതുക്കിയ എസ്റ്റിമേറ്റ് തയ്യാറാക്കിയതിൻ പ്രകാരം കരാർ തുകയിൽ 13,53,91,342/- രൂപയുടെ കുറവ് വന്നിട്ടുണ്ട്. ഫൈനൽ ബിൽ ആയതിനുശേഷം കൃത്യം തുക കണക്കാക്കാൻ സാധിക്കുകയുള്ളൂ.</p>
(ഡി)	<p>കോടഞ്ചേരി കക്കാടംപൊയിൽ മലയോര ഹൈവേയിൽ നിന്നും ഒഴിവാക്കിയ കൂമ്പാറ ആനക്കല്ലംപാറ അകമ്പുഴ താഴെ കക്കാട് റോഡ് നിർമ്മാണത്തിന് (മലയോര ഹൈവേയിൽ നിന്നും ഒഴിവാക്കിയ പുതിയ റോഡ്) കിഫ്ബി ഫണ്ട് അനുവദിച്ചിട്ടുണ്ടോ; ഉണ്ടെങ്കിൽ എത്ര തുകയാണ് അനുവദിച്ചതെന്ന് അറിയിക്കുമോ; ഇത് സംബന്ധിച്ച ഉത്തരവിന്റെ പകർപ്പ് ലഭ്യമാക്കുമോ;</p>	(ഡി)	<p>മലയോര ഹൈവേയുടെ അലൈൻമെന്റിൽ നിന്നും ഒഴിവാക്കിയെങ്കിലും മേലെ കൂമ്പാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള 7.217 കി.മീ റോഡ് ഗതാഗതയോഗ്യമായ വിധത്തിൽ മെച്ചപ്പെടുത്തുന്ന പ്രവൃത്തി കിഫ്ബി ഫണ്ടിംഗ് വിനിയോഗിച്ച് ഡെപ്പോസിറ്റ് വർക്കായി നിർവ്വഹിക്കുന്നതിന് തീരുമാനിച്ചിട്ടുണ്ട്. ഇതിന്റെ അടിസ്ഥാനത്തിൽ നിർവ്വഹണ ഏജൻസി സമർപ്പിച്ച എസ്റ്റിമേറ്റ് പ്രകാരം ഈയിനത്തിൽ 26.25 കോടി രൂപ കൂടി ഉൾപ്പെടുത്തി കിഫ്ബി പുറപ്പെടുവിച്ച 23/05/2023-ലെ PWD013-14/APR-1/2023/KIIFB നമ്പർ പുതുക്കിയ ധനാനുമതി ഉത്തരവിന്റെ പകർപ്പ് അനുബന്ധം - 4 ആയി ചേർക്കുന്നു.</p>

<p>(ഇ) മലയോര ഹൈവേ പദ്ധതിയിൽ ഉൾപ്പെടുത്തിയിരുന്ന 6.7 കി.മീ. റോഡിന്റെ നിർമ്മാണം ഒഴിവാക്കിയിട്ടും കരാർ തുകയിൽ കുറവ് വരുത്താതെ തുക ഉയർത്തി നൽകിയതും ആദ്യത്തെ കരാർ പ്രകാരം പൂർത്തീകരിക്കേണ്ട റോഡിന് കിഫ്ബി മുഖേന പ്രത്യേകം തുക അനുവദിച്ചു നൽകിയതിലൂടെയും 144 കോടി രൂപയ്ക്ക് പൂർത്തിയാക്കേണ്ട പ്രോജക്ടിന് ഫലത്തിൽ 225 കോടി രൂപ ചെലവഴിച്ച സാഹചര്യത്തിൽ ഈ വിഷയത്തിന്മേൽ വിജിലൻസ് അന്വേഷണം നടത്തുന്നതിനുള്ള നടപടികൾ സ്വീകരിക്കുമോ; വ്യക്തമാക്കുമോ?</p>	<p>(ഇ) മേലേ കൂമ്പാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള 7.217 കി.മീ റോഡ് മലയോര ഹൈവേയുടെ അലൈൻമെന്റിൽ നിന്നും ഒഴിവാക്കിയെങ്കിലും ടി റോഡ് ഗതാഗതയോഗ്യമായ വിധത്തിൽ മെച്ചപ്പെടുത്തുന്ന പ്രവൃത്തി കിഫ്ബി ഫണ്ടിംഗ് വിനിയോഗിച്ച് ഡെപ്പോസിറ്റ് വർക്കായി നിർവ്വഹിക്കുന്നതിന് 26.25 കോടി രൂപ കിഫ്ബി വകയിരുത്തിയിട്ടുണ്ട്. കോടഞ്ചേരി കക്കാടംപൊയിൽ റോഡ് പ്രവൃത്തിയ്ക്ക് യൂട്ടിലിറ്റി ഷിഫ്റ്റിംഗ് ഉൾപ്പെടെ 30/06/2018-ലെ ധനാനുമതി ഉത്തരവ് പ്രകാരം കിഫ്ബി 144 കോടി രൂപയ്ക്കുള്ള ധനാനുമതിയാണ് നൽകിയിരുന്നത്. എന്നാൽ പ്രസ്തുത എസ്റ്റിമേറ്റിൽ ജി.എസ്.ടി ഉൾപ്പെട്ടിരുന്നില്ല.</p> <p>പിന്നീട് പ്രവൃത്തിയുടെ Agreed PAC-യും ആയതിന്മേൽ 12 ശതമാനം ജി.എസ്.ടിയും യൂട്ടിലിറ്റി ഷിഫ്റ്റിംഗിനുള്ള പുതുക്കിയ എസ്റ്റിമേറ്റും ഉൾപ്പെടുത്തി നിർവ്വഹണ ഏജൻസി സമർപ്പിച്ച റിവീഷൻ പ്രൊപ്പോസലിന്റെ അടിസ്ഥാനത്തിൽ 10/10/2021-ൽ ധനാനുമതി 178 കോടി രൂപയായി പുതുക്കി നൽകി. തുടർന്ന് മലയോര ഹൈവേയുടെ അലൈൻമെന്റിൽ നിന്നും ഒഴിവാക്കിയ മേലേ കൂമ്പാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള ഭാഗത്തെ ഡെപ്പോസിറ്റ് പ്രവൃത്തിയ്ക്കുള്ള എസ്റ്റിമേറ്റും, റീഹാബിലിറ്റേഷൻ എസ്റ്റിമേറ്റ്, ആനുപാതികമായ തുകയ്ക്കുള്ള 18 ശതമാനം ജി.എസ്.ടി എന്നിവയും ഉൾപ്പെടുത്തി നിർവ്വഹണ ഏജൻസി സമർപ്പിച്ച റിവീഷൻ പ്രൊപ്പോസൽ പ്രകാരം 23/05/2023-ൽ ധനാനുമതി 198.35 കോടി രൂപയായി പരിഷ്കരിച്ച് നൽകി. പ്രവൃത്തിയുടെ Standard Bid Document പ്രകാരം അനുവദനീയമായ Price Escalation തുകയായി നിർവ്വഹണ ഏജൻസി ശുപാർശ ചെയ്ത 23.33 കോടി രൂപ ഉൾപ്പെടുത്തി 30/11/2024-ൽ ധനാനുമതി 221.20 കോടി രൂപയായി പുതുക്കി നൽകി.</p> <p>10/10/2021-ലെ ധനാനുമതി ഉത്തരവ് പ്രകാരം പ്രസ്തുത പ്രവൃത്തിയുടെ Agreed PAC 154.94 കോടി രൂപയായിരുന്നു (ജി.എസ്.ടി ഒഴികെ). തുടർന്ന് മേലേ കൂമ്പാറ മുതൽ താഴെ കക്കാട് വരെയുള്ള ഭാഗം ഒഴിവാക്കിയതിന് ആനുപാതികമായി എസ്റ്റിമേറ്റിൽ കുറവ് വന്നിട്ടുണ്ടെങ്കിലും, ശേഷിക്കുന്ന ഭാഗത്ത് സൈറ്റിലെ സാഹചര്യങ്ങൾക്കനുസൃതമായി നിർവ്വഹിക്കേണ്ടി വന്ന അധിക പ്രവൃത്തികൾ കൂടി ഉൾപ്പെടുത്തി അനുവദിച്ച സിവിൽ വർക്കിനുള്ള എസ്റ്റിമേറ്റ് 23/05/2023-ലെ ധനാനുമതി ഉത്തരവ്</p>
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		പ്രകാരം 145.37 കോടി രൂപയായും, 30/11/2024-ലെ ധനാനുമതി ഉത്തരവ് പ്രകാരം 141.4 കോടി രൂപയായും കുറഞ്ഞിരുന്നു.
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സെക്ഷൻ ഓഫീസർ

Agreement No.06/PWD013-14/PD/PMU-KRFB/2020-21 dated 18.06.2020

Name of Work: **KIIFB 2017-18 Construction of Hill Highway from Kodanchery to Kakkadampoyil 34.30 Km.) In Kozhikode District.(Re-tender)**

1. Agreement in stamp paper
2. Form of agreement
3. Contractor details
4. Memo of work tendered
5. Copy of Administrative Sanction
6. Copy of KIIFB Sanction order
7. Copy of Technical sanction
8. Tender Notice
9. E-tender Publishing details
10. Letter of Acceptance
11. Notice to proceed with the work
12. Copy of Contractor's Licence
13. Contractor's Bid (BOQ)
14. Contract Data
15. WBS (separately attached)
16. Drawings (separately attached)
17. Preliminary Agreement
18. Tender Documents
19. Any other documents listed in the Contract Data as forming part of the Contract.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10957

CONTRACTOR

A. A. [Signature]
PROJECT DIRECTOR

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
10000



Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173113

Agreement Form

Agreement No. 06/ PWD013-14/PD/PMU-KRFB/2020-21 Dt 18.06.2020 of the
Project Director, PMU-KRFB, Thiruvanthapuram

This agreement, made the 18th day of June 2020 between Project Director,
PMU KRFB [hereinafter called "the Employer"] and M/s. Uralungal Labour Contract
Co-operative Society, Ltd., Madappally College P.O., Vatakara (Via), Kozhikode
(name and address of the contractor) hereinafter called "the Contractor" of the other
part.

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No. 10057

CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

No. 1164

Value Rupees 10000/-
issued to

08.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

PAID TO VENDOR



00001



IN A SALVAGEABLE CONDITION
FOR SOCIETY OF THE
CHIRM

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
10000



Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173114

Whereas the Employer is desirous that the Contractor execute "KIIFB 2017-18 Construction of Hill Highway from Kodanchery to Kakkadampoyil 34.30 Km.) In Kozhikode District.(Re-tender)" (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such works and the remedying of any defects therein, at the cost of Rs. 154,93,87,879.28/- (Rupees One Fifty Four Crore Ninety Three Lakhs Eighty Seven Thousand Eight Hundred and Seventy Nine and Paise Twenty Eight only)

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No. 10957

CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

No. 1165

Value Rupees 10000/-
Issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

20 MAY 2020
PALOO VENDOR

00001



THE HON. THE CHIEF MINISTER
GOVERNMENT OF INDIA
NEW DELHI

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
10000



Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173115

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy and defects therein in conformity in all aspects with the provisions of the contract.

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10957

CHAIRMAN
CONTRACTOR

A. A. [Signature]
PROJECT DIRECTOR
PROJECT DIRECTOR
Project Management Unit
Kerala Field Fund Board
Thiruvananthapuram

No. 1166

Value Rupees. 10000/- only
Issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

[Signature]
PALOUE VENDOR



00001



CO-OP SOCIETY NO. 100
WILL BE STAYED
CHARGE

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
10000



Rs.
10000

TEN THOUSAND RUPEES

१०००० केरल KERALA

B 173116

- 3 The Chief Executive Officer of Kerala Infrastructure Investment Fund Board covenants to pay the Contractor in consideration of the execution and completion of the Works and remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10957

CHAIRMAN

CONTRACTOR

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

No. 1167

Value Rupees. 10000/- Only
issued to

28-5-2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara



00001



RESEARCH SOCIETY LTD NO 1001
CHAND

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
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Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173117

4 The following documents shall be deemed to form and be ready and constructed as part of this Agreement viz.

- i) Agreement in Stamp paper
- ii) Form of agreement
- iii) Contractor Details

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10953

CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Sahitya Akademi
Thiruvananthapuram

No 1168

Value Rupees 10000/-
issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

2-6 MAY 2020



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भारत सरकार
राज्य सरकार

चक्र

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

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Rs.
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TEN THOUSAND RUPEES

INDIA

കേരളം KERALA

B 173121

- iv) Memo of work tendered
- v) Copy of Administrative Sanction
- vi) Copy of KIIFB Sanction order
- vii) Copy of Technical sanction

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10057

CONTRACTOR CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

No. 1172

28.5.2020

Value Rupees 10000/- only
issued to

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

PAI ONE VENDOR



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विधि में लिखित (अथवा)
गोपनीयता के अधीन है

INDIAN

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Rs.
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TEN THOUSAND RUPEES

१०००० केरल KERALA

B 173118

- viii) Tender Notice
- ix) E-tender publishing details
- x) Letter of Acceptance.
- xi) Notice to proceed with the work
- xii) Contractor's License
- xiii) Contractor's Bid (BOQ)

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No. 19867

CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR

Project Name: District Palt
Kangra, Jharkhand
Thermal and Hydel Power

No. 1169

Value Rupees 10000/- 15
Issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

PALODE VENDOR

26 MAY 2020

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GOVERNMENT OF INDIA
MINISTRY OF DEFENCE

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भारतीय गैर न्यायिक INDIA NON JUDICIAL

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Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173119

- xiv) Contract Data.
- xv) WBS. (Separately attached)
- xvi) Drawings (Separately attached)
- xvii) Preliminary Agreement
- xviii) Tender Documents
- xix) Any other documents listed in the Contract Data as forming part of the Contract.

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10857

CHAIRMAN

CONTRACTOR

PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram, Kerala

NO. 1170

Value Rupees 10000/- Only
issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madannalloor Chollana, Vatakara

PAY TO THE VENDOR



00001



CHAIR
WOMEN'S SOCIETY
WOMEN'S SOCIETY

भारतीय गैर न्यायिक INDIA NON JUDICIAL

दस हजार रुपये

रु.
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Rs.
10000

TEN THOUSAND RUPEES

കേരളം KERALA

B 173120

In witnessd whereof the parties there to have caused this Agreement to be
executed the day and year first before written.

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No: 10957

CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

PROJECT DIRECTOR

Project Management Unit

Project Management Unit

Project Management Unit

19

No. 1171

28.5.2020

Value Rupees. 10000/- only
issued to

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

Handwritten signature of the contractor.



00001



RECEIVED
JAN 10 1967
CENTRAL

भारतीय गैर न्यायिक INDIA NON JUDICIAL

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Rs.
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TEN THOUSAND RUPEES

കേരളം KERALA

B 173122

The

Common

Seal

of

was hereunto affixed in the presence of:

1 Kavitha, K. L, General Manager, PMU-KRFB

2.V.P. Mahesh Kumar, Divisional Accounts Officer, PMU-KRFB

Binding Signature of Employer

Binding Signature of Contractor

For THE URALUNGAL LABOUR CONTRACT
CO-OP. SOCIETY LTD. No. 16957

CHAIRMAN

No. 1173

Value Rupees, 10000/- only
issued to

28.5.2020

The Chairman, ULCCS Ltd
P.O. Madappally College, Vatakara

PAIDEE VENDOR





ORIGINAL - FOR COPY
 COPY SOCIETY NO 100

1000

Form of Agreement

Kerala Road Fund Board

Project Management Unit

Agreement No.06/PWD013-14/PD/PMU-KRFB/2020-21 dated 18.06.2020

Between Project Director, PMU-KRFB, Thiruvananthapuram as one part for Governor of Kerala and M/S. **Uralungal Labour Contract Co-operative Society Ltd., Madappally College P.O., Vatakara (via), Kozhikode** as the other part.

Description of Work : **KIIFB 2017-18 Construction of Hill Highway from Kodanchery to Kakkadampoyil 34.30 Km.) In Kozhikode District.(Re-tender)**

Administrative Sanction No. : G. O (Rt) No. 942/2017/PWD Dated 10.07.2017

Administrative Sanction Amount : 3500 crore (Total Amount of Hill Highway)

KIIFB Sanction order No. : PWD013-14-PA-01 Dated: 30-06-2018

Amount : 144.00 crore

Technical Sanction No. : Order No. RdDnKKD/2019-2020/RD/2017/6915 Dated: 11-11-2019

Technical Sanction Amount : 158,88,00,000/-

Tender PAC : Rs. 140,85,34,605/-

Name of Contractor : M/S. Uralungal Labour Contract Co-operative Society Ltd

Amount of Contract : Rs. 154,93,87,879.28/-

Time of Completion : 24 months

Defect Liability Period : 3 years

Division : Roads Division, Kozhikode

Sub Division : Roads Sub Division, Koduvally

Date: 18/06/2020

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10997

CONTRACTOR

23

A. A. J.
PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board

Contractor Details

Kerala Road Fund Board

Project Management Unit

Name of Contractor : M/S. Uralungal Labour Contract
Co-Operative Society Ltd

Contractor Type : Co-operative Society
(Individual/Proprietor ship/
Partnership/Limited
Liability
Partnership/Pvt. Ltd
Company/Public Agency)

Adhaar/Firm Registration :10957
Number/CIN

Year of Registration : 1925

Address with Pin code : M/S. Uralungal Labour Contract
Co-Operative Society Ltd., Madappally College P.O.,
Vatakara (via), Kozhikode, Pin - 673102

Office Contact Number

a. Land line Number : 0496-2514042

b. Mob Number : 9446002401

Email ID : uralungal@ulccsltd.com

PAN No. : AAAAU0170E

GST Reg. No. : 32AAAAU0170E1Z4

Bank Details

Bank Name : KOZHIKODE DISTRICT CO OPERATIVE BANK

State : Kerala

District : Kozhikode

Branch Name : KOZHIKODE DISTRICT CO OPERATIVE BANK
VATAKARA MAIN BRANCH

Account No. : 100086007700001

IFSC Code : KDCB00000008

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10957

CONTRACTOR

CHAIRMAN

25

A. A. [Signature]
PROJECT DIRECTOR

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board

**PROJECT MANAGEMENT UNIT
KERALA ROAD FUND BOARD**

MEMO OF WORK TENDERED

Name of Work	Value of Works as per sanctioned DPR	Accepted Tender	Date of commencement of work	Date of completion of work	Details of security deposit	Details of additional performance guaranty
KIIFB 2017-18 Construction of Hill Highway from Kodanchery to Kakkadampoyil 34.30 Km.) In Kozhikode District.(Re-tender)	PWD013-14-PA-01 Dated: 30-06-2018 Rs. 144.00 crores (Rupees One Hundred Fofity Four Crores Lakhs only)	As per the decision of Tender Approval Committee held on 20/05/2020 tender accepted for Rs. 154,93,87,879.28 /-(Rupees One Fifty Four Crore Ninety Three Lakhs Eighty Seven Thousand Eight Hundred and Seventy Nine and Paiza Twenty Eight only)	Within 10 days from the date of issue of notice to proceed with the work or date of actual commencement whichever is earlier	24 Months from the date of proceed to work or date of actual commencement whichever is earlier	Nil	Nil

Date: 18.06.2020

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD No: 10457
CONTRACTOR

CHAIRMAN

PROJECT DIRECTOR

27

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

15075-

1117/17



GOVERNMENT OF KERALA

Abstract

Public Works Department – Budget Speech 2017-18 – Implementation of Projects to be taken up by availing funds under Kerala Infrastructure Investment Fund Board (KIIFB) – In Principle Administrative Sanction - Accorded - Orders issued.

PUBLIC WORKS (G) DEPARTMENT

G.O.(Rt) No. 942/2017/PWD.

Dated, Thiruvananthapuram, 10.07.2017

Read:- 1) G.O. (Rt) No. 596/2017/PWD dated 04.05.2017.

2) G.O(Rt) No. 616/2017/PWD dated 10.05.2017.

3) Letter Nos. CE/R&B/GL-KIIFB/2017-18 dated 06.06.2017 & 14.06.2017 from the Chief Engineer(Roads & Bridges), Thiruvananthapuram.

ORDER

It has been announced in the Budget Speech 2017-18 as detailed below that KIIFB will invest an amount of Rs. 18,185 Crore for the development of Hill Highway, Coastal Highway, various Road Corridors, Bridges, Flyovers etc. under Public Works Department.

Sl. No.	Name of Work	Estimate Amount (Rs. In Crore)
1	Hill Highway	3500
2	Coastal Highway	6500
3	182 roads	5628
4	69 Bridges & Flyovers	2557
	TOTAL	18185

(2) In the Reply Speech 2017-18, certain corrections / substitution / deletion

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10057

CHAIRMAN

29

PROJECT DIRECTOR
Project Management Unit

were made in the list of works under PWD referred in Para 156 & 157 of Budget Speech 2017-18. Among the Road works in Para 156, Sl. No. 162 & 175 are repeated twice and hence Sl. No. 162 was removed from the list. The work "Karettu-Kallambalam road" in Sl. No. 113 of Para 156 of Budget Speech 2017-18, has been replaced with Drinking Water Projects in Pulimathu, Nagaroor and Karavaram Villages. As per Government Order read as 1st paper above Administrative Sanction was accorded for the work "Kundannur Flyover" (Sl. No. 34, Para 157 of Budget Speech 2017-18) & as per Government Order read as 2nd paper above in-principle sanction was accorded for the work "Vytila flyover" (Sl. No. 48, Para 157 of Budget Speech 2017-18) and the amount for the work "Bridge connecting Kurunkotta Island with Cochin Corporation" (Sl no. 69, Para 157 of Budget Speech 2017-18) amount has been cut short by Rs. 10 Crore. Hence the total number of Bridges/ROBs/Flyovers decreases from 69 to 67 and the total amount falls from Rs. 2557 Crore to Rs. 2345 Crore. In case of road works, Sl No. 162 has been deleted and the work in Sl. No. 113 of Para 156 has been substituted and the total number of Road works decreases from 182 to 180 and the total amount falls from Rs. 5628 Crore to Rs. 5583 Crore.

(3) As per letters read above, the Chief Engineer, PWD (Roads & Bridges) has requested to accord in principle sanction for the works to be taken up under KIIFB funding.

(4) Government have examined the matter in detail and are pleased to accord in-principle Sanction for the development of Hill Highway, Coastal Highway, Improvements of 180 Road works and 67 Bridges & Flyovers as detailed below under Public Works Department for an amount of Rs. 17,928 Crore (Rupees Seventeen Thousand Nine Hundred and Twenty Eight Crore only) to be taken up under Kerala Infrastructure Investment Fund Board (KIIFB) funding.

(5) The Kerala Road Fund Board (KRFB) will be the Special Purpose Vehicle (SPV) for arranging the Roads & Bridges works and Roads and Bridges Development

30

[Signature]

Kerala Road Fund Board
Thiruvananthapuram

Corporation of Kerala Ltd. (RBDCK) will be the Special Purpose Vehicle for executing ROB's and Flyovers. Hill highway and Coastal Highway will also be implemented by Kerala Road Fund Board and will be executed through Roads & Bridges and National Highway wings of Kerala Public Works Department respectively.


Sl. No.	Name of Work	Estimate Amount (Rs. In Crore)
1	Hill Highway	3500
2	Coastal Highway	6500
3	180 roads (List appended as Annexure I)	5583
4	67 Bridges & Flyovers (List appended as Annexure II)	2345
	TOTAL	17928

(By Order of the Governor),
R. SREEKALADEVI
SPECIAL SECRETARY TO GOVERNMENT

To

The Chief Engineer, PWD (Roads & Bridges), Thiruvananthapuram.
The Chief Executive Officer, Kerala Road Fund Board, TC 4/1654, Mayoaram,
Belhaven Gardens, Kowdiar Post, Thiruvananthapuram - 695003.
The Managing Director, Roads & Bridges Development Corporation of Kerala,
Preethy Buildings, 2nd Floor, Palarivattom, Kochi.
The Joint Fund Manager, Kerala Infrastructure Investment Fund Board,
4th Floor, India Heights, Govt Women's College Road,
Vazhuthacaud, Thycaud P.O, Thiruvananthapuram - 695014.
The Accountant General (A&E)/(Audit), Kerala, Thiruvananthapuram.
The Finance Department.
The Public Works (D/H/PS) Department
Stock File/Office Copy/Website.

Forwarded / By Order


Section Officer.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10957


CHAIRMAN

**PROCEEDINGS OF THE CHIEF EXECUTIVE OFFICER KERALA INFRASTRUCTURE
INVESTMENT FUND BOARD, THIRUVANANTHAPURAM**

ORDER NO : PWD013-14-PA-01 Dated 30.06.2018

Sub:- KIIFB - Project : TRAN - 9: PWD013-14: Construction of Hill Highway between Kodanchery and Kakkadampoyil Ch: 83/900 to Ch: 119/250 in Kozhikode District (35.35 km)- Approval and Sanction of funding - Orders Issued.

Read:- 1. GO(Rt.) No. 942/2017/PWD dated 10.07.2017.
2. Minutes of the 32nd General Body meeting of KIIFB held on 02/06/2018.

In the Budget Speech 2017-18, Government had announced **Construction of Hill Highway between Kodanchery and Kakkadampoyil Ch: 83/900 to Ch: 119/250 in Kozhikode District (35.35 km)** as a project funded by KIIFB. Administrative Sanction for the project has been accorded entrusting the execution of the work to The Kerala Road Fund Board [KRFB], [Special Purpose Vehicle] vide Government Order read above.

The Detailed Project Report, subsequently, submitted by The Kerala Road Fund Board was verified for adherence to KIIFB stipulations and appraised for compliance, as per GO(Ms) No.315/16/Fin dated 08.08.2016 and GO(Ms) No.69/2018/Fin dated 24.02.2018, was found that the project satisfied all the technical and financial parameters insisted upon by KIIFB.

Thus 32nd General Body meeting met on 02 June 2018, after considering the proposal and appraisal report approved the project. Accordingly, sanction is accorded for funding the project **PWD013-14: Construction of Hill Highway between Kodanchery and Kakkadampoyil Ch: 83/900 to Ch: 119/250 in Kozhikode District (35.35 km)**, approved vide Government Orders read above, to be implemented by the, The Kerala Road Fund Board [KRFB],[Special Purpose Vehicle]; limiting the proposed outlay to **Rs. 144 Crore (Rupees Hundred and Fourty four Crore Only)** with the following stipulations:

1. The tripartite agreement, as per KIIFB stipulations shall be entered into, after which Technical Sanction shall be mandatorily issued by the TS authority.
2. The detailed estimate submitted shall be reviewed by the TS authority considering, the relevance of Cost Index and adherence of latest PRICE schedule. It is also suggested that the applicability and correctness of items as regards Financial Estimates is fixed as the responsibility of the TS authority.
3. The cost provisions for work alone shall be utilized for execution of work. The savings or anticipated savings from LA, QC, shifting of utilities etc., if any, shall not be re appropriated for meeting expenditure of work proper.
4. SPV shall ensure that the technical sanction shall be issued only after finalizing the Land Acquisition / free surrender / encroachment eviction process and after ensuring the availability of all necessary statutory clearances including permission from concerned forest authorities at the locations where forest land is

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD, No: 10957

CHAIRMAN

33

A. PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board

used. It shall also be ensured that TS shall be given only after the finalisation of the revised alignment by Administrative Department. All such clearances shall be communicated to KIIFB, prior to award of work to the contractor.

5. While entrusting the maintenance activities to the contractor, SPV shall be ensure that the obligation under defect liability is performed without any additional cost. Hence no maintenance expenditure is considered under the original work.

6. SPV shall ensure that the technical sanction shall be issued only after the revised hill highway alignment is sanctioned by the Administrative Department.

7. The SPV has to ensure that if any repair work / widening or improvement is executed at any of the stretches within the project earlier and is under its defect liability period, TS shall not be issued for that portion of work.

8. The compensation for affected structures shall be provided based on the actuals and the compound wall may be shifted and restored, limited to the valuation of the original structure, as per the prevailing code of practices in PWD / CPWD.

9. The work shall be executed as per the standard specified in by MoRTH and in accordance with the procedures in the Kerala PWD.

10. The revenue streams if any shall be identified and communicated as per the requirement of the tripartite agreement.

11. A report of KIIFB premised on the technical appraisal of the project is appended for reference and it shall be taken into consideration by the TS Committee while according Technical Sanction to the Project.

Dr. K. M. Abraham CFA
Chief Executive Officer

To

The Principal Secretary to Government, Public Works Department
The Chief Executive Officer/ Project Director, Kerala Road Fund Board, Thiruvananthapuram
The Principal Secretary (Finance)
The F&A Division, KIIFB
The Inspection Authority, KIIFB
The Stock file/ Office Copy

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10957

CHAIRMAN

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

Forwarded / By Order

Assistant Project Manager

D5022

TECHNICAL SANCTION FOR WORKSKERALA PUBLIC WORKS DEPARTMENT (ROADS/BRIDGES)

ORDER No.RdDnKKD/2019-2020/RD/2017/6915Dated:11-11-2019

Circle :	Roads North Circle
Division :	Roads Division Kozhikode
Sub Division :	Koduvally Roads Sub Division
Work Name :	KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHIKODE DISTRICT.
Reference Administrative Sanction :	ORDER NO.PWD013-14-PA-01 Dated:30-06-2018 1440000000
Amount for which Technical Sanction Issued :	1588800000.00
Source of Fund (Budget head of Account) :	00-00-000-00-00-00-00-KIIFB Fund
Duration of Work :	2 Years

Technical Sanction issued for the above work is deposited in S register vide register number 4683/2019-2020
-sd

PRICE

Chief Engineer

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10957

CHAIRMAN

A. A.
PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

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GOVERNMENT OF KERALA
PUBLIC WORKS DEPARTMENT

O/o Project Director ,
Kerala Road Fund Board ,
Project Management Unit Sreebala Building Tc 11/339. 5th Floor ,
Keston Road ,
Nanthancode ,
Kowdiar P.O ,
Trivandrum-695003

NO. :KKD/2017/6915

Date : 20-01-2020

NOTICE INVITING TENDER

e-Government Procurement (e-GP)

PQ TENDER NO. :PWD/PQ-2019-2020/9574/PD KRFB

The **Chief Engineer** , Public Works Department (PWD) , **O/o Project Director, Kerala Road Fund Board, Project Management Unit Sreebala Building Tc 11/339. 5th Floor, Keston Road, Nanthancode, Kowdiar P.O, Trivandrum-695003** for and on behalf of the Governor of Kerala invites online bids for the work detailed below from the Registered Bidders of Kerala PWD/Central PWD/Other Central or State Government Departments/State or Central Public Sector Undertakings etc who have successfully completed at least one similar work costing more than 40% (Forty percentage) of the estimated cost of the work within the last five years. A certificate to this effect from the agreement executing authority of the completed similar work shall invariably be submitted along with the tender documents failing which the tenders will not be accepted. The certificate should contain the details such as name of work, agreement number, date of start and completion as per agreement, completed amount of work etc.

1	Name of Work	KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHICODE DISTRICT.
2	Location of Work	Kozhikode
3	Estimated Cost of Work	Rs.1408534605.00/-
4	Brief Description of work	SCOPE OF WORK As part of this scheme, Hill Highway in the Kozhikode district is from Vilangad (North eastern end) to Kakkadampoyil (South eastern end). Among this alignment, decided to construct the highway in between Kodanchery to Kakkadampoyil as First Phase which having a length of 34.30 Km. The main destinations along this route are Kodanchery, Nilipoyil, Pulloorampara, Punnakkal,

For THE URALUNGAL CO-OPERATIVE SOCIETY LTD. No: 10957

PRICE (Printed On: 20-01-2020 , 15:43)

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Project Management Unit
Kerala Road Fund Board

Page 1 of 4

		Koodaranji, Koompara, Akampuzha, Anakkallanpara, Thazhe Kakad, Kakkadampoyil. The present road is having 3.80~5.50 m carriage width and 8.00 m ~ 9.0 m. land width. Now proposed to be widened the RoW to 12.00 m. land width. The land required for widening, has been procured as free surrender from the landlords adjoining to the road. The road is to be upgraded to two-lane traffic with 7.00 m carriage way with sufficient shoulders including sufficient drainage and cross drainage facilities, Traffic safety measures, Provisions for passing utility lines etc. Concrete drain with 60cmx 60cm average inner dimensions is proposed along throughout length of road and on both sides where it is necessary. Correction of vertical gradient by cutting and filling at several reaches is proposed to keep the road within the limit of permissible gradient and to avoid black spots on road. Cross ducts at the 500m interval has also provided to facilitate the utility services. Sufficient traffic safety measures have proposed to make the road as accidents free and to ensure safer vehicular traffic. Pavement surfacing proposed with DBM & BC. 3 Km length of road will be surfaced by using waste plastic. The estimate is prepared based on the MoRTH/MoRD specification and data, and rates as per DSR 2016 with cost index 31.06 % with reference to the DPAR of base 105%. This work was already tendered vide tender No. PWD/PQ-2019-2020/6253/PD KRFB. Since single bid is received for the work, hence the work is retendered now
5	Bidding procedure	Two Stage
6	Bid Security	Rs. 500000/-
7	Bid submission fee(tender fee)	Rs. 16540 + 2978 (GST 18%) = 19518/-
8	Period of completion	0 Days 0 Months 2 Years
9	Classification of Bidder	A Class
10	Last date and time for submission of bids	15-02-2020 at 3:00 PM
11	Pre Bid meeting Date, time and place	30-01-2020 at 3:00 PM, PMU KRFB
12	Date and time of opening of Technical Bid	18-02-2020 at 11:00 AM

Bid documents including the Bill of Quantities (BoQ) can be downloaded free of cost from the e- Government Procurement (e-GP) Website www.etenders.kerala.gov.in. All bid documents are to be submitted online only and in the designated cover(s)/ envelope(s) on the e-GP website. Tenders/ bids shall be accepted only through online mode on the e-GP website and no manual submission of the same shall be entertained. Late tenders will not be accepted. A bid submission fee shall be remitted online during the time of bid submission.

The hard copies of certificates and documents, as detailed in clause 4.4 of Part-I Instructions to the Bidders, shall be submitted subsequently after online submission of bids in a separate cover by registered post/speed post before the date and time of opening of technical bid. Price

Bid shall only be submitted through online. Details regarding remittance of Bid Submission Fee, Bid Security, Bid preparation and submission are mentioned in the bid document

The technical bids shall be opened online on **18-02-2020 at 11:00 AM** at the office of the **O/o Project Director, Kerala Road Fund Board, Project Management Unit Sreebala Building Tc 11/339, 5th Floor, Keston Road, Nanthancode, Kowdiar P.O, Trivandrum-695003** in the presence of the Bidders / their authorized representatives who wish to attend at the above address. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be done on the next working day at same time and place. The technical bids submitted by the Bidders will be evaluated as per the terms and conditions set out in the bid document for pre-qualification and the price bid of only the pre-qualified Bidders shall be opened. The date and time of opening of the Price bid will be intimated by e- mail to the Bidders who are Pre-qualified after evaluation of Technical Bids and will be published on the notice board at the office of the Tender Inviting Authority.

Online Tenders/ bids are to be accompanied with a preliminary agreement executed in Kerala stamp paper worth Rs.200/-. Tenders/ bids received online without the details mentioned in clause 4.4 of Part-I Instructions to the Bidders will not be considered and shall be summarily rejected.

More details can be had from the NIT or Office of the **Chief Engineer, Public Works Department(PWD) O/o Project Director, Kerala Road Fund Board, Project Management Unit Sreebala Building Tc 11/339, 5th Floor, Keston Road, Nanthancode, Kowdiar P.O, Trivandrum-695003** during working hours.

All other existing conditions related to bidding in force in the Kerala Public Works Department will be applicable in this tender also unless expressly defined in the bidding document. The Tender Inviting Authority/Employer shall not be responsible for any failure, malfunction or breakdown of the electronic system while downloading or uploading the documents by the Bidder during the e-procurement process. Details required for e-payment (Details of bank account having core banking facility and email address of the bi) shall be furnished along with the tender. Tenders not accompanied by these details will be rejected. All subsequent Government orders connected to tenders and any revision in the rates of taxes would also be applicable to this tender.

The **Chief Engineer, Public Works Department (PWD), O/o Project Director, Kerala Road Fund Board, Project Management Unit Sreebala Building Tc 11/339, 5th Floor, Keston Road, Nanthancode, Kowdiar P.O, Trivandrum-695003** reserves the right to accept or reject any or all tenders without assigning any reason thereof.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10957

CHAIRMAN

Chief Engineer


Public Works Department (PWD)

O/o Project Director ,
Kerala Road Fund Board ,

**Project Management Unit Sreebala Building Tc 11/339. 5th Floor ,
Keston Road ,
Nanthancode ,
Kowdiar P.O ,
Trivandrum-695003**

(For and on behalf of Governor of Kerala)

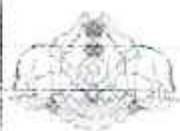
Public Works Department
PRICE


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

40

Validity unknown

Digitally signed by DARLENE C DCRUZ
Date: 2020.01.21 11:01:31 IST
Location: Kerala-K

Kerala
Tenders

eTendering System Government of Kerala

Tender Details

Date : 21-Jan-2020 12:59 PM

Print

Basic Details

Organisation Chain	Kerala Road Fund Board		
Tender Reference Number	PWD/PQ-2019-2020/9574/PD KRFB		
Tender ID	2020_KRFB_337485_1		
Tender Type	Open Tender	Form of contract	Item Rate
Tender Category	Works	No. of Covers	2
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No
Payment Mode	Online	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No

Payment Instruments

Online Bankers	S.No	Bank Name
	1	SBI MOPS

Cover Details, No. Of Covers - 2

Cover No	Cover	Document Type	Description
1	Fee/PreQual /Technical	.pdf	Attested Copies of License
		.pdf	Preliminary Agreement
		.pdf	Any other relevant document required for PQ evaluation
		.pdf	EMD Exemption Certificate if any
		.pdf	E-payment form
		.pdf	Technical documents
2	Finance	.xls	BOQ

Tender Fee Details, [Total Fee in ₹ * - 19,518]

Tender Fee in ₹	19,518		
Fee Payable To	online	Fee Payable At	online
Tender Fee Exemption Allowed	Yes		

EMD Fee Details

EMD Amount in ₹	5,00,000	EMD through BG/ST or EMD Exemption Allowed	Yes
EMD Fee Type	fixed	EMD Percentage	NA
EMD Payable To	online	EMD Payable At	online

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 18957

CHAIRMAN

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PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

Work / Item(s)					
Title	KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHIIKODE DISTRICT.				
Work Description	Construction				
Pre Qualification Details	Please refer Tender documents.				
Independent External Monitor/Remarks	NA				
Show Tender Value in Public Domain	Yes				
Tender Value in ₹	1,40,85,34,605	Product Category	Civil Works - Roads	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	120	Period Of Work(Days)	730
Location	Kozhikode	Pincode	673603	Pre Bid Meeting Place	PMU KRFB
Pre Bid Meeting Address	SreeBala Building, TC 11/339, 5th Floor, Keston Road, Nanthancode, Kowdiar P.O., Trivandrum-695003	Pre Bid Meeting Date	30-Jan-2020 03:00 PM	Bid Opening Place	PMU KRFB
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

Critical Dates

Publish Date	21-Jan-2020 01:00 PM	Bid Opening Date	18-Feb-2020 11:00 AM
Document Download / Sale Start Date	21-Jan-2020 01:00 PM	Document Download / Sale End Date	15-Feb-2020 03:00 PM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	21-Jan-2020 01:00 PM	Bid Submission End Date	15-Feb-2020 03:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size (In KB)
	1	Tendernotice_1.pdf	NIT	45.13

Work Item Documents	S.No	Document Type	Document Name	Description	Document Size (In KB)
	1	Tender Documents	SBD.pdf	Tender documents	2512.93
	2	Additional Documents	epaymentform.pdf	E-payment form	54.21
	3	BOQ	BOQ_471072.xls	BOQ	365.50

Bid Openers List

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	btsajith76@yahoo.com	Sajith B.T	SAJITH B T
2.	rabeenas31a@gmail.com	Rabeena A	RABEENA A
3.	pmukrftb@gmail.com	Darlene C Dcruz	DARLENE C DCRUZ

Tender Inviting Authority

Name	Project Director
Address	SreeBala Building, TC 11/339, 5th Floor, Keston Road, Nanthancode, Kowdiar P.O., Trivandrum-695003

For THE URALUNGAL LABOUR CO-OPERATIVE SOCIETY LTD. No: 10957

CHAIRMAN

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Project Director
Kerala Road Development Board
Thiruvananthapuram

22-06-2020 14:49

Tender Creator Details	
Created By	Darlene C Dcruz
Designation	chief engineer
Created Date	21-Jan-2020 12:01 PM

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD, No: 10957
CHAIRMAN


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

PROJECT MANAGEMENT UNIT
KERALA ROAD FUND BOARD
(SPECIAL PURPOSE VEHICLE FOR IMPLEMENTING
KIIIFB FUNDED PROJECTS)

Phone : 0471-2311313
e-mail : pmukrfb@gmail.com

No. 68/PWD013-14/PD/PMU-KRFB/HH/KKD/2017

Date: 26/05/2020

Letter of Acceptance

To

M/s. Uralungal Labour Contract Co-operative Society Ltd.,
Madappally College P.O.,
Vadakara (Via), Kozhikkode

Sir,

This is to notify you that your Bid for the tender for execution of "KIIIFB 2017-18 Construction of Hill Highway from Kodanchery to Kakkadampoyil 34.30 Km.) In Kozhikkode District.(Re-tender) " (Bid No- PWD/PQ-2019-2020/9574/PD KRFB) for the Contract Price of Rs. 154,93,87,879.28/- (Rupees One Fifty Four Crore Ninety Three Lakhs Eighty Seven Thousand Eight Hundred and Seventy Nine and Paise Twenty Eight only) is hereby accepted.

You are hereby requested to furnish the additional performance guarantee for an amount equivalent to Rs. 3,63,15,200.00(Rupees Three Crores Sixty Three Lakhs Fifteen Thousand Two Hundred only) valid up to 28 days from the date of completion of work (*Not less than 50% of the Additional Performance Guarantee shall be in the form of Treasury Fixed Deposit*) as per clause 7 of ITB. You have to sign the agreement within 28 days from the date of registration of this letter of acceptance and falling which action as per clause 7.12 of ITB will be taken

Any failure to execute the agreement within 28 days from the date of registration of this communication action may be taken for cancellation of the award and forfeiture of the bid security. Period of bank guarantee shall be extended in the event of change of actual date of completion. The following conditions are also applicable.

1. Failure to execute the agreement as directed will result in forfeiture of his earnest money deposit and the cancellation of the proposed contract.
2. It must be understood that on no account the rate once fixed be increased.
3. The work shall be commenced within 10days from the date of issue of the notice to proceed with the work.
4. The work should be completed within 24months from a date which is 10days from the date of letter to proceed with the work or date of actual commencement whichever is earlier.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10952

CHAIRMAN

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A. K. S.
PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board

Passport Size Photo

SOCIETY NO.

10957

Signature of the
Registering Officer

Designation

URALUNAL
LABOUR CONT. CO-OP.
SOCIETY LTD
PO Madampally College
Kadappu
is/are registered as a A. class

Category contractor(s) the Register No.
being 72A of 1969-1970
Renewed up to 31-3-2013

SUPERINTENDING ENGINEER
P.W.D. ROADS & BRIDGES
Name, Signature and Designation
of the Registering Officer

Date

NOTE:

1. The Registration card is to be renewed once in every two financial years.

The next renewal application are to be submitted in the prescribed form on or before the 1st January of together with an upto-date income-tax clearance certificate and a fee of Rs. (non refundable).

Renewal applications will be however be considered for a further period of one month, i.e. upto 31st January provided they are accompanied by a fine of Rs.

While tendering for the work, number of Registration Card shall invariably be referred to an produced when called for.

SUPERINTENDING ENGINEER P.W.D.
ROADS & BRIDGES, NORTH CIRCLE, KOZHIKODE

Renewed upto
31-3-2020
Renewed upto
31-3-2020
Renewed upto
31-3-2020

Signature
Superintending Engineer
P.W.D. Roads & Bridges
North Circle, Kozhikode-01

Renewed upto
31-03-2023
Renewed upto
31-03-2023

Signature

For THE URALUNAL LABOUR CONTRACT-
HEERAKOONRATIVE SOCIETY LTD, No. 10957

CHAIRMAN

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Signature

DIRECTOR
Management Unit
Kerala Road Fund Board

U.P. PLANNING
 LABOUR CONTRACT CO-OP.
 SOCIETY LTD.
 P. Madhupally College
 Madhupally
 is a registered firm. A class
 Category: Contractual the Project No.
 72A 2, 1969-1970
 Renewed up to 31.3.2013
 Signature of the
 Designating Officer
 Designation Date: 10/12/10

1/5831/16 Renewed upto
 31.3.2020 Dated 30.12.2016
 Signature
 Superintending Engineer
 P.W.D. Roads & Bridges
 P.O. Box, Kozhikode-07
 Renewed upto
 Signature
 Renewed upto
 NOTE:
 1. The Registration card is to be renewed once in every two financial year.
 2. The next renewal application are to be submitted in the prescribed form on or before the 31st January of together with an up-to-date income-tax clearance certificate and a fee of Rs. (non refundable).
 3. Renewal applications will be however be considered for a further period of one month, i.e. upto 31st January provided they are accompanied by a fine of Rs.
 4. While tendering for the work, number of Registration Card shall invariably be referred to an produced when called for.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 18957

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 18957

CHAIRMAN

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PROJECT DIRECTOR
 Project Management Unit
 Kerala Road Fund Board
 Thiruvananthapuram

Part IV- CONTRACT DATA

Sl.No.	Item	Clause reference	Data
1	Identification No. of the Contract	NIT	PWD/PQ-2019-2020/9574/PD KRFB
2	Name of Work	NIT	KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPYOIL (34.30 Km.) IN KOZHIIKODE DISTRICT.
3	Employer	GCC-1.1	Government of Kerala- Public Works Department
4	Tender Inviting Authority	GCC- 1.2	Chief Engineer, Project Director KRFB
5	Name of PWD Division		Roads Division Kozhikode
6	Name of PWD Sub-Division and Section		Koduvally Roads Sub Division & Thiruvambadi Roads Section
7	Estimated Probable Amount of contract		Rs.1408534605.00/-
8	Source of Fund	ITB-1.2	(00-00-000-00-00-00-00-KIIFB Fund) , KIIFB
9	Location of Work	NIT	Kozhikode
10	Type of Work(brief description about the nature of work)	NIT	<p>SCOPE OF WORK</p> <p>As part of this scheme, Hill Highway in the Kozhikode district is from Vilangad (North eastern end) to Kakkadampoyil (South eastern end). Among this alignment, decided to construct the highway in between Kodanchery to Kakkadampoyil as First Phase which having a length of 34.30 Km. The main destinations along this route are Kodanchery, Nilipoyil, Pullurampattam, Runnakkal, Koodaranji, Kumpara, Akampuzha, Anakkallanpara, Thiruvambadi, Kakkadampoyil. The present road is having 5.80-5.50 m carriage width and 8.00 m ~ 9.0 m. land width. Now proposed to be widened the RoW to 12.00 m. land width. The land required for widening, has been procured as free surrender from the landlords adjoining to the road. The road is to be upgraded to two-lane traffic with 7.00 m carriage way with sufficient shoulders including sufficient drainage and cross drainage facilities, Traffic safety measures, Provisions for passing utility lines etc. Concrete drain with 60cmx 60cm average inner dimensions is proposed along throughout length of road and on both sides where it is necessary. Correction of vertical gradient by cutting and filling at several reaches is proposed to keep the road within the limit of permissible gradient and to avoid black spots on road. Cross ducts at the 500m interval has also provided to facilitate the utility services. Sufficient traffic safety measures have proposed to make the road as accidents free and to ensure safer vehicular traffic. Pavement surfacing proposed with DBM & BC. 3 Km length of road will be</p>

Public Works Department
PRICE

For THE MALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 18952

CHAIRMAN

			surfaced by using waste plastic. The estimate is prepared based on the MoRTH/MoRD specification and data, and rates as per DSR 2016 with cost index 31.06 % with reference to the DPAR of base 105%. This work was already tendered vide tender No. PWD/PQ-2019-2020/6253/PD KRFB. Since single bid is received for the work, hence the work is retendered now						
11	Time of completion of work(in months)	GCC-1.18, 14	0 Days 0 Months 2 Years (24 month)						
12	Work Milestones	GCC-15, 43, 76	By the end of 6th month 25% work completed. By the end of 12th month 50% work completed. By the end of 18th month 75% work completed. By the end of 24th month 100% work completed						
13	Class/Registration of Bidder	NIT, ITB-13.1,	A Class						
14	Pre-bid meeting date , venue and time	ITB-2.2.3	30-01-2020 at 3:00 PM, PMU KRFB						
15	Bid submission start date	NIT	< SBD Aproved date >						
16	Last date and time for bid submission	NIT	15-02-2020 at 3:00 PM						
17	Bid submission fee	ITB-3.7	Rs. 16540 + 2978 (GST 18%) = 19518/-						
18	Bid Security	ITB-3.6	Rs.500000/-						
19	Performance Guarantee	ITB-7	5% of Contract amount						
20	Performance Security Deposit	ITB-7	at 2.5% from running bills						
21	Insurance requirements as per GCC -1	GCC -1	(a). The Contractor shall obtain insurance cover for a minimum of Rs.* per occurrence. (b). The insurance cover shall be taken initially for a minimum of four occurrences, which shall be revised whenever an event involving Contractor's liability and Plant and Materials for payment arises, and additional insurances shall be taken so as to cover minimum four occurrences always. (c). 0.2% of the Contract Amount shall be deducted in the event of failure to obtain the insurance by the contractor within 15 days of Start Date [* The value shall be generally 0.5% of the Contract Value subject to a minimum of Rs. 2.00 lakh and maximum of Rs. 5.00 lakh]						
22	First Tier Quality control test/ Minimum tests to be conducted	GCC 35.5	All mandatory quality tests as per PWD quality manual and KIIFB Guide Lines.						
23	Defects Liability Period	GCC-46	0 Days 0 Months 3 Years						
24	Price adjustment is applicable/not	GCC-40	Yes						
	Price adjustment is applicable/not, if applicable	GCC-40	<table><tr><th>Sl.No</th><th>Component</th><th>Percentage *</th></tr><tr><td>1</td><td>Labour - PMU</td><td>15.0 %</td></tr></table>	Sl.No	Component	Percentage *	1	Labour - PMU	15.0 %
Sl.No	Component	Percentage *							
1	Labour - PMU	15.0 %							

For THE KERALA LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10957

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	give the percentages for calculation		2	Cement - Pc	10.0 %	
			3	Bitumen- Pb	10.0 %	
			4	Steel - Ps	2.0 %	
			5	Fuel and Lubricants - Pf	0.0 %	
			6	Plant & Machinery Spares - PP	10.0 %	
			7	Other materials - Pm	53.0 %	
25	Liquidated damages	GCC-15	@ 1(one) percent of the contract price per week of delay or part thereof			
26	Work items for which Guaranties required	GCC-45	Sl. No	Item Description	Period of Guaranty	
27	Limit of subcontracting	SCC-12	25% of Contract Value			
28	Maximum extent of change in quantity	GCC-10	25% of BoQ quantity			
29	Contractors Equipments and Tools and Plants	SCC-17	Sl. No	Type of equipment	Min. Capacity Req.	Min. Number Req.
			1	Tipper	10 Ton	20
			2	Motor Grader	600 m3/day	4
			3	Dosser	200 m3/day	2
			4	Front end - loader 1cum bucket capacity @ 45cum /hour	1m3	4
			5	Self propelled 80-100 KN tandem roller	10 Ton	4
			6	Vibratory roller 80-100 KN	10 Ton	3
			7	Hotmix Plant - 100 TPH capacity	80-100 TPH	2
			8	Batch Mix HMP100-120 TPH	100-120 TPH	1
			9	Paver Finisher	75-160 TPH	2
			10	Water tanker 6 KL capacity (Truck mounted)	6 KL	5
			11	Bitumen emulsion pressure distributor	10000 Ltr	2
			12	Tandem Roller	10 Ton	1
			13	Concrete Mixers with integral weigh Batching facility	Integral weigh batch	2
			14	Concrete Batching and mixing plant	15 m3/hour	1
			15	Concrete batching and mixing plant with automatic control	30 cum/hour	1

Public Works Department

PRICE

For THE URALINDIA LABOUR CONTRACT CO-OPERATIVE SOCIETY LTD. No. 10952

Public Works Department PRICE

For THE URALINDAL LABOUR CONTRACT CO-OPERATIVE SOCIETY LTD. No. 10957

CHAIRMAN

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DIRECTOR

Project Management Unit
S. S. Road Fund Board
Chennai-600 002

DRAWINGS (Separately attached)



കേരളം KERALA

CF 811153

PRELIMINARY AGREEMENT

Preliminary Agreement entered in to on this 15th of February Two Thousand Twenty between Sri..... Chief Engineer ,O/o Project Director,Kerala Road Fund Board,Trivandram for and on behalf of Governor of Kerala (Hereinafter called "The Government") of the one part and M/s Uralungal Labour Contract Co-operative Society Ltd, Madappally College(PO),Vatakara(Via), Kozhikode (hereinafter called "the Contractor") of the other part for the execution of the work "KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHICODE DISTRICT"

[Signature]

PROJECT DIRECTOR
Project Management Unit

20657

7.2.2020

chairman ULCS
Madappally
LOO

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കേരളം KERALA

CF 811154

WHEREAS the Government invited tenders for the work of "KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHIKODE DISTRICT" by notification number.KKD/2017/6915 dated 20/01/2020 in the website www.etenders.kerala.gov.in & daily.

We undersigned hereby offer to construct the proposed work in strict accordance with the contract/bid document for the consideration to be calculated in terms of the priced schedule of quantities.

A. A. [Signature]

PROJECT DIRECTOR
Project Management Unit
Kerala Road Development Board
Thiruvananthapuram

[Signature]
CHAIRMAN

20038 7.2.2020

Chairman, VCCS Hd
Madappally
100

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We undertake to complete the whole of the works as per the attached schedule from the date of issue of intimation by you that our tender has been accepted and upon being permitted to enter site. We further undertake that on failure, subject to the conditions of the contract relating to extension of time, We shall pay agreed 'Liquidated Damages' for the period during which the work shall remain incomplete.

We hereby deposit with you as Earnest money Rs. -NA- [carrying no interest] by means of online payment in the e-GP web site of Kerala in favour of **Chief Engineer ,O/o Project Director,Kerala Road Fund Board,Trivandram** and We agree that this sum shall be forfeited in the event of the Employer accepting our tender and We fail to take up the contract when called upon to do so as per clause 3.6.6 and 7 of ITB of the bid document.

We further agree for the deduction of 2.5% from the 'Interim Payment/RA Bill' and up to a maximum of 2.5% of the contract value towards the 'Performance Security Deposit', which will be returned as per the relevant clauses in the agreement.

We will furnish the Performance Guarantee Bond as per the approved format, if our bid is accepted. Bid Security deposited shall be treated as security for the proper fulfilment of the same and shall execute an agreement for the work in the prescribed form. If I/We fails to do this or maintain a specified rate of progress (as specified in the Milestone details of contract data in the bid document), the performance guarantee(both treasury fixed deposit and irrevocable bank Guarantee) and Performance Security Deposit if any deducted from the RA Bills shall be forfeited to Government and fresh tenders shall be called for or the matter


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

For THE UDALINGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10057

CHAIRMAN



otherwise disposed off. If as a result of such measures due to the default of the Bidder to pay the requisite deposit, sign contract or take possession of the work any loss to Government due to the same will be recovered from me/us as arrears of revenue, but should it be a saving to Government. I/We shall have no claim whatever to the difference. Recoveries on this or any other account will be made from the sum that may be due to us on this or any or other subsisting contracts or under the Revenue Recovery act or otherwise the Government may decide.

We further agrees that, in the case of becoming the lowest bidder in this tender and in the event of failure on part of me/us to produce any of the original documents, or submit the performance guarantee, or enter into agreement with the first part within the specified time limit, the first part may take appropriate action as provided in the bid document. Recoveries on this or any other account will be made from the sum that may be due to us on this or any or other subsisting contracts or under the Revenue Recovery act or otherwise the Government may decide.

NOW THEREFORE IN THE PRESENCE OF WITNESSES and it is mutually agreed as follows.

a.6.1) The terms and conditions for the said contract having been stipulated in the said tender document and forms to which the I/We have agreed and a copy of which is here to be appended which forms the part of this agreement, it is agreed that the terms and conditions stipulated therein shall bind the parties to this agreement except to the extend to which they are abrogated or altered by express terms and conditions herein agreed to and in which respect the express provisions herein shall supersede those of said tender form.


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

For THE UDALUNGA LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10157

CHAIRMAN



a.6.2) The I/We hereby agreed and undertake to perform and fulfill all the operations and obligations connected with the execution of the said contract work "KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHIKODE DISTRICT"

a.6.3) If the Bidder does not come forward and to execute the original agreement after the aid work is awarded and selection notice issued in his favour or commits breach of any of the conditions of the contract as stipulated in clause of the notice inviting tenders as quoted above, within the period stipulated then the Government may rearrange the work other wise or get it done departmentally at the risk and the cost of the Bidder and the loss so sustained by the Government can be realized from the Bidder under the Revenue recovery Act as if arrears of land revenue as assessed quantified and fixed by an adjudicating authority consisting of the Secretary Public works, Chief Engineer (Admn) or any other officer or officers authorized by Government in this behalf, taking into consideration the prevailing P.W.D rates and after giving due notice to the Bidder. The decision taken by such authority officer or officers shall be final and conclusive and shall be binding on the Bidder.

a.6.4) The Bidder further agrees that any amount found due to the Government under or by virtue of this agreement shall be recoverable from the Bidder from his EMD and his properties movable and immovable as arrears of Land Revenue under the provision of the Revenue Recovery Act for the time being in force or in any other manner as the Government may deem fit in this regard.


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

For THE URALUMBAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10957

CHAIRMAN



a.6.5) The Bidder further assures that it is clearly understood that the settlement of claims either by part bills or by final bills will be made only according to the availability of budget provision and allotment of funds made with the Divisional officer in charge of the work under the respective heads of account in which the work is sanctioned and arranged and also subject to the seniority of such bills. No claims for interest or for damages whatsoever shall be made for the related settlement of claims of bills.

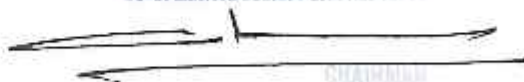
IN WITNESS WHERE OF Shri. **Chief Engineer ,O/o Project Director,Kerala Road Fund Board,Trivandram** For and on behalf of the Governor of Kerala **M/s Uralungal Labour Contract Co-operative Society Ltd, Madappally College (PO), Vatakara (Via),Kozhikode** the Contractor have set their hands on the day and year first above written.

Signed by Shri..... **Chief Engineer ,O/o Project Director,Kerala Road Fund Board,Trivandram** Officer/Officers P.W.D in the presence of

Witness:-

- 1.
- 2.


PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram
For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10857


CHAIRMAN

Signed and delivered by **M/s Uralungal Labour Contract Co-operative Society Ltd, Madappally College (PO), Vatakara (Via), Kozhikode (Contractor)** in the presence of

Witness:-

- 1.
- 2.



Part II- GENERAL CONDITIONS OF CONTRACT

1. Definitions

- 1.1. Employer means Government of Kerala on whose behalf the Work is taken up for execution. Employer will carry out its functions and obligations through officers who have been delegated powers.
- 1.2. Accepting Authority/Agreement Authority means the officer who has invited and received bids for the Work and has executed agreement for execution on behalf of the Employer.
- 1.3. Technical Sanction Authority means the competent Departmental Officer who has issued the technical sanction for the Work.
- 1.4. Engineer means all Engineers in charge of the Work from Chief Engineer to Assistant Engineer.
- 1.5. Field Engineer means Engineers at Section and Sub Division level who are directly in charge of execution of the Work.
- 1.6. Engineer-in-Charge means the Executive Engineer, PWD, who is responsible for the execution of the Work.
- 1.7. Engineer's Representative means Overseer or other subordinate staff posted to assist the Engineer, supervise execution and to maintain documents.
- 1.8. Contract is the agreement between the Agreement Authority and the selected Bidder to execute, complete and maintain the Work.
- 1.9. Contractor means person or persons or firms who have entered into contract for the execution of the work subject to the eligibility conditions of the NIT.
- 1.10. Contract Price is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provision of the contract.
- 1.11. Contract Data defines the documents and other information which comprise the contract.
- 1.12. Bid or Tender means the Contractor's priced offer to the Employer for the execution and completion of the Work and the remedying of any defects therein in accordance with the provisions of Contract.
- 1.13. Bill of Quantities means the priced and completed Bill of Quantities forming part of the bid.
- 1.14. Specification means the instructions, provisions, conditions and detailed requirements contained in the tender documents which form part of the contract and any modification or addition made or approved by the Accepting Authority.
- 1.15. Drawings means all drawings, calculations and technical information related to the Work provided by the Engineer from time to time to the Contractor under the Contract.
- 1.16. Letter of Acceptance or selection notice means intimation issued by the Accepting Authority as formal acceptance of Bid by the Employer.

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- 1.17. Date of commencement means the date of handing over the site to the Contractor.
- 1.18. Time of completion means the period allowed for completing all works related to the Work including carrying out and passing the required quality control tests prescribed by the Quality Manual published by the Department.
- 1.19. Date of completion shall be the date of issue of virtual completion certificate. The virtual completion certificate shall be issued by the Engineer-in charge within 15 days of the final measurement and shall specify the work has been completed satisfactorily by the contractor and taken over by the Department. In case of defects liability period the works shall be finally taken over after completion of defects liability period.
- 1.20. Quality control tests means all relevant tests prescribed by the PWD Quality Control Manual applicable to the Work which are to be made and passed before each part bill is presented for payment.
- 1.21. A Defect is any part of the work not completed in accordance with the contract.
- 1.22. Defects Liability Period is the period named in the Contract Data and calculated from the date of completion.
- 1.23. Plant is any integral part of the works which is to have a mechanical, electrical, electronic or biological function.
- 1.24. Equipment means contractor's machinery and vehicles brought temporarily to site for execution of the Work.
- 1.25. Site means the places provided by the Employer where the Work is to be executed. It may also include any other place or places as forming part of the site, mentioned in the Contract.
- 1.26. Materials means all supplies, including consumables used by the contractor for incorporation in the works.
- 1.27. Works are what the Contract requires the contractor to construct, install and run over to the Employer as defined in Contract Data.
- 1.28. Days are calendar days, months calendar months.
- 1.29. "Codes" shall mean the following, including the latest amendments, and/or replacements, if any:
- a. Bureau of Indian Standards/Indian Roads Congress relevant to the works under the Contract and their specifications. If Indian Standards are not available British Standards or ASHTO Standards are to be followed.
 - b. Other Internationally approved Standards and/or rules and regulations touching the subject matter of the Contract.
 - c. Any other laws, rules, regulations and Acts applicable in India with respect to labour, safety, compensation, insurance etc.
- 1.30. Words importing singular only shall also include the plural and vice-versa where the context so requires.
- 1.31. Words importing "Person" shall include firms, companies, corporations, and associations or bodies of individuals, whether incorporated or not.

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1.32. Terms and expressions, not defined herein, shall have the same meaning as are assigned to them in the Indian Contract Act, and failing that in the General Clauses Act.

1.33. "Government Approvals" shall mean all permits, licenses, authorisations, consents, clearances, decrees, waivers, privileges, approvals from and filing with government instrumentalities necessary for the development, construction and operation of the Work.

1.34. Measurement Books: The "measurement books" shall be defined as the books with serially numbered and maintained during the currency of the Work to record all measurements qualifying for payment. The measurement book shall be in the form given in Appendix 2100E1 of PWD Manual and is the original record of actual measurements. Except for quantities of work paid on level basis, all measurements shall be recorded in the measurement book. For measurements taken on level basis, the levels shall be entered in properly numbered field books as in Appendix-2100E2 of PWD Manual. All measurement books and Field Books shall be certified by the Engineer-in-Charge before entering measurements.

2. Scope, extent, intent etc

2.1. Scope: The general character and the scope of the Work shall be as illustrated and defined in the Drawings, Specifications, Schedule of Rates and other Contract Documents.

2.2. Extent: The Contractor shall carry out and complete the Work under the Contract in every respect, and his work shall include the supply of all labour, equipment, materials, plant and machinery, tools, transportation, form work, scaffolding and everything else necessary for the proper execution and completion of the Work in accordance with the Contract Documents and to the satisfaction of the Engineer-in charge. The Contractor shall be fully responsible and liable for everything and all matters in connection with or arising out of or being a result or consequence of his carrying out or omitting to carry out any part of the Work. Where any parts of the Work may be executed by Sub-Contractors, such responsibility and liability of the Contractor shall cover and extend to the work of all such Sub-Contractors.

2.3. Intent: The Contract Documents are complementary and what is called for by any one shall be binding as if called for by all. Wherever it is mentioned in the Contract Documents that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at his own cost. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognised standards as are applicable.

3. SITE

3.1. Contractor to satisfy himself about site conditions: The Contractor ensures that before submitting bids for the Work the Contractor has visited the Site and satisfied himself about the Site conditions for construction and for logistics and smooth flow of workmen and materials as well as permission from Authorities for this purpose. The Contractor has examined the Site and taken note of character of the soil and of the excavations, the correct dimensions of the Work, and facilities for obtaining any special articles called for in the Contract Documents. The Contractor has also made its own assessment and obtained all information on the Site constraints and on all matters that will affect the execution, continuation and progress, and completion of the Works. Any extra claims or

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- extension of time made in consequence of any misunderstanding, incorrect information on any of these points or on the grounds of insufficient description or information shall not be entertained or allowed at any stage.
- 3.2. It will be the responsibility of the Contractor to obtain necessary land for stacking the materials and establishing plants and equipments for carrying out the work, if the specified site of work is of less extents.
- 3.3. Land required for the work may not be available in full. Further land will be handed over as and when it is received from the Land Acquisition Authority. The Contractor shall not be eligible for any extra or enhance claims or for compensation due to the non-availability of entire land. He shall also not be eligible for any claims or compensative for the non- completion of the work within the agreed time and for continuing the work in the agreed extended period of completion due to the above reasons.
- 3.4. In the case of any delay in shifting the utility services like Telephone posts, Electric posts, Electric over head line and cables, water lines etc. by the utility Department, the Employer shall not in any way be liable to pay damages on account of this delay, instead a proportionate extension of time for completion of work will be granted in deserving cases on application by the Contractor.
- 3.5. Access to site by the contractor: The access to the Site will be shown immediately on award of the Contract to the Contractor and the Site shall be shared with other Contractors and Sub-Contractors as applicable. The Contractor shall upon being given such access commence the Work and diligently proceed with the execution of the Work in accordance with the Contract Documents. Access to the Site by the Contractor shall be merely a licence for carrying out the construction of the Work under the Contract, and the Contractor shall not by his being allowed such entry on the Site, acquire any right, lien or interest either in the Work carried out by him under the Contract or anything appurtenant or attached thereto or to any part of the Site, and his claim will only be in the nature of money found due and payable to him in accordance with the certificates issued by the Engineer-in-charge under the provisions contained herein. The Work shall be free from all liens, charges or claims of whatsoever nature from any party other than the Engineer-in-charge. The Engineer-in-charge shall have a lien over all work performed by the Contractor, Sub-Contractors and Vendors and also for the materials and equipment brought on Site by them.
- 3.6. Treasures, Antiquities found are property of Employer: All fossils, antiquities and other objects of interest or value, which may be found on the Site at the commencement or during the progress of the Work, shall be the property of the Employer. The Contractor shall carefully take out and preserve all such fossils, antiquities and objects and shall immediately deliver the same in their discovered state into the possession of the Employer.
- 3.7. The Department does not undertake to construct or make available any approach road or other means of approach to the proposed work site and the Contractor shall get acquainted with the available means of approaches to the proposed site and quote for the various items. The Department shall not be liable for any claim raised later on the plea of non-availability or non-access to the site.

4. Nature of contract

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- 4.1. The Contract shall be an item rate Contract wherein the item rates are for the finished work as per the Contract Documents. The estimated cost is tentative based on the estimated quantities and is liable to change during execution as per the actual quantities executed and approved by the Engineer-in charge. The Contractor understands and agrees that the amount payable is assessed on a re-measurable basis in accordance with the BoQ rates. The Contract Price shall include payment for the supply of all labour (including payment to his Sub-Contractors), equipment, materials, plant and machinery, tools, transportation, formwork, scaffolding, works under this contract and all applicable taxes including the Work Contract Tax (WCT), Value added tax(VAT), duties, octroi, levies, royalties, fees, insurance premiums, contributions towards employees benefits including Employee State Insurance and Provident Funds, arrangement of power and water and all services and activities constituting the Scope of Work defined in the General Conditions of Contract. The Contract Price shall also include the Contractor's establishment, infrastructure, overheads & profits, establishing site laboratories, first tier quality control tests all rectifications including that necessitated during Technical Audit and all other charges, and shall generally be inclusive of every cost and expense required by the Contract to be borne by the Contractor and necessary for the proper execution and completion of the Work under the Contract, in conformity with the Contract Documents and according to the best engineering and construction practices and to the satisfaction of the Engineer-in-charge. Service tax, wherever legally applicable, shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Employer on production of receipts/vouchers and after satisfying that it has been actually and genuinely paid by the contractor.
- 4.2. No adjustment of the prices shall be allowed during the period of the contract for works which have a period of completion up to 18(eighteen) months for any reasons whatsoever and the prices quoted by the Contractor shall be deemed to be fixed for the entire contract period. For works which have a original period of completion up to 18(eighteen) months, and if the time of completion is extended beyond 18(eighteen) months in accordance with clause 19 of GCC, there shall not be any escalation in the price.
- 4.3. For works which have a time of completion more than 18(eighteen) months, price adjustment will be permitted subjected to the provisions in clause 40 of GCC.
5. Notices, Fees, Byelaws, Regulations, etc
- 5.1. The Contractor shall comply with all applicable laws and Government Acts including the Byelaws or regulations of Central and / or Local Authorities relating to the Work in so far as labour, construction, fabrication and installation activities are concerned, and he shall obtain from the Central and / or Local Authorities all permissions and approvals required for the plying of trucks, construction machinery etc., and also for construction of temporary offices, labour camps, batching plant, hot mix plant, base camp, stores and other temporary structures in connection with the Work, and the Contractor shall give all notices and pay all fees and charges that are and that can be demanded by law there under. In the Contract Price for the Work, the Contractor shall allow for such compliance and work, and for the giving of all such notices, and shall include the payment of all such fees and charges.

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5.2. The contractor is bound to follow relevant Kerala State Government orders, circulars, Kerala PWD Manuals etc prevailing at the time of contract connected to the execution of the work under the contract even though specific reference to these are not provided elsewhere in the contract conditions.

6. Licenses and permits

6.1. The Contractor shall directly obtain all licences and permits for the materials under Government control, and those required to be obtained by the Contractor for the execution of the Work. The Contract Price shall include all transportation charges and the other expenses that may be incurred in this connection.

7. Contract documents

7.1. The following documents shall constitute the Contract documents:

- a. Articles of Agreement,
- b. Notice Inviting Tender
- c. Letter of Acceptance of Tender indicating deviations, if any, from the conditions of Contract incorporated in the Tender document issued to the Bidder and/or the Bid submitted by the Bidder,
- d. Conditions of Contract, including general terms and conditions, instructions to Bidders, additional terms and conditions, technical terms and conditions, erection terms and conditions, special conditions, if any etc. forming part of the Agreement,
- e. Specifications, where it is part of Tender Documents,
- f. Scope of works/Bills of quantities/schedule of works/quantities and
- g. Contract Drawings and finalized work programme.

7.2. After acceptance of Tender the Contractor shall be deemed to have carefully examined all Contract Documents to his satisfaction. If he shall have any doubt as to the meaning of any portion of the Contract Documents, he shall before signing the Contract, set forth the particulars thereof, and submit them to the Agreement Authority in writing in order that such doubt may be removed. The Agreement Authority will provide such clarifications as may be necessary in writing to the Contractor. Any information otherwise obtained from the Employer or the Engineer shall not in any way relieve the Contractor of his responsibility to fulfil his obligations under the Contract.

7.3. The Contractor shall enter into a Contract Agreement with the Agreement Authority within 28 (twenty-eight) working days from the date of 'Acceptance of Tender' or within such extended time as may be granted by the Employer. The date of despatch of Letter of Acceptance by registered post shall be the date of Acceptance of Tender. The performance Guarantee for the proper fulfilment of the Contract shall be furnished by the contractor in the prescribed form within 28 (twenty-eight) days of 'Acceptance of Tender'. The performance Guarantee shall be as per terms prescribed in the clause 7 of "Instructions to Bidders" of this Tender.

7.4. The agreement, unless otherwise agreed to, shall be signed within 28(twenty-eight) working days from the date of Acceptance of Tender, at the office of the Agreement Authority on a date and time to be mutually agreed. The Contractor shall provide required details for signing of the contract like performance guarantee in copies as required, appropriate power of attorney and other requisite materials. In case it is agreed mutually that the contract is to be signed beyond the stipulated time as specified in

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clause 6.6.3 of Instruction to the Bidders, the bid security submitted with the tender will have to be extended accordingly.

7.5. After the signing of the agreement with the Agreement Authority and the Contractor, two certified copies of the agreement are to be made. Original shall be kept with the Agreement authority and the Contractor shall be provided with one certified copy and the other certified copy shall be kept with the Engineer-in Charge. None of these documents shall be used for any purpose other than this Contract and the Contractor shall ensure that all persons employed for this Contract strictly adhere to this.

7.6. The laws applicable to this Contract shall be the laws in force in India.

8. Assignment and subletting of contract

8.1. The Contractor shall not assign this Contract. The Contractor shall not sub-let the Contract or any part thereof other than for supply of raw materials, for minor works or any special type of works for which makes are identified in the Contract or as approved by the Engineer-in charge. Suppliers of the equipment not identified in the Contract or any change in the identified supplier shall be subject to approval by the Engineer. The experience list of such equipment vendors under consideration by the Contractor for this Contract shall be furnished to the Engineer for approval prior to procurement of all such items/equipments. Such assignment /sub-letting shall not relieve the Contractor from any obligation, duty or responsibility under the Contract. Any assignment as above without prior written approval of Engineer-in charge shall be void.

9. Patent rights and royalties

9.1. Royalties and fees for patent covering materials, articles, apparatus, devices, equipment or processes used in the works shall be deemed to have been included in the Contract Price. The Contractor shall satisfy all demands that may be made at any time for such royalties or fees and he alone shall be liable for any damages or claims for patent infringements and shall keep the Employer indemnified in that regard. The Contractor shall, at his own cost and expense, defend all suits or proceedings that may be instituted for alleged infringement of any patent involved in the works, and, in case of an award of damages, the Contractor shall pay for such award. In the event of any suit or other proceedings instituted against the Employer, the same shall be defended at the cost and expense of the Contractor who shall also satisfy/comply any decree, order or award made against the Employer. But it shall be understood that no such machine, plant, work, material or thing for any purpose or any manner other than that for which they have been furnished and installed by the Contractor and specified under these specifications. Final payment to the Contractor by the Employer will not be made while any such suit or claim remains unsettled. In the event any apparatus or equipment, or any matter thereof furnished by the Contractor, is in such suit or proceedings held to constitute infringement, and its use is enjoined, the Contractor shall, at his option and at his own expense, either procure for the Employer, the right to continue use of said apparatus, equipment or part thereof, replace it with non-infringing apparatus or equipment or modify it, so it becomes non-infringing.

10. Variation in quantity

10.1. The Employer/Engineer-in charge reserves the right to vary the quantities of items or groups of items to be ordered as specified in the Bill of quantities, as may be

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necessary, during the execution of the Contract. The Contractor is bound to execute such varied quantities of work at his quoted price up to an extent of 25% in excess of the agreed quantity or quantities. In case of variation over 25% in excess of the agreed quantity, the department reserves the right to arrange such works through a separate contract. Negotiation shall be made with original contractor to revise the rate for the additional quantity in excess of 25% of the agreed quantity and in no case the revised rate shall be more than the market rate at the time of initiating the proposal for revision of rate as recommended by the Engineer-in charge. No increase shall be permitted within the original contract period and the rate in excess of market rate shall not be given under any circumstances. Upon rate revision shall be considered only in exceptional cases which shall be approved by the Employer for the enhanced rates based on the recommendation of the Engineer.

- 10.2. The Contractor is bound to carry out sinking of wells increase up to 10 meter (ten meter) extra depth beyond the estimated design depth and rate for which shall be paid as per schedule of rate and extra item conditions in case such items are included in the contract. In case of pile foundation, precast or cast in site, the same conditions as above shall apply.

11. Deductions from contract price

- 11.1. All costs, damages or expenses, which the Employer may have paid, for which under the Contract the Contractor is liable, will be claimed by the Employer. The Engineer-in charge shall deduct the amount, from any moneys due or becoming due by him to the Contractor under the Contract or may be recovered by actions of law or otherwise, if the Contractor fails to satisfy the Employer of such claims.

12. Insurance

Public Works Department

- 12.1. The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance covers in two parts, i.e. (a) from the start date to the completion date, and (b) for the Defect Liability period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- a. loss of or damage to the Works, Plants and Materials;
- b. loss of or damage to Equipment;
- c. loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract;
- d. Workman compensation policy to cover personal injury or death.

- 12.2. Policies and Certificates for insurance shall be delivered by the Contractor to the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

- 12.3. If the Contractor does not provide any of the policies and certificates required, the Engineer-in charge may effect the insurance which the Contractor should have provided and recover any such premiums which the Employer has paid from the payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 12.4. Alterations to the terms of insurance shall not be made without the approval of the Employer.

- 12.5. Both parties shall comply with any conditions of the insurance policies.

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- 12.6. Premium for all insurance policies shall be paid and borne by the Contractor and shall not be reimbursable. The Contractor shall provide to the Engineer-in-Charge all policies of insurance in original. These policies shall be fully executed and shall state that the policies cannot be cancelled until completion of the Contract or completion of defects liability period and any extensions thereof. The Contractor shall obtain similar policies from all Sub-Contractors and thereby assume responsibility for any claims or losses to the Employer and Engineer-in-charge resulting from failure of any of the Sub-Contractors to obtain adequate insurance protection in connection with their work and shall indemnify and keep indemnified the Employer and Engineer-in-charge including their employees, officers, servants, agents and any other person moving in the premises, accordingly.
- 12.7. Unlimited liability: In addition to the liability imposed by law upon the Contractor for injury (including death) to persons or damage to property by reason of the negligence of the Contractor or his agents, which liability is not impaired or otherwise affected hereby, the Contractor hereby assumes liability for and agrees to save the Employer and Engineer-in-Charge including their employees, officers, servants, agents and any other person moving in the premises harmless and indemnifies them from every expense, liability or payment by reason of any injury (including death) to persons or damage to property suffered through any act or omission of the Contractor, his employees, agents, servants, workmen, suppliers or any of his Sub-Contractors, or any person directly or indirectly employed by any of them or from the conditions of the Site or any part of the Site which is in the control of the Contractor or his employees or any of his Sub-Contractors, or any one directly or indirectly employed by either of them or arising in any way from the Work.
- 12.8. All insurance claims, payable by the insurers, shall be paid to the Employer which shall be released to the Contractor in instalments as may be certified by the Engineer-in-charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers.
13. Liability for accidents and damages
- 13.1. Under the Contract, the Contractor shall be responsible for any loss or damage to the works under this contract until the works are completed and taken over in accordance with the Contract.
14. Time of Completion
- 14.1. Time: "the essence of the contract": The time allowed for carrying out the Work as entered in the tender shall be strictly observed by the Contractor and shall be deemed to be of the essence of the Contract and shall be reckoned from the date of handing over the site to the Contractor. The Work shall proceed with due diligence until Final Completion. The Contractor shall prepare a Construction Programme with time schedule keeping in view the completion period stipulated for specific portions of the Work and also the overall completion time and submit the same for the approval of the Tendering Authority after the receipt of letter of acceptance or selection notice. The approved work programme shall be made as part of the contract agreement. The Contractor shall comply with this time schedule. In the event of the Contractor failing to comply with the overall and individual milestones contained in the time schedules, he shall be liable to pay liquidated damages as provided for in this Contract.

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- 14.2. Completion Period: The Date of commencement will be the date of site handover or the 10th day after agreement whichever is earlier. The Milestone dates shall be those specified in the Contract Data or as mutually discussed and agreed. In case the Contractor fails to meet the above stipulated completion period or milestone achievement period, Contractor shall be liable to pay to the Employer, liquidated damages as specified in Clause 15 of General Conditions of Contract. In addition to his own work in the overall time period, the Contractor shall provide for the works of other Sub-contractors and Vendors, including those employed directly by the Employer / Engineer-in-Charge.
- 14.3. The contractor has to take over charge of the site by signing the acknowledgement form and commence the work within 10 days from the date of execution of agreement.
- 14.4. If the site is not taken over by the contractor by signing the acknowledgement form, Engineer will forward the filled up form by registered/speed post, recording the date of taking over as the tenth day from the date of execution of agreement unless otherwise decided.
- 14.5. The contractor has to resubmit the acknowledgement form duly signed within three days of receipt and commence the works.
- 14.6. Unless otherwise decided by the agreement authority, it shall be deemed that the contractor has taken over charge of the site on the tenth day from the date of agreement irrespective of whether he has received the acknowledgement by post or has resubmitted it with his signature. The work will be terminated at his risk and cost if the contractor does not resubmit the acknowledgement form and commence the work as required under 14.3.
- 14.7. Recovery towards risk and cost will be made from the performance guarantee, if the contractor does not turn up to take charge of the site within the time prescribed under 14.3, he shall be demoted to a lower category as per the rules for registration of contractors.
- 14.8. The works shall be carried out in accordance with the programme submitted by the contractor and agreed to by the Agreement Authority at the time of executing agreement and updated subsequently with the approval of the Agreement Authority.
15. Liquidated damages(LD)
- 15.1. If the Contractor fails to maintain the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the date of completion of Contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the Employer on account of such breach, pay as compensation/ Liquidated damages @ 1(one) percent of the contract price per week of delay or part thereof. The aggregate of such compensation / compensations shall not exceed 10 (ten) percent of the contract value. This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with the Employer.
- 15.2. The Employer, if satisfied, that the work can be completed by the Contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion as per clause 19. In the event of extension granted being with Liquidated Damages, the Employer will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the Contractor as agreed

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damages equivalent to @ 1(one) percent of the contract price per week of delay or part thereof.

- 15.3. If the contractor achieves balance milestones, even though he has failed to achieve initial milestones, and the work has been completed in the specified/original time of completion, the Agreement Authority may release the already levied liquidated damages at his sole discretion.
 - 15.4. The Agreement Authority, if not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the Contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to terminate the contract.
 - 15.5. The Agreement Authority, if not satisfied with the progress of the contract and in the event of failure of the Contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
 - 15.6. In the event of such termination of the contract as described in clauses 15.4 and 15.5 or both, the Employer, shall be entitled to recover Liquidated Damages up to ten percent (10%) of the contract value and forfeit the performance guarantee or Performance Security Deposit made by the Contractor to make good the losses besides getting the work completed by other means at the risk and cost of the Contractor.
 - 15.7. The Employer may waive the payment of compensation in the case of contracts where milestones are fixed, depending upon merit of the case, on request received from the Contractor if the entire work is completed within the date as specified in the Contract or as validly extended without stipulating any penalty.
16. Bonus for timely Completion
- 16.1. Bonus will be paid to the bidder at the rate of 1% of the estimated PAC of the work subject to a maximum of Rs.4 lakhs (four lakhs) for completion of work within the original time of completion in case of works which exceed TS power of Superintending Engineer. The amount of bonus, if payable, shall be paid along with final bill after completion of Work.
17. Contractor's default
- 17.1. If the Contractor shall neglect to execute the works with the diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him, in writing by the Engineer in connection with the works or shall contravene the provisions of the Contract, the Agreement Authority may give notice in writing to the Contractor to make good the failure, neglect or contravention complained of. Should the Contractor fail to comply with the notice within thirty (30) days from the date of service thereof, then and in such case the Agreement Authority shall be at liberty to employ other workmen and forthwith execute such part of the works as the Contractor may have neglected to do or if the Agreement Authority shall think fit, it shall be lawful for him, without prejudice to any other right he may have under the Contract, to take the works wholly or in part thereof and in that event the Employer shall have free use of all Contractor's equipment that may have been at the time on the site in connection with the works without being responsible to the Contractor for fair wear and tear thereof and to the exclusion of any right of the Contractor over the same, and the Agreement Authority shall be entitled to retain and apply any balance which may otherwise be due on the Contract by him to the Contractor, or such part thereof as may be necessary, the payment of the cost of executing the said part of the works or of completing the works as the case

may be plus a fine of 20 percent of the value of work so carried out. If the cost of completing the works or executing a part thereof as aforesaid plus a fine of 20 percent of the value of work so carried out shall exceed the balance due to the Contractor, the Contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay, which the Contractor shall have to pay if the completion of works is delayed. In addition, such action by the Agreement Authority as aforesaid shall not relieve the Contractor of his liability to pay liquidated damages for delay in completion of works as defined in clause 15. The termination of the Contract under this clause shall not entitle the Contractor to reduce the value of the performance bank guarantee nor the time thereof. The performance guarantee shall be valid for the full value and for the full period of the Contract including Defects Liability Period.

- 17.2. If the Contractor fails to complete the work and the Agreement is cancelled, the amount due to him on account of work executed by him, if payable, shall be paid to him only after due recoveries as per the provisions of the Contract and that too after alternative arrangements to complete the work has been made.

18. Delays by Employer or his authorised agent

- 18.1. In case the Contractor's performance is delayed due to any act of omission on the part of the Employer or his authorized agents, then the Contractor shall be given due extension of time for the completion of the works, to the extent such omission on the part of the Employer has caused delay in the Contractor's performance of his work. Regarding reasonableness or otherwise of the extension of time, the decision of the Engineer shall be final. The reasons for such delays shall be recorded in the hindrance register as per clause 19.2 and shall be certified by the Field Engineers in charge of the work.

- 18.2. Any delay in finalisation of mutual agreement in regard to any of the Contractor's claim against any act of omission on the part of the Employer or his authorised agents should not result in any work stoppage /further delay on the part of the Contractor.

19. Extension of time of completion

- 19.1. On happening of any events causing delay as stated hereinafter, the Contractor shall intimate immediately in writing to the Engineer-in-charge:

- a. due to any reasons defined as Force Majeure.
- b. non-availability of stores which are the responsibility of the Employer to supply
- c. non-availability or breakdown of tools and plant to be made available by the Employer
- d. Inclement weather conditions
- e. delay on the part of the Contractors or tradesmen engaged by the Employer not forming part of the Contract, holding up further progress of the work
- f. non-availability of design or detailed drawings or specifications time, which are to be made available by the Employer during progress of the work

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- g. any other causes which, at the sole discretion of the Employer is beyond the control of the Contractor.

19.2. A "Hindrance Register" shall be maintained by the Departmental Officer(not below the rank of AE) at site to record the various hindrances, as mentioned under item 19.1 above, encountered during the course of execution. The entries made in hindrance register are to be approved by the Engineer in charge. Contractor is permitted to sign the register and record his remarks.

19.3. The Contractor may request the Agreement Authority in writing for extension of time within 14(fourteen) days of happening of such event causing delay stating also, if practicable, the period for which extension is desired. The Agreement Authority may, considering the eligibility of the request, give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the Contractor in writing by the Agreement Authority through the Engineer-in-charge within one month of the date of receipt of such request. The Contractor shall however use his best efforts to prevent or make good the delay by putting his endeavours constantly as may be reasonably required of him to the satisfaction of the Engineer-in-charge. Related entries in the hindrance register shall also to be submitted along with the request for extension.

19.4. When the period fixed for the completion of the Contract is about to expire, the question of extension of the Contract may be considered at the instance of the Contractor or the Employer or the both. The extension will have to be by both party's agreement, expressed or implied.

19.5. In case the Contractor does not apply for grant of extension of time within 07 (Seven) days of hindrance occurring in execution of the work and the Employer wants to continue with the work beyond the stipulated date of completion for reason of the work having been hindered, the Engineer-in charge at his sole discretion can grant provisional extension of time even in the absence of application from the Contractor. Such extension of time granted by the Engineer-in-charge is valid provided the Contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such extension of time shall be without prejudice to Employer's right to levy compensation under the relevant clause of Contract.

20. Termination, suspension, cancellation & foreclosure of contract

20.1. The Agreement Authority shall, in addition to other remedial steps to be taken as provided in the conditions of Contract, be entitled to cancel the Contract in full or in part, if the Contractor

- a. makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in charge, then on the expiry of the period as specified in the notice, or
- b. commits default/breach in complying with any of the terms and conditions of the Contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in charge, then on the expiry of the period as may be specified by the Engineer-in-charge in a notice in writing. Or

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- c. fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the Agreement Authority, then on the expiry of the period as may be specified by the Engineer-in-charge in a notice in writing, or
 - d. shall offer or give or agree to give any person in the service of the Employer or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other Contract for the Employer, or
 - e. shall try to obtain a Contract from the Employer by way of ring Tendering or other non-bonafide method of competitive Tendering, or
 - f. transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Agreement Authority. The Agreement Authority may by giving a written notice, cancel such transfers or sublets or assignment.
- 20.2. The Agreement Authority shall in such an event give fifteen (15) days notice in writing to the Contractor informing his decision to do so.
- 20.3. The Contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and Contracts to the extent they are related to the work terminated and terms satisfactory to the Employer, stop all further sub-Contracting or purchasing activity related to the work terminated, and assist the Employer in maintenance, protection, and disposition of the works acquired under the Contract by the Employer.
- 20.4. The Contract shall stand terminated under the following circumstances unless the Employer is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the Contract and the Employer shall in any way not be liable to payment of any compensation to the estate of deceased Contractor and/or to the surviving partners of the Contractor's firm on account of the termination of the Contract.:
- a. If the Contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of insolvency act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any insolvency act.
 - b. In the case of the Contractor being a employer, its affairs are under liquidation either by a resolution passed by the employer or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or re-organisation, or a receiver or manager is appointed by the court on the application by the debenture holders of the Employer, if any.
 - c. If the Contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21(twenty-one) days.

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- d. On the death of the Contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the Agreement Authority is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the Contract. The decision of the Agreement Authority in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.
- e. If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies, then unless the Employer is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the Contract the Employer shall be entitled to cancel the Contract as to its incomplete part without being in any way liable to payment of any compensation to the estate of deceased Contractor and/or to the surviving partners of the Contractor's firm on account of the cancellation of the Contract. The decision of the Employer that the legal representatives of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties. In the event of such cancellation the Employer shall not hold the estate of the deceased Contractor and/or the surviving partners of the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable to damages for not completing the Contract.
- 20.5. On cancellation or on termination of the Contract, the Engineer-in-charge shall have powers
- to take possession of the site and any materials, constructional plant, implements, stores, etc. thereon.
 - to carry out the incomplete work by any means at the risk of the defaulted Contractor
 - to determine the amount to be recovered from the Contractor for completing the remaining work or in the event the remaining work is not to be completed the loss/damage suffered, if any, by the Employer after giving credit for the value of the work executed by the Contractor up to the time of termination/cancellation less on account payments made till date and value of Contractor's materials, plant, equipment, etc., taken possession of after termination/cancellation.
 - to recover the amount determined as above, if any, from any moneys due to the Contractor or any account or under any other Contract and in the event of any shortfall, the Contractor shall be called upon to pay the same on demand. The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the Employer shall not however arise in the

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case of termination of the Contract for death/demise of the Contractor as stated in clause.20.4 (d).

- e. The inventory of up to date work and balance stores at site, plant/machineries, equipments and any other property of contractor utilised for the work shall be taken on charge by the Department after combined survey with the Contractor or his authorised representative. If Contractor or his authorised representative is not appearing for combined survey after one week of giving notice, inventory shall be prepared by the Department in his absence and the Contractor is bound to accept the same.
- f. During the currency of execution of work, contractor shall not remove his resources without prior permission of Engineer-in charge.
- g. Additionally, the Employer will reserve the right to debar such defaulting Contractor from participating in future Tenders for a minimum period of one year.

20.6. Suspension of work - The Employer shall have power to suspend the progress of the work or any part thereof and the Engineer-in-charge may direct the Contractor in writing to suspend the work, for such period and in such manner as may be specified therein, on account of any default on the part of the Contractor, or for proper execution of the work for reasons other than any default on the part of the Contractor, or on ground of safety of the work or part thereof. In the event of suspension for reason other than any default on the part of the Contractor, extension of time shall be allowed by the Agreement Authority equal to the period of such suspension plus an additional time period of 25% of the suspension period or 30 days whichever is less. Any necessary and demonstrable costs incurred by the Contractor as a result of such suspension of the works will be paid by the Employer, provided such costs are substantiated to the satisfaction of the Engineer. The Employer shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the Contractor or his sub-Contractor. The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor. In the event of termination or suspension of the contract, on account of default on the part of the contractor, as narrated hereinbefore, the Security Deposit and other dues of this work or any other work done under this Employer shall be forfeited and brought under the absolute disposal of the Employer provided, that the amount so forfeited shall not exceed 10% of the contract price.

20.7. Foreclosure of Contract in full or in part - If at any time after acceptance of the Bid, the Employer decides to abandon or reduce the scope of the work for any reason whatsoever the Employer, through its Engineer-in-charge, shall give notice in writing to that effect to the Contractor. In the event of abandonment/reduction in the scope of work,

- a. The Contractor shall, if required by the Engineer-in-charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer-in-charge to assess the amount payable in terms of part 4.19.7 (b), (c) and (e) above, the Contractor shall not have any claim for compensation

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whatsoever either for abandonment or for reduction in the scope of work, other than those as specified above.

- b. If the progress of the work or of any portion of the work is unsatisfactory, the Engineer-in-Charge, after giving the contractor 15(fifteen) days' notice in writing, without cancelling or terminating the contract, shall be entitled to employ another agency for executing the job or to carry out the work departmentally or contractually through tendering process, either wholly or partly, debiting the contractor with cost involved in engaging another agency or with the cost of labour and the prices of materials, as the case may be. The certificate to be issued by the Engineer-in-Charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor. However, when this clause is invoked, penalty will not be applicable.

21. No waiver of rights

- 21.1. Neither the inspection by the Employer or the Engineer or Engineer's Representatives or any of their officials, employees or agents nor any order by the Employer or the Engineer for payment of money or any payment for or acceptance of, the whole or any part of the works by the Employer or the Engineer, nor any extension of time, nor any possession taken by the Engineer, inspection by Chief Technical Examiner or his authorised representatives and mandatory waiting period for inspection by CTE wing etc shall operate as a waiver of any provision of the Contract, or of any power herein reserved to the Employer, or any right to damages herein provided, nor shall any waiver of any breach in the Contract be held to be a waiver of any other or subsequent breach.

22. Certificate not to affect right of Employer and liability of contractor

- 22.1. No interim payment certificate of the Engineer, nor any sum paid on account, by the Employer, nor any extension of time for execution of the works granted by the Engineer shall affect or prejudice the rights of the Employer against the Contractor or relieve the Contractor of his obligations for the due performance of the Contract, or be interpreted as approval of the works done or of the equipment furnished and no certificate shall create liability for the Employer to pay for alterations, amendments, variations or additional works not ordered, in writing, by the Engineer or discharge the liability of the Contractor for the payment of damages whether due, ascertained, or certified or not, or any sum against the payment of which he is bound to indemnify the Employer, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the Contractor against the Employer.

23. Gifts and commissions etc.

- 23.1. Any gift, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner, agent, officers, director, employee or servant or any one of his or their behalf in relation to the obtaining or to the execution of this or any other Contract with the Employer, shall, in addition to any criminal liability which it may incur, subject the Contractor to the cancellation of this and all other Contracts and also to payment of any loss or damage to the Employer resulting from any cancellation. The Employer/Engineer shall then be entitled to deduct the amount so payable from any moneys otherwise due to the Contractor under the Contract.

24. Language and measures

24.1. All documents pertaining to the Contract including specifications, schedules, notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in the Contract. Measurements, quantities, prices or rates and amounts shall have two digit precision.

25. Release of information

25.1. The Contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium photographs or other reproduction of the works under this Contract, or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the Employer.

26. Completion of contract

26.1. Unless otherwise terminated under the provisions of any other relevant clause, this Contract shall be deemed to have been completed at the expiration of the Defects Liability Period as provided for under the clause 46.

27. Enforcement of terms

27.1. The failure of either party to enforce at any time of the provisions of this Contract or any rights in respect thereto or to exercise any option herein provided, shall in no way be construed to be a waiver of such provisions, rights or options or in any way to affect the validity of the Contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have hereunder.

28. Engineer's decision

28.1. In respect of all matters which are left to the decision of the Engineer including the granting or withholding of the certificates, the Engineer shall, if required to do so by the Contractor, give in writing a decision thereon.

28.2. If in the opinion of the Contractor, a decision made by the Engineer is not in accordance with the meaning and intent of the Contract, the Contractor may file with the Engineer within 15(fifteen) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as acceptance of the Engineer's decision and the decision shall become final and binding.

28.3. The Engineer's decision and the filing of the written objection thereto shall be a condition precedent to the right to any legal proceedings. It is the intent of the agreement that there shall be no delay in the execution of the works and the decision of the Engineer as rendered shall be promptly observed.

29. Co-operation with other Contractors, Consultants & Engineers

29.1. The Contractor shall co-operate with the Employer's other Contractors Consultants and consulting Engineers, if employed in the site, and freely exchange with them such technical information as is necessary for the satisfactory execution of works.

30. Variations or additions

30.1. No alterations, amendments, omissions, suspensions or variations of the works (hereinafter referred to as "Variation") under the Contract as detailed in the Contract documents, shall be made by the Contractor except as directed in writing by the Engineer, but the Engineer shall have full power subject to the provision hereinafter

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contained from time to time during the execution of the Contract, by notice in writing, to instruct the Contractor to make such variation without prejudice to the Contract. The Contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variation occurred in the Contract documents. If any suggested variation would, in the opinion of the Contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the Engineer thereof in writing and the Engineer shall decide forthwith, whether or not the same shall be carried out and if the Engineer confirm his instructions, Contractor's obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost occasioned by any such variation shall be added to or deducted from the Contract price as the case may be.

- 30.2. In the event of the Engineer requiring any variation, such reasonable and proper notice shall be given to the Contractor to enable him to work his arrangements accordingly, and in cases where goods or materials are already prepared or any design, drawings or pattern made or work done requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the Contractor.
- 30.3. In any case in which the Contractor has received instructions from the Engineer as to the requirement of carrying out the altered or additional substituted work which either then or later on, will in the opinion of the Contractor, involve a claim for additional payments, the Contractor shall immediately and in no case later than ten (10) days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the Engineer to that effect. But the Engineer shall not become liable for the payment of any charges in respect of any such variations, unless the specifications of the same shall be confirmed in writing by the Engineer.
- 30.4. If any variation in the works, results in reduction of Contract price, the parties shall, agree, in writing, so to the extent of any change in the price, before the Contractor proceeds with the change.
- 30.5. In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of the Engineer shall prevail.
- 30.6. Notwithstanding anything stated above in this clause, the Engineer shall have the full power to instruct the Contractor, in writing, during the execution of the Contract, to vary the quantities of the items or groups of items. The Contractor shall carry out such variations and be bound by the same conditions, as though the said variations occurred in the Contract documents. However, the Contract price shall be adjusted at the rates and the prices provided for the original quantities in the Contract.
31. Replacement of defective parts and materials
- 31.1. If during the progress of the works the Engineer shall decide and inform in writing to the Contractor, that any part of work or materials used therein is unsound or imperfect or has furnished any work is inferior than the quality specified, the Contractor on receiving details of such defects or deficiencies shall at his own expense within seven (7) days of his receiving the notice, or otherwise, within such time as may be reasonably necessary for making it good, proceed to alter, re-construct or remove such work and furnish fresh materials up to the standards of the specifications.
- 31.2. In case the Contractor fails to do so, the Engineer may on giving the Contractor seven (7) days' notice in writing of his intentions to do so, proceed to remove the portion of the works or materials so complained of and, at the cost of the Contractor, perform all

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such work or furnish all such equipment provided that nothing in this clause shall be deemed to deprive the Employer of or affect any rights under the Contract which the Employer may otherwise have in respect of such defects and deficiencies.

- 31.3. The Contractor's full and extreme liability under this clause shall be satisfied by the payments to the Employer of the extra cost, of such replacement procured, including erection, as provided for in the Contract, such extra cost being the ascertained difference between the price paid by the Employer for such replacements and the Contract price portion for such defective work and repayments of any sum paid by the Employer to the Contractor in respect of such defective work. Should the Employer not so replace the defective work or materials, the Contractor's extreme liability under this clause shall be limited to repayment of all sums paid by the Employer under the Contract for such defective works or works using the defective materials.

32. Defence of suits

- 32.1. If any action in court is brought against the Employer or Engineer or an officer or agent of the Employer for the failure or neglect on the part of the Contractor to perform any acts, matters, covenants or things under the Contract, or for damage or injury caused by the alleged omission or negligence on the part of the Contractor, his agents, representatives or his sub-Contractors, workmen, suppliers or employees, the Contractor shall in all such cases indemnify and keep the Employer, and the Engineer and/or his representative, harmless from all losses, damages, expenses or decrees arising out of such action.

33. Limitations of liabilities

- 33.1. The final payment by the Employer in pursuance of the Contract shall mean the release of the Contractor from all his liabilities under the Contract. Such final payment shall be made only at the end of the defects liability period as detailed in clause 46 and till such time as the Contractual liabilities and responsibilities of the Contractor, shall prevail. All other payments made under the Contract shall be treated as on account payments.

34. Taxes, Permits & Licenses

- 34.1. The Contractor shall be liable and pay all taxes, duties, levies, royalties etc lawfully assessed against the Contractor in pursuance of the Contract. In addition the Contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the Contractor for his personal income and property. This clause shall be read in conjunction with clause 3.3.6 of section Instruction to Bidders.

35. Payments

- 35.1. The payment to the Contractor for the performance of the works under the Contract will be made by the Employer as per the guidelines and conditions specified herein. All payment made during the Contract shall be on account payments only. The final payment will be made on completion of all the works and on fulfilment by the Contractor of all his liabilities under this contract and also after issue of Completion Certificate by the Agreement Authority.
- 35.2. All payments under the Contract shall be in Indian Rupees only.
- 35.3. All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or

materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

- 35.4. Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.
- 35.5. The bill for a work shall be submitted only with the first tier quality control certificates and Test Result sheets for all items in the Bill as required by the relevant provisions of the PWD Quality Control Manual or as listed in the Contract data. Assistant Engineer shall obtain certificates and Test Result Sheets of the second tier quality control tests from the Quality Control wing and attach the same to the bill along with the Test Results of first tier Q.C. Disbursing officers shall effect payment only after ensuring the QC test results furnished for the items covered in the bill confirm to standards prescribed which are detailed in the PWD Quality Control Manual.
- 35.6. The Contractor will be required to produce income-tax and sales tax clearance certificates before the final payment and release of Performance Security Deposits.
36. Method of measurement and Bill Preparation:
- 36.1. All Works shall be measured for making payments to the Contractor. To evaluate Work under this Contract and instructed as per work order/change orders issued by the Engineer-in-Charge, the standard method of measurement in accordance with the Standards laid down by CPWD Specifications Vol-I and II or Bureau of Indian Standards (IS: 1200) shall be followed. However if definite methods of measurements are stipulated in the Schedule of Rates or Specifications, then the same shall supersede BIS methods and shall be followed. In the event of any dispute with regard to the method of measurement of any work, the decision of the Engineer-in-Charge shall be final and binding and no extra claims shall be entertained or allowed at any stage in this regard.
- 36.2. The bills shall be prepared by the Departmental officers as per the procedure laid down in revised PWD Manual with amendments thereof if any.
37. Covering up:
- 37.1. The Contractor shall give at least 24 hours clear notice in writing to the Engineer-in-Charge before covering up any of the Work in foundations or any other such areas in order that inspection of the Work may be carried out for maintaining proper quality control. In the event of the Contractor failing to provide such notice he shall, at his own expense, uncover such Work as required to allow the inspection to be taken and thereafter shall reinstate the Work to the satisfaction of the Engineer-in-Charge. Each stage of all hidden works shall be approved by the Engineer-in charge before executing the next stage.
38. Rectification of improper work noticed:
- 38.1. If it shall appear to the Engineer-in-Charge during the progress of the Work that any work has been executed with unsound, imperfect or unskilful workmanship or with

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materials of any inferior description or that any materials or articles provided by the Contractor for the execution of the Work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the Contract, the Contractor shall, on demand in writing from the Engineer-in-Charge specifying the work, materials or articles complained of, notwithstanding that the same may have been passed and certified, forthwith rectify or remove and reconstruct the work so specified in whole, or in part as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost and in the event of his failing to do so within a period so specified by the Engineer-in-Charge in his demand aforesaid, the Engineer-in-Charge may rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respects of the Contractor, and deduct the expenses from the Performance Security Deposit any sums that may be due at any time thereafter to the Contractor or from his performance guarantee.

39. Rates for the extra, additional, altered or substituted items

39.1. Employer reserves the right to alter the Scope of Work (See Clause 10 and 30) and consequently the Contract Price shall be suitably adjusted for such changes by applying the approved rates. All change orders shall be issued by the Engineer-in-Charge and the onus shall be on the Contractor to obtain such prior written consent of the Engineer-in-Charge/Employer.

39.2. There shall be an order in writing to execute the extra item of work duly signed by the Agreement Authority before its commencement.

39.3. If the contractor finds, after examining the specifications and plans that extras are involved, he should give notice to the Engineer-in charge to this effect and shall proceed with the execution of the extra item only after receiving instructions in writing from Engineer-in charge and Agreement Authority.

39.4. Extra items may be classified as new, additional, substituted or altered items, depending, on their relation or otherwise to the original item or items of work.

39.5. The rates for extra items shall be worked out as below

39.5.1. In the case of extra items whether additional, altered or substituted, for which similar items exists in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate of the original item with reference to the departmental estimated rate shall be applied in deriving the rates for such items. The Engineer's interpretation as to what is a similar class of work shall be final and binding on the Contractor.

39.5.2. In the case of extra items whether additional, altered or substituted and for which similar items do not exist in the contract and rates exists in the prevailing departmental data rate, the rates shall be arrived at on the basis of the departmental data rate current at on the time of ordering the extra item, after applying the tender deduction except on cost of departmental material. Tender excess, if any, will not be applied.

39.5.3. In the case of extra items whether additional, altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from the

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departmental schedule of rates the rates for such part or parts of items which are not covered in the schedule of rates shall be determined by the Engineer-in charge on the basis of the prevailing market rates (if available in the LMR published by the Department the same shall be taken) giving due consideration to the analysis of the rate furnished by the contractor with supporting documents, including contractor's profit, overheads and other allowed charges if any. This shall be added on to the departmental rate (including contractor's profit, overheads and allowed other charges if any) current at the time of ordering or executing the extra item, whichever is earlier for the other part the item for which rates can be derived from the schedule of rates, after applying the tender deduction except on cost of departmental material and market rate items. Tender excess, if any, will not be applied.

39.5.4. In the case of extra item whether altered or substituted, for which the rates cannot be derived either from- similar item of work in the contract or from the departmental schedule of rates, the contractor shall within 14 days of the receipt of the order to carry out the said extra item of work communicate to the Engineer-in charge the rate which he proposes to claim for the item, supported by analysis of the rate claimed and the department shall within one month thereafter determine the rate on the basis of the market rate (if available in the LMR published by the Department the same shall be taken) giving consideration to the rate claimed by the contractor, after applying the tender deduction except on cost of departmental material and market rate items. Tender excess, if any, will not be applied.

39.5.5. In all the above cases, the approved rates for extra, additional, altered or substituted items shall not exceed the rate which is arrived on the basis of the prevailing local market rates of the Department (published as per Government guidelines) at the time of ordering or executing the extra item whichever is earlier.

39.5.6. Wherever the term "Departmental data rate" appears, it shall mean the rate derived from the prevailing Departmental schedule of rate and data and shall include conveyance charges and contractor's profit.

39.5.7. Wherever, the term "tender excess or tender deduction" appears, it shall mean the overall percentage variation of estimated PAC and agreed PAC of the original contract.

39.6. In cases in which the contractor has executed extra items not contemplated in the agreement but the rates of which require sanctioning of higher authorities the Division Officer may in such case, sanction advance up to an amount not exceeding 75 per cent of the amount for the items at the rate worked out and certified by the Engineer-in-Charge. The Assistant Engineer shall in all such cases promptly record all authorised extra items executed by the contractor including detailed measurements and quantities thereof in the Measurement Book. He shall neither enter any rate for the same in the Measurement Book nor include such extra items in the body of the bill. When the bill is received in the Sub Division, the sub Division Officer shall prepare a separate statement for those extra items showing the items executed, quantity of each item, rate for each item worked out by him based on agreement, conditions and amount for each item on the basis of the rate worked out by him. He shall also furnish a certificate to the effect that he has personally examined all the extra items and they are bonafide the amount payable for these items will not be less than Rs (amount to be specified) and that there is no

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objection in paying 75 per cent of this amount as a secured advance On receipt of the bill with the above statement and certificate the Division Officer may make payment not exceeding the amount recommended by the sub Division Officer as a lump sum secured for extra items of works done but not billed for.

40. Price Adjustment

- 40.1. This clause is applicable for works which have original time of completion more than 18 months
- 40.2. Contract price shall be adjusted for increase or decrease in rates and prices beyond the base price(s) of labour, materials, plant and equipment spares, fuels and lubricants as indicated in the Contract Data in accordance with the following principles, procedures and as per formula given in the Special conditions of contract.
- The price adjustment shall apply for the work done from the start date up to end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributions to the contractor.
 - The price adjustment shall be determined during each month from the formula given in the Special conditions of contract.
- 40.3. To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

41. Deductions for uncorrected work:

- 41.1. If the Engineer-in-Charge deems it inexpedient to get corrected or rectified any work of the Contractor which is defective or damaged or of substandard quality or is generally not in accordance with the Contract Documents, then an equitable and appropriate deduction shall be made thereof from the Contract Price, and the Engineer-in-Charge's decision in this respect shall be final and binding on the Contractor.
- 41.2. Furthermore if, by reason of any accident, or failure, or other event occurring to, in or in connection with the Work, or any part thereof, either during the execution of the Work or during the Defects Liability Period, any remedial or other work or repair shall, in the opinion of the Engineer-in-Charge, be urgently necessary for the safety of the Work, or any part thereof, and the Contractor is unable or unwilling to immediately and at once do such work or repair, the Engineer-in-Charge may employ and pay other persons or agencies to carry out such work or repair as the Engineer-in-Charge may consider necessary. If the work or repair so done by other persons or agencies is work which, in the opinion of the Engineer-in-Charge, the Contractor was liable to do at his own expense under the Contract, then all expenses incurred by the Employer / Engineer-in-Charge in connection with such work or repair shall be recovered from the Contractor and shall be deducted by the Employer / Engineer-in-Charge from any money that may be payable or that may become payable to the Contractor or from the Contractor's performance guarantee.
- 41.3. The defective or uncorrected work of the Contractor at any stage (during or after completion of work) may adversely affect or damage the work of other Vendors. Contractor shall at his own cost immediately rectify, correct or replace both his defective work as well as the work of the other Vendors so damaged, within the time period

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41.4. Actual costs including any incidentals thereof incurred by the Engineer-in-Charge on such corrections / extra works shall be recovered from the payments or any amounts due to the Contractor.

42.1. The Contractor shall complete the Works by the intended date of completion. In case Extension of Time has been granted, the extended date of completion shall be considered. The Works shall be considered as Virtually Complete only upon satisfactory correction of all defects notified by the Engineer, and only after the Work has been completed in every respect in conformity with the Contract Documents and after all the systems and services have been tested and commissioned, and after the Site has been cleared and the Work cleaned in accordance with Clause 78 and when the Agreement Authority on a report by the Engineer-in-Charge have certified in writing that the Work is Virtually Complete. The virtual completion certificate shall be issued by the Engineer-in-charge within 15 days of final measurement. The Defects Liability Period shall commence from the date of Virtual Completion in the virtual completion certificate issued by the Agreement Authority.

42.3. Prior to the issue of the Virtual Completion Certificate, the Contractor shall submit and hand-over to the Engineer-in-Charge the keys to all locks, all operation and maintenance manuals for systems and services, material reconciliation statements, warranties, as built drawings, any spares called for in the Contract, and everything else necessary for the proper use and maintenance of the Work complete with all systems and services.

43. Programme chart / milestones:

44. Penalty / fine for non-compliance of safety codes & labour laws:

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- 44.1. If the Engineer-in-Charge notifies the Contractor of non-compliance with safety codes as in Clause no. 68 and 69 and the labour laws etc. Contractor shall immediately if so directed or in any event not more than 10(ten) hours after receipt of such notice, make all reasonable effort to correct such non-compliance and to ensure that there is no reoccurrence of such non-compliance.
- 44.2. If the Contractor fails to do so, the Engineer-in-Charge shall levy a fine of Rs.500 (Rupees five hundred only) per head per day of the total number of labourers employed on that particular day at site for not complying with safety codes & labour laws etc.
45. Guarantees:
- 45.1. The Contractor understands and agrees that the Engineer-in-Charge is expressly relying and will continue to rely on the skill and judgment of the Contractor in executing the Work and remedying any defects in the Work. The Contract represents and warrants that :-
- The Contractor shall perform the Work in a timely manner, in strict accordance with the Contract Documents, and consistent with generally accepted professional, construction and construction-supervision practices and standards provided by an experienced and competent professional contractor and construction supervisor rendered under the same or similar circumstances.
 - The Contractor is and will be responsible to the Engineer-in-Charge for the acts and omissions of his Sub-Contractors and their respective employees, agents and invitees and all the persons performing any of the Work on behalf of the Contractor.
 - Besides the guarantees required and specified elsewhere in the Contract Documents, the Contractor shall in general guarantee all work executed by the Contractor and his Sub-Contractors for Defects Liability Period from the date of issue of the Virtual Completion Certificate. Those parts of the Work or equipment or installations, for which extended guarantee periods are stipulated elsewhere in the Contract Documents, shall be guaranteed for such periods that are so stipulated. The duration of the Defects Liability Period, unless specified otherwise, shall be the extent of length of such guarantee periods.
- 45.2. The Contractor represents, warrants and guarantees to Engineer, inter alias that:
- The execution of the Work shall be approved and capable of use, operation, performance and maintenance for accomplishing the purpose for which it has been built and acquired.
 - The Work shall comply with the Specifications, Drawings, and other Contract Documents and that quality standards as per the PWD Quality Control Manual shall be maintained.
 - The Work shall, for Defect Liability Period from the date of issue of the Virtual Completion Certificate, be free from all defects and the Work shall be of structural soundness, durability, ease of maintenance, weather tightness etc.
 - The materials, workmanship, fabrication and construction shall be of the specified and agreed quality and all materials shall be new.

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- e. The Work performed for the Engineer-in-Charge shall be free from all liens, charges, claims of whatsoever nature from any party other than the Engineer-in-Charge.
- 45.3. Where, during such guarantee periods as mentioned above, any material or equipment or workmanship or generally any item of work fails to comply or perform in conformity with the requirements stipulated in the Contract Documents or in accordance with the criteria and provisions of the guarantee, the Contractor shall be responsible for and shall bear and pay all costs and expenses for replacing and/or rectifying and making good such materials, equipment, workmanship, and items of work and, in addition, the Contractor shall be also responsible for and shall bear and pay all costs and expenses in connection with any damages and/or losses suffered as a consequence of such failure.
- 45.4. All guarantees required under the Contract shall be in the format approved by the Engineer-in-Charge and submitted to the Engineer-in-Charge by the Contractor when requesting certification of the final bill.
46. Defects liability:
- 46.1. The Defect Liability Period shall be as mentioned in the Contract Data.
- 46.2. Maintenance by contractor during defects liability period: All defective items of work and defects noticed and brought to the attention of the Contractor by the Engineer in writing during the Defects Liability Period shall be promptly and expeditiously attended to and replaced and/or rectified and made good by the Contractor at his own cost, to the complete satisfaction of the Engineer-in-Charge.
- 46.3. Replacement and/or rectification and making good by contractors of all defective materials, equipment and/or workmanship during defects liability period: The Contractor shall replace and/or rectify and make good, at his own cost, and to the satisfaction of the Engineer-in-Charge, all defective items of work and defects arising, in the opinion of the Engineer-in-Charge, from materials, equipment, and/or workmanship not performing or being in accordance with the Drawings or Specifications or the instructions of the Engineer-in-Charge or other Contract Documents or the best engineering and construction practices, and which may appear or come to notice within Defects Liability Period after Virtual Completion of the Work. Any item, material or matter repaired or replaced shall receive a new Defects Liability Period of like duration beginning upon the date the repaired or replaced item, material or matter is returned for use to the Engineer-in-Charge, provided that the aggregate guarantee period shall not exceed 24 months. The Contractor shall be also liable for all costs associated with damages and/or losses which are a consequence of such defective items of work and defects, and such costs shall be recouped by Engineer-in-Charge/Agreement Authority from the Contractor and shall be recovered from the Performance Security Deposit held and/or from the Contractor's final bill (if the final bill has not been certified and paid for at the time), or the same would otherwise be recovered from the Contractor. Should the Performance Security Deposit held (and the amount in respect of the final bill if it has not been certified and paid for at the time) be insufficient to meet such costs, damages, losses and expenses, as determined by the Engineer-in-Charge, then the Contractor shall be legally bound to pay the balance amount due under the claim to the Engineer-in-Charge within one month of receiving notification to that effect from the Engineer-in-Charge. In the event of failure on the part of the Contractor to pay the balance amount due within one month as stated above, the Engineer-in-Charge shall be entitled to invoke the performance bond and the Contractor

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shall raise no objection in this regard. In respect of those parts of the Work for which longer guarantee periods are stipulated elsewhere in the Contract Documents, the Defects Liability Period for such parts of the Works shall be until the end of the respective guarantee period that is stipulated for each such part. No payment shall be made to the contractor on this account.

- 46.4. All the material whether Employer supplied or not shall be supplied by the Contractor at his own cost for undertaking any correction/rectification/replacement of defective/damaged or uncorrected works.

47. Final completion of the work :

- 47.1. The Work shall be considered as finally complete at the end of the Defects Liability Period subject to the Contractor having replaced and/or rectified and made good all the defective items of work and defects and hand over the Work in accordance with clause above, to the satisfaction of the Engineer-in-Charge, and provided that the Contractor has performed all his obligations and fulfilled all his liabilities under the Contract, and when the Agreement Authority has certified in writing that the Works are finally complete. Such Final Completion in respect of those parts of the Work, for which extended guarantee periods are stipulated elsewhere in the Contract Documents, shall be achieved at the end of such stipulated guarantee periods.

48. Taking over of the works

- 48.1. The Contractor shall be responsible to maintain all his works till completion of the Defects Liability Period and to handover the work to the Assistant Engineer. In this regards the works would be jointly inspected by a team comprising of representatives of Contractor and the Engineer-in-Charge, for noting any discrepancy, defect, shortcomings. Within the time period specified by the Engineer-in-Charge the Contractor shall rectify, correct or replace the defective works so noted during the joint inspection, at his own cost to the satisfaction of the Engineer-in-Charge. On acceptance of the Contractor's work, the contractor shall prepare the inventory of his works, and hand over the Work & the inventory to the Assistant Engineer.

- 48.2. During carrying out the rectification, correction or replacement works as mentioned above the Contractor shall take all necessary precautions to safeguard the existing finishing and works of other Vendors against any damage. In case the works of other Vendors are damaged by the Contractor while undertaking the rectification / replacement work, the Contractor shall rectify / replace the works so damaged at his own cost to the satisfaction of the Engineer-in-Charge.

- 48.3. On failure of the contractor to rectify, correct or replace the defective works or on undue delay on part of the contractor for the same, the Engineer-in-Charge shall be at liberty to undertake the correction works by itself or through any Vendor at the Contractor's cost. All such costs including any incidentals thereof incurred by the Engineer-in-Charge shall be recovered from the Contractor's payments or from any amounts due to the Contractor.

- 48.4. Subject to clause 42 of this section, upon the issue of virtual completion certificate, the Engineer may take over the completed work for intended use. Such taking over of the works prior to completion of the Defects Liability Period by the Engineer shall not discharge the contractor of his responsibilities for the balance Defects Liability

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Period and the Defects Liability Period shall remain in force till completion of Defects Liability Period.

- 48.5. On removal of all the defects and handing over to the Assistant Engineer upon successful completion of the Defects Liability Period by the Contractor, the Engineer-in-Charge shall issue the Final Completion Certificate to the contractor and the Defects Liability Period shall be deemed to be complete.

49. Force majeure

- 49.1. Force Majeure is herein defined as any cause which is beyond the control of the Contractor or the Employer as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the Contract, such as:

- a. Natural phenomena, including but not limited to floods, draughts, earthquakes and epidemics;
- b. Acts of any government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes,

- 49.2. Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

- a. The contractor will advise, in the event of his having resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the clause of delay, within fifteen days of the occurrence and cessation of such force majeure condition.
- b. For delays arising out of Force Majeure, the contractor will not claim extension in completion date for a period exceeding the period of delay attributable to causes of Force Majeure and neither Employer nor the Contractor shall be liable to pay extra costs (like increase in rates, remobilization advance, idle charges for labour and machinery etc.) provided it is mutually established that the Force Majeure conditions did actually exist.
- c. If any of the Force Majeure conditions exists in the place of operation of the Bidder even at the time of submission of the bid he will categorically specify them in the bid and state whether they have been taken into consideration in their bids.

- 49.3. The Contractor or the Employer shall not be liable for delays in performing his obligations resulting from any force Majeure cause as referred to and/or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after Contractor's performance of his obligations has been delayed for other causes.

50. Intellectual property rights:

- 50.1. All communications, whether written or oral, including but not limited to this Contract, its Annexure, Drawings, data sheets, Specifications, bills of material, sketches, calculations, designs and all other materials shall be treated as confidential and shall be the exclusive property of the Employer unless otherwise agreed in writing and must be given to the Employer upon request, but in any event all such materials shall be delivered to the Engineer-in-Charge upon termination/expiry of this Contract.

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- 50.2. The Contractor agrees that it and its employees, agents, Sub- Contractors and consultants shall not (without the prior written consent of the Employer) during the term of this Contract or thereafter, disclose, make commercial or other use of, give or sell to any person, firm or corporation, any information received directly or indirectly from the Engineer-in-Charge or acquired or developed in the course of the Work, or this Contract, including by way of example only, ideas, inventions, methods, designs, formulae, systems, improvements, prices, discounts, business affairs, trade secrets, products, product specifications, manufacturing processes, data and know-how and technical information of any kind whatsoever unless such information has been publicly disclosed by authorised officials of the Employer. The Contractor agrees that prior to assigning any employee or agent or hiring any Sub -Contractor or consultant to work on this Work, such employee, agent, Sub-Contractor or consultant shall be required to execute a document containing in substance and form, a confidentiality provision similar to this provision.
- 50.3. The Contractor shall not, without the Engineer-in-Charge's prior consent:
- Take any photographs or videos of the Work (or any part thereof) for use otherwise than in connection with carrying out and completion of the Work;
 - Write for publication, or cause, information or comment or pictures about the Work;
 - Supply to any third person such as actual and prospective clients, contractors, publishers, other interested parties and the like, the designs and any articles or information relating to the Work; and
 - Give interviews to the press including television, radio print and the like regarding the Work or the Contractor's involvement in the Work.
- 50.4. Notwithstanding the foregoing, this provision shall not limit the obligation of the Contractor to take photographs and/or videos on a regular basis for the purpose of providing the progress reports and other communications to the Engineer/Employer.
- 50.5. The Contractor, Sub-Contractors and their respective employees, representatives, agents, servants, workmen and suppliers shall not, during or after the termination/expiry of this Contract, disclose any information pertaining to this Contract or the Work to any person without the prior written consent of the Engineer-in-Charge except when called upon to do so by a valid and lawful direction or order of a statutory or Government authority or an order of a court of law or where any of the parties require production of this document and related information for establishing their respective legal rights.
51. Governing law:
- 51.1. The governing Law of the Contract shall be Indian law.
52. Standards of conduct:
- 52.1. The Contractor, in performing its obligations under this Contract, shall establish and maintain appropriate business standards, procedures and control, including those necessary to avoid any real or apparent impropriety or adverse impact on the interests of the Employer / Engineer-in-Charge. The Employer / Engineer-in-Charge will in no event reimburse the Contractor for any costs incurred for purposes inconsistent with such policies.
- 52.2. Compliance with Laws, Rules and Regulations: Contractor represents, warrants, certificates and covenants that in connection with performance under this contract that:

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- a. It shall, and the Work to be provided hereunder shall, comply with all applicable Local, National, and Central Laws, rules and regulations, including but not limited to those governing building/road constructions, environmental, safety of persons and property, Employee State Insurance, workmen compensation, Provident Fund and applicable industrial/labour laws, and land development laws, rules and regulations.
- b. No services provided hereunder will be produced using forced, indentured or convict labour or using the labour of persons in violation of the minimum working age law in the country where the Work are rendered;
- c. It shall comply with all laws regarding improper or illegal payments, gifts or gratuities; and Contractor agrees not to pay, promise to pay or authorize the payment of any money or anything of value, directly or indirectly, to any person or entity for the purpose of illegally or improperly inducing a decision or obtaining or retaining business or any advantage in connection with this Contract;
- d. It has not paid or provided and shall not pay, any gratuity for the benefit of any agent, representative or employee of the Employer other than in accordance with the Employer's applicable policies; and
- e. It has not, and shall not, engage in any sharing or exchange of prices, costs or other competitive information or take any other collusive conduct with any third party supplier or Bidder in connection with the preparation or submission of any bid or proposal to the Engineer-in-Charge or the negotiation of this Contract.
- f. It will also comply with all rules and regulations of the Employer which may be in effect at the Facility site regarding employment, passes, badges, smoking, fire prevention, safety and conduct or property. On behalf of the Engineer-in-Charge, Contractor shall request and monitor that such is observed by any Contractor, subcontractors, vendors and each of their employees.

52.3. Salient Features of Some Major Labour Laws (Applicable to the establishments engaged in construction work)

52.3.1. Workmen Compensation Act 1923: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

52.3.2. Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.

52.3.3. Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:

- i. Pension or family pension on retirement or death, as the case may be.
- ii. Deposit linked insurance on the death in harness of the worker.
- iii. Payment of P.F. accumulation on retirement/death etc.

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- 52.3.4. Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- 52.3.5. Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Employer by Law. The Contractor is required to take license from the designated Officer. The Act is applicable to the establishments of the Contractor for the Employer if they employ 20 or more contract labour.
- 52.3.6. Minimum Wages Act 1948: The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Bridges, Runways etc are scheduled employments.
- 52.3.7. Payment of Wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- 52.3.8. Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- 52.3.9. Payment of Bonus: Minimum bonus shall be paid as per the State Government rules prevailing during the time of work.
- 52.3.10. Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- 52.3.11. Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- 52.3.12. Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- 52.3.13. Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- 52.3.14. Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs 5 or more interstate migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.

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52.3.15. The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 1% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

52.3.16. Factories Act 1948: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

53. Warranty as to documents submitted to Employer audit:

53.1. The Contractor represents that all documents, including invoice, vouchers, financials to settlements, billings and other reports submitted or to be submitted by the Contractor to the Engineer-in-Charge in support of an application payment are true, correct, complete and accurate in all respects. Upon request of the Engineer-in-Charge, the Contractor agrees to cooperate fully with the Engineer-in-Charge and the field Engineers in the conduct of a Technical Audit for the Work by an independent agency entrusted by the Agreement Authority. The Contractor accepts that the contract / work shall be subject to the technical audit by an independent technical auditor appointed by the Agreement Authority to audit the quality and quantities of the works done by the contractor, and agrees to render all necessary assistance to such agencies / professionals, whose reports / assessments shall be final and binding. Contractor shall fulfil the requirements as per the auditor's assessments at his own cost within the time stipulated by the Engineer-in-Charge.

54. Changes in Contractor's constitution:

54.1. Where the contractor is a Partnership, prior approval in writing shall be obtained from the Engineer-in-Charge before any change is made in the Constitution of the partnership.

54.2. Where the Contractor is an individual or a Hindu Undivided Family business, such written approval from the Agreement Authority shall likewise be obtained before Contractor enters into any partnership agreement in which the partnership would have the right to carry out the work previously to be undertaken by the Contractor.

54.3. If such written prior approval is not obtained by the Contractor, appropriate action shall be taken by the Agreement Authority as per the contract terms and conditions.

55. Grounds for withholding payments:

55.1. The Engineer-in-Charge may withhold the whole or part of any compensation due to the Contractor to the extent necessary to protect the Employer from any loss on account of any breach of Contractor's obligations under the Contract. When the cause

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for withholding is rectified, such amounts then due and owing shall be paid or credited to the Contractor.

CONTRACTOR'S SITE ORGANIZATION AND RESOURCES

56. Contractor's representative and supervisory staff

56.1. The Contractor shall at his cost provide and ensure continued effective supervision of the Work with the help of the Contractor's Representative, assisted by a team of qualified, experienced and competent engineers, supervisors and adequate staff, to the satisfaction of the Engineer-in-Charge for the entire duration of the Work. The Contractor shall submit his proposed site organization chart for the approval of the Engineer-in-Charge. The Contractor's Representative shall be on the Site at all times as the Work and the Work progresses and shall be responsible for carrying out the Work to the true meaning of the Drawings, Specifications, Conditions of Contract, Schedule of Rates, the other Contract Documents, and instructions and directions of the Field Engineers. The instructions and directions given in writing to the Contractor's Representative or to any of his assistants at the Site by the Engineer-in-Charge shall be deemed to have been given to the Contractor officially. Attention is called to the importance of the Contractor requesting written instruction from the Engineer-in-Charge before undertaking any Work where the Engineer-in-Charge's and/or Employer's direction or instructions are required. Any such Work done in advance of such instructions will be liable to be removed at the Contractor's expense and will not be paid for unless specifically approved in writing by the Engineer-in-Charge, as the case may be. All key staff employed at the Site by the Contractor shall be considered essential to the performance of the Work and the Work Co-ordination Services, and all key staff shall be subject to the approval of the Engineer-in-Charge. However such approval shall not relieve the Contractor of any of his Contractual obligations. No staff including the resident engineer and other technical supervisory staff shall be removed or transferred from the Work without the prior written permission of the Engineer-in-Charge. The Engineer-in-Charge shall, however, have the authority to order the removal from Site of any undesirable personnel. If key staff becomes unavailable for assignment to the Work or the Work Co-ordination Services for reasons beyond the Contractor's control, the Contractor shall immediately notify the Engineer-in-Charge to evaluate the impact on the Work. Prior to substitution or addition of any key staff, the Contractor shall obtain the Engineer-in-Charge's written consent as to the acceptability of replacements or additions to such personnel. The Contractor shall at all times be fully responsible for the acts, omissions, defaults and neglect of all of his representatives, agents, servants, workmen and suppliers and those of his Sub-Contractors.

57. Man-power and plant and machinery

57.1. The Contractor shall at his own cost provide and install all equipment, materials, plant/machines. Provision of Passenger Lift, Batching Plant, Concrete Pumps, Cranes, and Material Hoists each of adequate capacity, will be required in case of bulk concreting and fast construction. Other equipments like concrete mixers (weigh batchers in case of design mixes), ladders, and scaffolding etc, necessary for the execution of the Work in conformity with the Contract Documents and to the satisfaction of the Engineer-in-Charge will also be provided by the contractor at his own cost in adequate quantity. All machines, tools, trucks, formwork material, man-power and everything else

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necessary for the proper and satisfactory execution and completion of the Work in accordance with the Contract Documents shall be provided by the Contractor at his own cost. The pre-qualification approval of the list of equipments however shall not relieve the Contractor of any of his responsibilities, obligations and liabilities under the Contract. The Contractor shall augment his manpower, plant and machinery without extra cost to the Engineer-in-Charge whenever required or so directed by the Engineer-in-Charge in order to conform to the approved construction programme for the achievement of milestones and Virtual Completion. The batching plant, hot mix plant WMM plant and Concrete batch mix plant shall be computerised (Microprocessor based) with printing facility so as to keep the printed out-put for each batch of concrete mix and for each component (stone aggregates, sand, cement, fly ash, water, plasticiser & any other concrete admixture) for each batch of design mix concrete for record purpose. The plants shall also be equipped with antipollution device and mechanisms.

58. Contractor store, site offices and other facilities

58.1. It is agreed that Contractor has inspected the site and has made his own assessment towards the availability of space at site for his stores, yards, offices, placement of batching plant, steel & shuttering yards, cranes, material hoists and other facilities. A mutually determined area within the constraints of the Site will be allowed to the Contractor free of cost for the purpose of storing his tools, plant, materials, Site office, cement godown, canteen, plant & machinery etc. In case contractor is not able to accommodate his facilities within the site, or in the opinion of the Engineer-in-Charge contractor's facilities are to be removed or relocated in the interest of the progress of work (contractors and / or any other agencies / vendors) the contractor shall make his own arrangements elsewhere outside the site at his own cost for the same. Water tank for the purpose of construction, Site offices, toilets, workshops and storage sheds etc. shall be built by the Contractor at the Contractor's cost. Water tank/s constructed for the purpose of construction should be of such dimensions as to provide storage for at least two days consumption. Site offices shall be of such dimensions to accommodate the Contractor's own office. A separate sanitary facility shall be provided and maintained for, Engineers and workers. The same shall be cleared or removed after construction period. The Contractor shall remove all the temporary construction constructed by him at the Site for the purpose of completing the Work after the Work is completed. Costs of all such facilities including construction & removal shall be borne by the Contractor. Construction of labour hutments will not be allowed inside the Site. The Contractor shall at his own cost make all arrangements for space, lodging, transportation etc. for the labour.

59. Security

59.1. The Contractor shall at his cost provide at all times adequate number of watchmen to guard the Site, materials and equipment, to the satisfaction of the Engineer-in-Charge. The Contractor shall at all times be fully responsible for the security of all materials and equipment on the Site, whether owned by the Employer, owned by the Contractor or those of any Sub-Contractor. Employer / Engineer shall not be responsible for any loss due to theft, fire, accident or any other reasons, whatsoever.

60. Telephone / Communication/Other services

60.1. The contractor shall make his own arrangement for the telephones and communication at site with information to the Engineer-in-Charge.

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61. Sanitary Convenience:

61.1. The Contractor shall at his expense provide and erect with prior permission and details to the Engineer-in-Charge all necessary sanitary conveniences including septic tank and soak pits at the Site for the staff and all workmen of his own, his Sub-Contractors, Engineer and Engineer's Representatives. The sanitary conveniences shall be strategically located around the Site to provide ready access to all site operatives and employees. The Contractor shall maintain such convenience in a clean, hygienic, orderly condition and shall clean, disinfect and deodorize the ground after their removal, and meet all statutory requirements.

62. Scaffolding, staging, guard rails, barricades:

62.1. The Contractor shall at his cost provide steel scaffolding, staging, guard rails, barricades and safety barriers around all excavations, openings and at all edges, temporary stairs and other temporary measures required during construction. The supports for the scaffolding, staging guard rails, barricades and safety barriers and temporary stairs shall be strong, adequate for the particular situations, tied together with horizontal pieces and braced properly. The temporary access to the various parts of the building under construction shall be rigid and strong enough to avoid any chance of mishaps. The entire scaffolding arrangement together with the staging, guard rails, barricades and safety barriers, and temporary stairs shall be to the approval of the Engineer-in-Charge which approval however shall not relieve the Contractor of any of his responsibilities, obligations and liabilities for safety and for timely completion of the Work. The use of wooden scaffolding on the Site is strictly forbidden.

63. Temporary Roads:

63.1. The Contractor shall at his cost construct and maintain temporary roads/access ways to suit Site requirements at locations mutually agreed with the Engineer-in-Charge. Such roads/access ways will also be used by other Contractors/vendors/Officials working at the Site.

64. Safety Equipment & Personnel:

64.1. The Contractor shall provide sufficient helmets, safety boots/shoes, nets and protective clothing for use by the Work management team, his own staff, staff of its sub-contractors and Engineer, Engineer's Representative. The Contractor shall make available at all times when work is being undertaken, a vehicle suitable for the emergency evacuation of personnel from the site to a hospital staffed and equipped to receive injured personnel.

65. Temporary Lighting:

65.1. The Contractor shall make his own arrangement in respect of the provision of adequate lighting at all places where adequate visibility is not there or at night works and also provide general lighting of site as a whole in a proper safe and satisfactory manner.

66. Protection of Environment:

66.1. The Contractor understands that the Site is free from pollutants at the time of access to the Site and commencement of the Work. The Contractor shall comply with all applicable environmental laws and regulations and shall ensure that the Site is and remains free from pollutants at the end of the Work. The Contractor shall ensure inter-alia, that neither the soil nor the ground water is polluted or contaminated by fuels or lubricants emitted by machinery operated on the Site or by other dangerous or poisonous substances which are or are deemed to be hazardous to the environment.

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Notwithstanding the above, the Contractor shall comply with all the directions and decisions of the Engineer-in-Charge in this regard.

67. First Aid Facilities:

67.1. The Contractor shall provide adequate first aid facilities at site.

68. Labour regulations:

68.1. The Contractor shall be wholly and solely responsible for full compliance with the provisions under all labour laws and /or regulations such as Payment of Wages Act 1948, Employees Liability Act 1938, Workmen's Compensation Act-1923, Employees State Insurance Act-1948, Employees Provident Fund Act-1952, Industrial Disputes Act-1947, the Maternity Benefit Act-1961, the Contract Labour (Regulation and Abolition) Act-1970 and the Factories Act-1948 or any modifications thereof or any other law relating thereto and rules there under introduced from time to time. The Contractor shall assume liability and shall indemnify the Employer and Engineer-in-Charge from every expense, liability or payment by reason of the application of any labour law, act, rules or regulations existing or to be introduced at a future date during the term of the Contract. Insurance cover towards the above shall be effected by the Contractor as called for in Clause 12. In general, in respect of all labour directly or indirectly employed in the Work for the performance of Contractor's part of the Contract, the Contractor shall comply with all the rules framed by the Government authorities concerned from time to time for protection of the health and welfare of the workers. The Contractor shall at his own cost obtain a valid licence for himself and the Employer under the Contract Labour (R & A) Act 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 and under any other applicable rules before the commencement of the Work and continue to have a valid licences until the completion of the Work.

68.2. Payment of wages: The Contractor shall pay to labour employed by him either directly or through Sub-Contractors wages not less than fair wages as defined in the relevant Central / Local Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the Contract Labour Regulation and Abolition of Central Rules 1971, wherever applicable. He shall also abide by the minimum wages and other regulations applicable to the labour engaged in the Work, as laid down by the concerned Central / local authorities (State, District or other local Authorities). In case the contractor fails to pay fair wages as required by the authorities then the Employer/ Engineer-in-Charge shall be entitled to do so and receives such amounts including associated cost incurred by them in doing so from the contractor.

68.3. Model Rules: The Contractor shall at his own expense comply with or cause to be complied with, Model Rules for labour welfare framed by Government or other local bodies from time to time for the protection of health and for making sanitary arrangements, Malaria control, etc. for workers employed directly or indirectly on the Work and in the workers hutment area. In case the Contractor fails to make arrangements as aforesaid, the Employer shall be entitled to do so and recover the cost thereof from the Contractor.

68.4. Safety Codes: In respect of all labour, directly or indirectly employed on the Work for the performance and execution of the Contractor's Work under the Contract, the Contractor shall at his own expense arrange for all the safety provisions as listed in (i) Safety codes of Central Public Works Department and Bureau of Indian Standards, (ii) The Electricity Act, (iii) The Mines Act, and Regulations, (iv) Regulations of

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employment & conditions of service Act 1996, Rules and Orders made there under and such other acts as applicable. Precautions as stated in the safety clauses are of minimum necessity and shall not preclude the Contractor taking additional safety precautions as may be warranted for the particular type of work or situations. Also mere observance of these precautions shall not absolve the Contractor of his liability in case of loss or damage to property or injury to any person including but not limited to the Contractor's labour, the Employer's Consultants, Employer's Representatives and Engineer-in-Charge's representatives or any member of the public or resulting in the death of any of these. Protective gear such as safety helmets, boots, belts, gloves, spectacles, nets, fire extinguishers etc. shall be provided by the Contractor at his own cost to all his manpower at the Site. The Contractor shall impose such requirements on all Sub-Contractors and Vendors also. It shall be the responsibility of the Contractor to ensure that such protective gear is worn at all times by all personnel working at the Site during the term of the Work. The Employer, Engineer, and Engineer's Representative shall each have the right to stop any person not wearing such protective gear from working on the Site.

- 68.5. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer-in-Charge shall be entitled (but not obliged) to do so and recover the costs thereof from the Contractor. The decision of the Engineer-in-Charge in this regard shall be final and binding on the Contractor.

69. Safety/Site Conditions:

- 69.1. The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and ensure that the methods of carrying out the Work and the Work by the Contractor including his workmen, employees, Sub-Contractors and Vendors meet all the necessary safety standards and requirements. In order to fulfil this obligation the Contractor shall appoint a permanent, full time and suitably qualified safety officer for the Site, who shall be responsible for incorporation, implementation and enforcement of all safety measures and requirements for maintaining safe working conditions, safety of manpower and equipment, general safety and security of Site as per the various safety codes and stipulations mentioned in contract documents. The Contractor shall provide Id-Cards (Identity Cards) to each of his worker with designated number & colour only of the card as directed by the Engineer-in-Charge.
- 69.2. The Contractor has full responsibility for maintaining the Site in good and clean condition and removing all trash and debris on a daily basis to the satisfaction of the Engineer. The Contractor is responsible for providing adequate sanitary facilities and maintaining them in a clean and healthy condition. If the Contractor fails to comply with the above the Engineer-in-Charge will have the authority to get the same cleaned by an external agency and debit the expenses incurred on the same to the Contractor's account; but without being under any legal obligation to do so.
- 69.3. If, by reason of any accident, or failure or other event occurring to, in, or in connection with the Work, or any part thereof, either during the execution of the Work, or during the Defects Liability Period, any remedial or other work is, in the opinion of the Engineer-in-Charge urgently necessary for the implementation of the safety programme of the Work by the Contractor and the Contractor is unable or unwilling at once to do such work, the Engineer-in-Charge shall be entitled to employ and pay other

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persons to carry out such work as the Engineer-in-Charge may consider necessary. If the work or repair so done by the Engineer-in-Charge is work which, in the opinion of the Engineer-in-Charge, the Contractor is liable to do at its own cost, then all costs consequent thereon or incidental thereto shall be recoverable from the Contractor and may be deducted by the Engineer-in-Charge from any of the Performance Security Deposit and any moneys due or to become due to the Contractor and the Engineer-in-Charge shall notify the Contractor accordingly, provided that the Engineer-in-Charge shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof. The Contractor shall ensure that all operations by the Contractor, his workmen, employees, Sub-Contractors to complete the Work and the remedying of any defects therein shall, so far as compliance with the requirements of this Agreement permit, be carried on so as not to interfere unnecessarily or improperly with:

- a) The convenience of the public, or
- b) The access to, use and occupation of public or private roads, railways and footpaths to or of properties whether in the possession of Employer/Engineer-in-Charge or of any other person.
- c) The Employers /Engineer-in-Charge's operation and utilization of the facility at the Site; and
- d) The Work of Vendors/other contractors.

69.4. If any hazardous or obnoxious materials (as defined by Indian law) are specified for use or are being used by Sub-Contractors or Vendors, the Contractor shall take necessary clearances from concerned departments and keep record of such material and forthwith give written notice to the Engineer-in-Charge and shall ensure that the Sub-Contractors and Vendors, as applicable, use, store and dispose of such hazardous or obnoxious materials strictly in accordance with all applicable laws.

69.5. Additional Safety Regulations: The Contractor shall continuously maintain adequate protection for the Work against fire and other hazards and shall protect the Employers /Engineer-in-Charges property from damage or loss during the performance of this Contract. The Contractor also shall adequately protect property adjacent to the Work. The Contractor shall take all necessary precautions for the safety of its employees, Subcontractors and the Vendors performing the Work and later phases of the Work and shall comply with all applicable safety laws and regulations to prevent accidents or injury to persons on, about, or adjacent to the Site. The Contractor shall be responsible for co-ordinating a safe working programme with the Field Engineer. Such a programme shall include, and the Contractor shall be responsible for maintaining, the following safe working conditions and practices:

- a) All combustible material, food matter, garbage, scrap, and other debris generated during the performance of the Work shall be collected and removed from the Site on daily basis. Arrangements for scrap disposal should be discussed with Field Engineers.
- b) An adequate number and type of fire extinguishers and sand buckets shall be provided at the Site for fire control and shall be kept/maintained in satisfactory and effective working condition, at all times.
- c) The Contractor and its employees, labourers and subcontractors shall strictly obey all "No Smoking" restrictions.

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- d) The Contractor shall not operate or use or manipulate utilities already established at the Site without the Engineer-in-Charge's prior written approval.

69.6. Safety with regard to site and housekeeping:- The contractor shall depute a dedicated team of adequate number of worker under the responsibility of the Safety In-charge for carrying out the safety and housekeeping work at site on daily basis. Following shall be ensured by the Contractor and his safety & housekeeping team:

- a) The use of intoxicants or unlawful drugs at the Site, in any degree, shall be strictly prohibited. The Contractor shall rigorously enforce this regulation.
- b) When overhead work is in progress in or around an occupied area, signs to denote such work prominently displaying "Overhead Work" shall be used and a barricade shall protect the area. Safety nets and appropriate catchments provisions shall be provided at suitable levels so as not to allow any material to fall on the ground.
- c) Dusty work, such as concrete breaking or demolition, in or near occupied areas, shall proceed only after wetting down the area and taking steps necessary to prevent dust from penetrating occupied areas and creating a nuisance.
- d) Care shall be taken not to block any door, passageway, and safety exit, fire fighting equipment, or safety equipment with materials or equipment.
- e) Materials must be piled, stacked, or stored in a neat and orderly manner. All stacking in the site, whether inside or outside a building, shall be parallel to or at right angles to the building line or fence. The stacking of materials shall be organised on daily basis.
- f) When noisy operations of a prolonged nature are necessary in or near an occupied area, arrangements must be made with the Engineer-in-Charge for scheduling to minimize any nuisance in the occupied area.
- g) All critical and dangerous locations / areas at site shall be marked with caution signs, indications and directions in the form of well designed and uniform signage, the design of signage shall be approved by the Engineer-in-Charge.

69.7. If the Field Engineer notifies the Contractor of non-compliance with all or any of the foregoing regulations, the Contractor shall immediately, if so directed, or in any event not more than eighteen (18) hours after receipt of such notice, make all reasonable efforts to correct such non-compliance. If the Contractor fails to do so, the Engineer-in-Charge may suspend all or any part of the Work. When the Contractor has undertaken satisfactory corrective action, Engineer-in-Charge shall lift the suspension of the Work. The Contractor shall not claim any extension of time to complete the Work or additional fees due to any such work suspension.

69.8. Notwithstanding anything herein before contained, the Contractor shall be liable to ensure and implement all safety measures, whether or not statutorily prescribed, to safeguard, preserve and protect the life, health and welfare of every workman employed/deployed/engaged directly or indirectly by the Contractor on the Site and in relation to or connected with the Work and all Vendors employed in later phases of the Work in addition to installing, providing every prescribed safety and protective equipment, clothing etc., and the mere absence of any reference to or specification of a

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particular statute or rule or regulation in this Contract shall not absolve the Contractor of an obligation to comply with every such law, rule or regulation. The obligations stipulated shall not in any manner be deemed to limit or restrict any obligation or duty that any law, rule or regulation may otherwise impose upon the Contractor. The Contractor shall be liable for all consequences/liabilities arising out of his violating any of the aforesaid provisions, including fines, penalties, compensations, damages, prosecutions, proceedings, medical expenditure and costs, rehabilitation costs and all other expenses connected therewith.

70. Child Labour:

70.1. The Contractor shall not employ any labour less than 18(eighteen) years of age on the job. If female labour is engaged, the Contractor shall make necessary provisions at his own expense for safeguarding and care of their children and keeping them clear of the Site. No children shall be permitted at the Site.

71. Contribution towards workers/employee benefits, funds etc

71.1. The Contractor shall include in the Contract Price all expenses necessary to meet his obligations for making contributions toward employee benefits funds (Such as provident fund, Employees State Insurance benefits, ESI, old age pension and/or any other benefits/compensation legally payable) in compliance with all the statutory regulations and requirements. All records in this connection shall be properly maintained by the Contractor and produced for scrutiny by the concerned authorities and the Engineer-in-Charge and the Employer whenever called for.

71.2. Employees State Insurance Scheme (ESI): The Contractor shall be liable to pay his contribution and Employees contribution to the State Insurance Scheme in respect of all labour employed by him or for the execution of the contract in accordance with the provision of "The Employees State Insurance Act, 1948" as amended from time to time.

71.3. Employees Provident Fund (EPF): The Contractor shall obtain prescribed recommendations from the Regional Provident Funds Commissioner under the Employees' Provident Fund and Miscellaneous Provisions Act", 1952 and shall cause provident fund contribution from all eligible employees and Contractor's contribution to be deposited regularly with the prescribed authority and in token of which shall submit every month necessary receipts/ documentary evidence as may be required by the Engineer-in-Charge. The contractor shall also provide its Provident Fund registration number/ certificate to Engineer-in-Charge. In case the contractor fails to comply with above provisions as required by the authorities then the Engineer-in-Charge shall be entitled to do so and recover such amounts including the associated costs incurred by them in doing so, from the contractor. The Contractor must fully satisfy himself as to these points and allow coverage for the same in the rates while giving his tender. Nothing extra shall be paid on these accounts.

72. Setting out and site surveys

72.1. The Contractor shall establish, maintain and assume responsibility for all bench marks and grid lines, and all other levels, lines, dimensions and grades that are necessary for the execution of the Work, in conformity with the Contract Documents. The Contractor shall establish his relation to the permanent benchmarks and boundary lines established at the Site. The Contractor shall verify and co-relate all the survey data available at the Site before commencing the Work and shall immediately report in writing any errors or inconsistencies to the Field Engineer. Commencement of Work by

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the Contractor shall be regarded as his acceptance of the correctness of all survey and setting out data available at the Site and no claims shall be entertained or allowed in respect of any errors or discrepancies found at a later date. If at any time error in this regard appears during his progress of the Work, the Contractor shall at his own expense rectify such error to the satisfaction of the Engineer-in-charge. The approval by the Engineer-in-Charge of the setting out by the Contractor shall not relieve the Contractor from any of his responsibilities, obligations, and liabilities under the Contract.

72.2. The Contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment for all levels and dimensions and for the correctness of every part of the Work, and he shall rectify effectively any errors or imperfections therein. All such rectifications shall be carried out by the Contractor at his own cost and to the instructions and satisfaction of the Engineer-in-Charge

72.3. The Contractor shall employ qualified surveyors to carry out all the surveys and setting out works.

73. Drawings, specifications, interpretations etc

73.1. The drawings included/available with the tender are to be used for general guidance only. These drawings are broadly indicative of the work to be carried out. These drawings are not the "Construction Drawings" and details indicated there in are for guidance only and are liable to be modified by the Engineer-in-Charge during course of actual construction. No claim what so ever shall be admissible on account of changes that may be introduced later by the Engineer-in-Charge.

73.2. In general, the Drawings shall indicate the dimensions, positions and type of construction, the Specifications shall stipulate the quality and the methods and performance criteria, and the Schedule of Rates shall indicate the rates for each item of work for evaluating change orders. However, the above Contract Documents being complementary, what is called for by any one shall be binding as if called for by all. Wherever there is a discrepancy between drawings and specifications, the drawings shall be followed. In interpreting the specifications, the following order of decreasing importance shall be followed:

- i. Bill of Quantities
- ii. Technical Specifications
- iii. Drawing
- iv. CPWD/MoRTH/IRC Specifications
- v. Indian Standard Specification of BIS

73.3. Matters not contained in the specifications and in case of any ambiguities in written specifications of the contract, the works shall be executed as per relevant Bureau of Indian Standards codes and Central Public Works Department specifications MoRTH specifications and IRC specifications in the above order of preference. If such codes have not been framed, the decision of the Engineer-in-charge shall be final. Any work indicated on the Drawings and not mentioned in the Specifications or vice versa, shall be deemed as though fully set forth in each. Work not specifically detailed, called for, marked or specified shall be the same as similar parts that are detailed, marked or specified. From time to time during the progress of the Work, the Contractor will be issued with revisions of Drawings and written instructions by the Engineer-in-Charge in connection with and necessary for the proper execution and completion of the Work. All

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such revisions of Drawings and written instructions shall be part of the Contract Documents and the Contractor shall be bound to carry out the work that is shown and detailed on all such Drawings and shall be bound to follow and comply with all such instructions.

- 73.4. It shall be the responsibility of the Contractor to ascertain and ensure that all the Work is carried out in accordance with the latest revisions of the Drawings issued to him. Should the Contractor fail to do this, all the rectifications and remedial work that may be required to conform to the latest revisions of the Drawings shall be at the Contractor's expense.
- 73.5. Wherever it is mentioned in the Conditions of Contract, Specifications, and other Contract Documents that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at his own cost, unless otherwise provided in the Documents.
- 73.6. No deviations shall be made by the Contractor, in the execution of the Work from the Drawings, Specifications, and other Contract Documents. Only the Engineer-in-Charge shall issue interpretations and clarifications.
- 73.7. The Contractor shall immediately in writing bring any errors or inconsistencies in the Drawings and Specifications to the attention of the Field Engineer for interpretation or correction before proceeding with the affected portion of the Work, and no claims or losses alleged to have been caused by such discrepancies shall be entertained or allowed at any stage. Local conditions, which may affect the Work, shall likewise be brought to the Field Engineer's attention at once. If at any time it is discovered that work, which has been done or is being done is not in accordance with the approved Drawings and Specifications, the Contractor shall correct the work immediately. Correction of such work shall be at the expense of the Contractor and shall not form a basis for any claims for payment or extension of time. The Contractor shall carry out all the rectification work only after obtaining approval for the same from the Engineer-in-Charge.
- 73.8. No scaling of any Drawing shall be done to obtain the dimensions. Figured dimensions on the Drawings shall be used for carrying out the Work. Drawings with large-scale details shall take precedence over small scale Drawings. Where any Drawings and details have not been provided but are necessary for the execution of the Work, it shall be the responsibility of the Contractor to seek these drawings and details in writing from the Engineer-in-Charge at least four weeks prior to the latest date by which the Contractor needs these drawings and details to suit the programmed execution of the Work. No extension of time shall be allowed for any delays caused due to the Contractor's failure to seek such details.
- 73.9. Drawings, Schedule of Rates, Specifications, and other Contract Documents, and all copies thereof furnished by the Engineer-in-Charge shall become the Employer's property. They shall not be used on any other work and shall be returned to the Employer at his request or at the completion of the Contract.
74. Overtime work
- 74.1. If it is necessary for the Contractor or any Sub-Contractor to work on other than working days or outside the normal working hours in order to keep up to the time schedule and meet the Construction Programme, the Contractor shall obtain the prior approval of the Engineer-in-Charge in writing, which approval shall not be unreasonably withheld. The additional cost of wages and any other costs incurred as a result of

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overtime or any shift work (except supervision expenses incurred by the Employer) shall be borne by the Contractor.

- 74.2. Where work is being carried out in or around an operating plant / office or occupied building / premises and is liable to cause disturbance or interruption in working of the Plant / Office or inconvenience to the occupants of the premises, the Contractor shall work only at specified places and times as mutually arranged between the Contractor and the Field Engineer so as not to cause any disturbance. Due to this the Contractor may be required to work during off-hours, Sundays and holidays. The Contractor shall not be entitled for any extra payment for doing work in the manner described above.

75. Materials, workmanship, storage, inspections etc

75.1. Employer Supplied Material

- a) The Employer will not supply any material unless otherwise specified in the contract. Sole responsibility rests with the contractor for procurement of all other materials required for completion of work within the stipulated time.
- b) Materials specified as to be issued by the Employer, if any, will be supplied to the Contractor by the Employer from his stores or the dealer or the dealer's warehouse or railway siding or from any other specified place.
- c) It shall be the responsibility of the contractor to take delivery of the materials and arrange for its loading, transport and unloading at the site of work and to keep the materials under safe custody at the site, at his own cost. The materials shall be issued during working hours only.
- d) The Contractor shall bear all incidental charges for the storage and safe custody of materials as directed by the Engineer, at site after these have been issued to him.
- e) The materials shall be issued in standard sizes as obtained from the manufacturers.
- f) It shall be the duty of the contractor to inspect the materials supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered, it shall be the responsibility of the Contractor to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and/or replaced by the contractor at his own cost, according to the directions of the Engineer-in-Charge.
- g) The Employer shall not be liable for delay in supply or non-supply of any materials, if any, which he has undertaken to supply where such failure or delay is due to natural calamities, transport and procurement difficulties and any circumstances beyond the control of the Employer. In no case, shall the Contractor be entitled to claim any compensation or loss suffered by him on this account.
- h) It shall be the responsibility of the Contractor to arrange in time all the materials required for the works. If, however, in the opinion of the Engineer-in-Charge / Employer, the execution of the work is likely to be

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delayed due to the Contractor's inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge / Employer shall have the right, at his own discretion to arrange for issue of such materials from the market or elsewhere and the Contractor will be bound to take such materials at the rate decided by the Employer. This however, does not in any way absolve the Contractor from responsibility of making arrangements for the supply of such material in part or full, should such a situation occur nor shall this constitute a reason for the delay in the execution of the work.

- i) The Contractor shall, if desired by the Engineer-in-Charge / Employer, be required to execute an indemnity bond in the prescribed form for safe custody and accounting of all materials issued by the Employer.
- j) A day to day account of the materials issued by the Employer shall be maintained by the Contractor, indicating the daily receipt, consumption and balance in hand, in a manner prescribed by the Engineer-in-Charge.
- k) The Contractor shall see that only the required quantities of materials are issued. The contractor shall not be entitled to cartage and incidental charges for returning the surplus materials, if any, to a place as directed by the Engineer-in-Charge.
- l) Materials supplied by the Employer, if any, shall not be used for any other purpose other than that issued for.

75.2. Contractor Supplied material

- a) All the materials including reinforcement steel, cement, bitumen, aggregate etc shall be procured by the contractor. Quoted rate to include labour, basic cost of material, cost of accessories, taxes, payment to suppliers, transportation, handling, storage, safety, wastage, accounting and reconciliation and to provide Form -C & 38 and any other documents/formalities for purchase of materials, cost of electricity, water, WCT, VAT and Contractor's overheads and profits etc.
- b) In case the Contractor fails / refuses to procure and provide any material, the Engineer-in-Charge in the interest of the work may resort to procure and provide such materials at the risk and cost of the Contractor. Under such circumstances an extra procurement charge @ 15% of the respective item rates shall be imposed on the Contractor and recovered from his bills / any outstanding payments.
- c) The materials shall be fully accounted for by the Contractor as required hereinafter. In accounting for the materials with allowances to cover all wastages and losses that may have been incurred in the process of handling, storing, cutting, fabrication, fixing and installing. The contractor shall submit statement of account and reconciliation of material lying in Contractor's stores along with each Running Account Bill and consolidated statement of reconciliation along with Final Bill.
- d) The Contractor shall, at all times when requested, satisfy the Engineer-in-Charge by the production of records or books or submissions of returns that the materials are being used for the purpose for which they are

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procured and the Contractor shall at all times keep the records updated to enable the Engineer-in-Charge to apply such checks as he may desire to impose. The Contractor shall, at all times, permit the Engineer-in-Charge to inspect his godown. The Contractor shall not, without prior written permission of the Engineer-in-Charge, utilise or dispose of the materials for any purpose other than intended in the Contract.

75.3. Materials and workmanship:

- a) The Contractor shall be responsible for the establishment of a full and comprehensive quality control system for the Work. The system shall include, but not be limited to, the means of controlling the testing and receipt of materials, the inspection of the Work, the filing and ordering of drawings and correspondence and the duties and responsibilities of staff members.
- b) All materials and equipment to be incorporated in the Work shall be new unless there is specific provision in the contract for reusing old good quality material. The materials, equipment, and workmanship shall be of the best quality of the specified type, in conformity with Contract Documents and the best engineering and construction practices, and to the complete satisfaction of the Engineer-in-Charge. This requirement shall be strictly enforced at all times and stages of the Work and no request for change whatsoever shall be entertained on the grounds of anything to the contrary being the prevailing practice. The Contractor shall immediately remove from the Work any materials, equipment and/or workmanship which, in the opinion of the Engineer-in-Charge, are defective or unsuitable or not in conformity with the Contract Documents and best engineering and construction practices, and the Contractor shall replace such rejected materials, equipment and/or workmanship with proper, specified, required and approved materials, equipment and/or workmanship, all at his own cost within a period of seven (7) days from the date of issuance of such notice.
- c) The Contractor shall, whenever required to do so by the Engineer-in-Charge, immediately submit satisfactory evidence and necessary test results as to the kind and quality of the materials and equipment.

75.4. Special makes or brands:

- a) Where special makes or brands are called for, they are mentioned as a standard. Others of equivalent quality may be used provided that Engineer-in-Charge considers the substituted materials as being equivalent to the brand specified, and prior approval for the use of such substituted materials is obtained in writing from the Engineer-in-Charge.
- b) Unless substitutions are approved by the Engineer-in-Charge in writing in advance, no deviations from the Specifications and other Contract Documents shall be permitted, the Contractor shall indicate and submit written evidence of those materials or equipment called for in the Specifications and other Contract Documents that are not obtainable for

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incorporation in the Work within the time limit of the Contract. Failure to indicate this in writing will be deemed sufficient cause for denial of any request for an extension of time and /or additional cost because of such circumstances.

- c) Alternative equivalent brands if suggested by the Contractor during construction may be considered if approved brand is not available in market, provided the suggested brand fully meets the requirements and is acceptable to the Engineer-in-Charge.

75.5. Contractor shall be responsible for providing, at his own cost, proper and adequate security for all the materials and equipment stored at the Site so as to prevent any theft, pilferage etc., and the Contractor shall be responsible and liable for all the matters in connection with such security or the lack thereof. Where, after permission has been sought and obtained from the Engineer-in-Charge, any material or equipment is kept on any portion of the structure, this shall be done in such a manner as to prevent any overloading whatsoever of the structure, to the complete satisfaction of the Engineer-in-Charge. The cost associated with any damage to any portion of the structure in this respect shall be to the account of the Contractor and shall be borne by him. Should delays be caused on account of removal and replacement of any materials or equipment or on account of any lack of security, the Contractor shall not be entitled to any extension of time or increase in the Contract Price. Wherever applicable the storage of materials shall be in accordance with the relevant Indian Standard Specifications. Reinforcement bars shall be stored diameter-wise over raised sleepers and protected from rain in suitable manner as approved by the Engineer-in-Charge. Similarly, structural steel sections shall also be stored in the yard in a proper orderly manner.

75.6. Certificates: The Contractor shall furnish, at his own cost, test certificates, calibration certificates for the various materials and equipment as called for by the Engineer-in-Charge. Such test certificates should be for the particular consignment/lot/piece as decided by the Engineer-in-Charge. The details in respect of the test and calibration certificates shall be as decided by the Engineer-in-Charge for the relevant items.

76. Construction programme and Site order book

76.1. Construction Programme:

76.1.1. The contractor should furnish an overall construction programme for the approval of the Engineer-in charge before the start of the works. The construction programme shall clearly show all the sequential activities of work required to be carried out from the commencement of the Work up to the Virtual Completion.

76.1.2. The construction programme shall be based on the mutually agreed milestones.

76.1.3. Every month, or sooner if required by the Engineer-in-Charge, the approved programme charts shall be reviewed in relation to the actual progress of the Work, and shall be updated as necessary. If at any time it appears to the Engineer-in-Charge that the actual progress of the Work does not conform to the approved programme, the Contractor shall produce, at its expense and without reimbursement therefore, a revised programme showing the modifications to the approved programme and the additional input of resources by the Contractor necessary to ensure completion of the Work within the time stipulated for completion.

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76.1.4. The submission to and approval by the Engineer-in-Charge of such programmes or the furnishing of such particulars shall not relieve the Contractor of any of his responsibilities, obligations and liabilities under the Contract.

76.2. Site Order Book/Work spot Order Book –shall be maintained at the Site as per the provisions contained in the Revised Kerala PWD Manual-2012.

76.3. Site Register:

76.3.1. The Contractor shall maintain a site register that records the name and time of arrival and departure, at Site, of any visitors.

77. Protections of works:

77.1. The Contractor shall take full responsibility for the proper care and protection of the Work from commencement of work until completion and handing over of the Work to the Assistant Engineer at no additional cost. The Contractor shall protect and preserve the Work in every way from any damage, fire or accident, including by providing temporary roofs, boxing or other construction as required by the Engineer-in-Charge. This protection shall be provided for all property on the Site as well as adjacent to the Site. The Contractor shall adequately protect, to the satisfaction of the Engineer-in-Charge, all the items of finishing work to prevent any chipping, cracking, breaking of edges or any damage of any kind whatsoever and to prevent such work from getting marked or stained or dirty. Should the Contractor fail to protect the Work or any part thereof and should any damage be caused to the same, the Contractor shall be responsible for all replacement and rectification, as directed by the Engineer-in-Charge, and all costs and expenses in connection with such replacement and rectification shall be to the account of the Contractor and shall be borne by him.

77.2. The Contractor shall in connection with the Work provide and maintain at his own cost all lights, security guards, fencing and anything else necessary for the protection of the Work and for the safety of the public and everyone associated with the Work, all to the approval and satisfaction of the Engineer-in-Charge.

77.3. All operations necessary for the execution of the Work shall be carried out so as not to interfere with the convenience of the public, or with the traffic, or the access to, use and occupation of public or private roads and footpaths or of properties whether in the possession of the Employer or of any other person. The Contractor shall save harmless and indemnify the Employer & Engineer-in-Charge in respect of all claims, proceedings, damages, costs, charges, and expenses whatsoever arising out of or in relation to any such matters.

78. Cleaning of works and clearing of site:

78.1. The Contractor shall maintain the Site, adjoining areas within 20 meters all around site and all Work thereon in neat, clean and tidy-conditions at all times. The Contractor shall remove all rubbish and debris from the Site and adjoining areas on daily basis and as directed by the Field Engineer. Suitable steel skips shall be provided at strategic locations around the Site to receive waste and packaging materials.

78.2. Just prior to the Virtual Completion of the Work, or whenever so directed by the Engineer-in-Charge, the Contractor shall carry out all the work necessary to ensure that the Site & 20 meter area all around site is clear and the Work are clean in every respect, the surplus materials, debris, sheds and all other temporary structures are removed from the Site, all plant and machinery of the Contractor are removed from site, the areas under

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floors are cleared of rubbish, the gutters and drains are cleared, the doors and sashes are cased, the locks and fastenings are oiled, all electrical, plumbing and other services are tested and commissioned, the keys are clearly labelled and handed to the Assistant Engineer, so that at the time of Virtual Completion the whole Site and the Work are left fit for immediate occupation and use, to the approval and satisfaction of the Engineer-in-Charge and the Employer.

- 78.3. Should the Contractor fail to comply with the cleaning requirements, whether progressively or before completion, or fail to clear the Site and 20 meter area all around site as directed and required, then the Engineer-in-Charge, after giving due notice in writing to the Contractor, shall have the right to employ other persons or agencies to carry out the cleaning and/or clearing work and all costs incurred on such work shall be recovered from the Contractor and shall be deducted by the Employer / Engineer-in-Charge from any money that may be payable or that may become payable to the Contractor.

79. Settlement of disputes

- 79.1. Arbitration shall not be a means of settlement of any dispute or claim out of this contract. All disputes and differences arising out of the contract may be resolved through discussions between the Employer and the Contractor within the purview of the contract agreement. If such discussions are not fruitful, the disputes shall be settled only by the Civil Court in whose jurisdiction the work covered by the contract is situated, or in whose jurisdiction the contract was entered into in case the work extended to the jurisdiction of more than one court.

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Part III- SPECIAL CONDITIONS OF CONTRACT

1. General

1.1. The Special Conditions of Contract are an extension of and are to be read in conjunction with the General Conditions of Contract. Should there be any contradictory requirements in the two, the requirement as per the Special Conditions of Contract shall prevail.

2. Reference drawings

2.1. The Contractor shall maintain on site one set of all Drawings issued to him for reference.

3. Completion drawings(As Built) & Measurement books

3.1. On completion of the Work, the Contractor shall submit three (3) complete sets of drawings and marked up prints of "AS BUILT" drawings verified and approved by the Engineer-in-Charge. These drawings shall include and show all the changes / deviations made from the working drawings during the course of construction and also the other details as called for by the Engineer-in-Charge. During the execution of the Works a set of drawings prepared initially shall be retained in the Contractors Site Offices for the exclusive purpose of recording changes made to the Work as the construction proceeds. The drawings shall be prepared on computer through CAD Software and provided to the Engineer-in-Charge as hard and soft copy.

3.2. Along with the completion drawings the Contractor shall also prepare and submit to the Engineer-in-Charge, a complete set of all final measurement of works in the form of bound measurement books and a soft copy of the same. Measurement Books shall incorporate the standard measurements of the items as per the completion / as built drawings in modules finalized in consultation with the Engineer-in-Charge.

4. Testing of installations:

4.1. All water retaining structures and the basement shall be tested as specified for the waterproof qualities, in the presence of the Engineer-in-Charge or his authorised representative. The Contractor shall also perform all such tests as may be necessary and required by the Engineer-in-Charge to ensure quality of the executed works. The Contractor shall provide all labour, equipment, and materials etc., required for the performance of the tests.

5. Quality assurance and Quality Control

5.1. The Contractor shall establish an effective quality control system at the Site and implement the same through an independent team consisting of qualified and experienced Engineers and technical personnel to enforce quality control on all items of the Work at all stages. Generally the following are to be noted regarding the quality control of the works in this contract.

5.2. Quality control of various items in this Work shall be governed by the provisions of Kerala PWD Quality Control (QC) Manual approved vide GO(Rt) No-1339/2015/PWD dated 10-9-2015 and Kerala PWD Quality Control laboratory Manual approved vide GO(Rt) No-1346/2015/PWD dated 11-9-2015 and subsequent modifications if any.

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- 5.3. The intending Bidders are expected to familiarize with the contents of QC manual before participating in the bid.
- 5.4. Technical audit as envisaged in clause 2406 of the revised PWD Manual-2012 shall be carried out for this Work. The contractor shall extend full cooperation to the agency entrusted with the technical audit.
- 5.5. The contractor shall extend full cooperation to the departmental officers of quality control wing for taking samples, curing and keeping them in safe custody whenever required. The contractor shall issue proper acknowledgement for samples so kept in his safe custody.
- 5.6. The Contractor is to mobilise technical personnel who are well versed with quality control tests and other guidelines stipulated in the QC manual.
- 5.7. The selected Bidder shall establish site laboratories with required facilities.
- 5.8. Being the agency entrusted with execution of the Contract, the primary responsibility for ensuring quality of each item of work in this Contract is vested with the Contractor. Engineer-in charge or his Representatives shall issue guidelines as and when required for ensuring Quality Control, which the Contractor has to follow.
- 5.9. The Engineer and his Representatives shall have the right to direct Contractor to remove materials supplied which do not conform to standards specified.
- 5.10. The contractor shall conduct first tier quality control tests for all items of work at the site laboratory as per the procedure and frequency stipulated in the PWD Quality Control manual at his own expense.
- 5.11. The Contractor is bound to carry out rectification works at his own cost, if results obtained during quality control tests either in the first-tier or second-tier do not comply with the standards. He shall also carry out rectification works, if any pointed out during technical audit done after completion of work.
- 5.12. The decision of the Engineer-in-charge regarding compliance of test results and rectification works to be done shall be final and binding on the contractor.
- 5.13. Payment for works which are to be re-done or rectified will be made only after the Engineer-in charge, after inspection, certifies in writing that the rectifications have been done satisfactorily and the results of the tests conducted after the rectification comply with the specified values.
- 5.14. Third party testing shall be done in an independent approved laboratory, if there is dispute due to difference in the test results of first-tier and second-tier testing or if any manipulated results are suspected. In case, certain specific tests cannot be carried out with the facilities available in the Contractor's site laboratory or the Department laboratories, third party laboratory testing shall be resorted to.
- 5.15. Engineer in charge shall decide whether third party testing is required to settle a dispute. His decision will be final and binding on the Contractor.
- 5.16. Third party tests, if approved by the Engineer-in charge shall be arranged by the Contractor in an approved laboratory as directed by the Engineer-in-charge. It is desirable that the test shall be done in the presence of the representatives of the Engineer-in charge and the Contractor to eliminate any further disputes. The expenses shall be met by the Contractor. The result obtained in the test shall be final and binding on both the Contractor and the Employer.
- 5.17. Wherever specified, the contractor shall also obtain manufacture's test certificate from the manufacturer/dealer and submit the same before executing the items listed in

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such certificates. Contractor shall be responsible for the genuineness of the Manufacturer's Test Certificate obtained and submitted by him. Contractor shall record a statement in the Manufacturer's Certificate that

*"This Certificate for supply of (Name of material with item
no in BQ) has been obtained by me from (Name and
address of Manufacturer/Dealer) on (date of receipt of certificate) for
the actual materials supplied at site"*

5.18. The rate quoted by the Bidder shall include all expenses for carrying out the first tier quality control tests. Expenses for third party tests as detailed in clause 7.4 of the introduction to QC Manual, if required, shall also be borne by the Contractor.

6. Drilling, cutting etc.

6.1. All cutting and drilling of walls or other elements of the building or structure for the proper entry/installation of inserts, boxes, equipment, etc. shall be carried out using electrically operated tools only. Manual drilling, cutting, chiselling, etc. shall be permitted with the written approval of Agreement authority. No structural member shall be cut or chased without the written permission of the Engineer-in-Charge. Cutting and drilling of structural members shall be carried out using vibration free diamond wire sawing and diamond drilling only with prior permission from the Engineer-in-Charge. The costs for procurement and using such equipment are deemed to be included in the Contract and no extra costs will be paid.

6.2. Horizontal cutting of walls or other supporting structural elements for laying pipe conduits, water supply lines etc., shall be avoided as far as possible. Conduits shall be laid through lintels or slabs or similar elements without affecting the structural safety. The conduits shall be connected to the required locations through vertical cuts in the walls or the supporting elements.

7. Approval by statutory bodies:

7.1. The Employer will handle commencement Certificate, No Objection Certificate and Occupation Certificate if applicable under this Contract. The contractor shall be responsible for providing required notices to authorities and to obtain and retain with him at his own cost all other approvals from the statutory bodies pertaining to works under this tender and temporary structures to be constructed at site or equipments to be erected, labour, Employee Insurance, Provident Funds, Tax Departments, etc and any other approval required to facilitate performance of Contractor's work under the Contract till completion. Refusal by statutory authorities to issue any certificate or any other approvals due to the Contractor's failure to observe the relevant rules and regulations in connection of the construction in accordance with the sanctioned plans and/or specifications shall render the Contractor liable for damages and in addition, render him liable to obtain such certificates at his cost.

8. Name board and publicity

8.1. The contractor is not entitled to do any publicity on account of the Work. Contractor shall not put any hoarding, publish any advertisement, put any banner or circulate any pamphlet or adopt any other publicity methods except with prior written approval of the

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Engineer-in-Charge. A name board may be made and displayed by the Contractor at his own cost at the Site at some approved place. The drawing of the Name Board shall be got approved from the Engineer-in-Charge.

The contents of the board shall be as follows:-

- i. Name of the Work.
- ii. Name of the Employer.
- iii. Name of Agreement Authority with address
- iv. Engineer-in-Charge and Field Engineers with contact details.
- v. Contracting Agency with contact details.
- vi. Contract Price, Date of Start and Expected date of Completion

9. Water and Electricity

- 9.1. Contractor shall make his own arrangement for electricity and water for construction purposes. The water used for construction purpose shall be potable and tested once in every 6 (six) months. The source of water shall be approved by the Engineer-in-charge.
- 9.2. The contractor shall arrange the water good for construction and personal use at his own cost and shall be responsible for all further connections, pumps, pipes, storage facilities and all other things necessary to distribute and use services from this distribution point.
- 9.3. The electricity required for Construction Work shall be arranged by the Contractor from the authorities and/ or generators provided at the site at his own cost. Contractor shall be responsible for all distribution points as may be required for the Work. The Contractor shall also make arrangement for alternative standby services at his own cost in the form of additional Generators of adequate capacity (day and night) so that there is no delay in progress of Work as per construction schedule submitted by him and approved by the Engineer-in-Charge. Contractor shall ensure adequate capacity of generators to support such load sharing with other vendors.
- 9.4. The Contractor shall prepare schematic distribution diagrams of distribution of electricity and water for construction purposes incorporating all safeties and get them approved by the Engineer-in-Charge, the distribution at site shall be in accordance to the approved schematic. The contractor shall ensure incorporation and strict implementation of all safety parameters, equipments, instruments and directions given by the Engineer-in-Charge from time to time in this regard.
- 9.5. The contractor shall install the temporary distribution lines for water and electricity ensuring that work of other agencies / vendors is not interrupted or hampered. In case during the course of construction these lines foul or interrupt or hamper the work of other agencies / vendors, the contractor shall remove and relocate the service lines and relocate the same at his own cost within the time stipulated by the Engineer-in-Charge.
- 9.6. All statutory Fees, & miscellaneous expenses and costs for electric power and Water connection for construction purposes shall be borne by the Contractor.

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10. Price Adjustment (applicable only for works having TOC greater than 18 months)

10.1. The formula(e) for adjustment of prices are:

R = Total value of work done during the month. This would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.

10.2. Adjustment for labour component

Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_1 / 100 \times R \times (L_i - L_o) / L_o, \text{ where}$$

V_L = increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour.

L_o = the consumer price index for industrial workers for the State on 28 days preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.

L_i = The consumer price index for industrial workers for the State for the period under consideration as published by Labour Bureau, Ministry of Labour, Government of India.

P_1 = Percentage of labour component of the work.

10.3. Adjustment for cement component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula.

$$V_c = 0.85 \times P_c / 100 \times R \times (C_i - C_o) / C_o, \text{ where}$$

V_c = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for cement

C_o = The all India average wholesale price index for Grey cement for on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

C_i = The all India average wholesale price index for Grey cement for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi

P_c = Percentage of cement component of the work

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10.4. Adjustment of Bitumen component

Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \times P_b / 100 \times R \times (B_i - B_o) / B_o, \text{ where}$$

V_b = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.

B_o = The official retail price of bitumen at the IOC depot at nearest centre on the day 28 days prior to date of opening of Bids.

B_i = The average official retail price of bitumen at IOC depot at nearest centre for the 15th day of calendar month under consideration.

P_b = Percentage of bitumen component of the work.

10.5. Adjustment for steel component

Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R \times (S_i - S_o) / S_o, \text{ where}$$

V_s = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel

S_o = The all India wholesale price index for reinforcement steel (Bars and Rods) on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

S_i = The all India average wholesale price index for reinforcement steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi

P_s = Percentage of steel component of the work

Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

10.6. Adjustment of POL(fuel and lubricant)component

Price adjustment for increase or decrease in cost fuel and lubricant shall be paid in accordance with the following formula:

$$V_f = 0.85 \times P_f / 100 \times R \times (F_i - F_o) / F_o, \text{ where}$$

V_f = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for fuel and lubricants.

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Fo = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at the nearest centre on the day 28 days prior to the date of opening of Bids.

Fi = The official retail price of HSD at the existing consumer pumps of IOC at nearest centre for the 15th day of the calendar month under consideration.

Pf = Percentage of fuel and lubricants component of the work.

Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.

10.7. Adjustment for Plant and Machinery Spares component

Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula:

$V_p = 0.85 \times P_p / 100 \times R \times (P_i - P_o) / P_o$, where

Vp = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for plant and machinery spares

Po = The all India wholesale price index for heavy machinery and parts on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi

Pi = The all India average wholesale price index for heavy machinery and parts for the month under consideration as published by Ministry of Industrial Development, New Delhi

Pp = Percentage of plant and machinery spares component of the work

Note: For the application of this clause, index of Heavy Machinery and Parts has been chosen to represent the Plant and Machinery Spares group.

10.8. Adjustment of Other materials component

Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the contractor shall be paid in accordance with the following formula:

$V_m = 0.85 \times P_m / 100 \times R \times (M_i - M_o) / M_o$, where

Vm = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.

Mo = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.

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Mi = The all India wholesale price index (all commodities) for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

Pm = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

The percentages given in the Contract Data will govern the price adjustment for the entire contract.

*[The Tender inviting authority shall fill up the percentages as per the requirement in the Works which are to be decided based on the Work components and type]

11. Protection / preservation of trees:

11.1. Contractor shall take all measures necessary to ensure the protection and preservation of existing trees within / outside the boundary of the site. Contractor shall be responsible of any damage / casualty to the trees happening as a result of his working at site and for any action, claim, penalty or expenses imposed by the forest / any other department. No claim / payment shall be payable to the contractor on this account.

12. Sub-Contracting

12.1. No subcontracting shall be done without prior written approval of Agreement Authority. Maximum value of works to be sub-contracted is limited to 25% of Contract value. The value of a sub-contract and Provisional Sums items as and when awarded, should be intimated by the Contractor to the Engineer-in charge and it should also be certified that the cumulative value of the sub-contracts awarded so far is within the aforesaid limit of 25%. A copy of the contract between the Contractor and Sub-Contractor shall be given to the Engineer within 15 days of signing and in any case 7 days before the Sub Contractor starts the Work and thereafter the Contractor shall not carry any modification without the consent in writing of the Engineer. The terms and conditions of sub-contracts and the payments that have to be made to the sub-contractors shall be the sole responsibility of the Contractor. Payments to be made to such sub-contractors will be deemed to have been included in the Contract price. However, for major sub-contracts (each costing over Rs 50 lakhs), it will be obligatory on the part of the Contractor to obtain consent of the Engineer. The Engineer will give his consent after assessing and satisfying himself of the capability, experience and equipment resources of the sub-contractor. In case the Employer intends to withhold his consent, he should inform the Contractor within 15 days to enable him to make alternative arrangements to fulfil his programme.

12.2. The Contractor shall provide sufficient superintendence, whether on the site or elsewhere, to ensure that the work to be carried out by a sub-contractor complies with the requirements of the Contract.

12.3. The proposed sub-contract terms and conditions shall impose on the sub-contractor such terms of the Contract as are applicable and appropriate to the part of the Works to be sub-contracted, to enable the Contractor to comply with his obligations under the Contract.

12.4. Notwithstanding any consent to sub-contract given by the Engineer, if in his opinion it is considered necessary, the Engineer-in-charge shall have full authority to

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order the removal of any sub-contractor from the Site or off-Site place of manufacture or storage.

13. Specialised Works to be carried out by licensed persons/firms:

13.1. Technically competent persons or firms holding valid licenses obtained from competent local authority/ proven experience record shall only carry out any special works and service installations included in the scope of the Work. The list of such special works are available in the Government order No-GO(Ms) No-65/2015//PWD dated 24-7-2015.

14. Contractor's temporary works design

14.1. The Contractor shall, prior to commencing the construction of any temporary Works like earth protection works for deep excavations, temporary platforms/formworks for heavy concreting etc, submit a certificate to the Engineer signed by him certifying that the temporary Works have been properly and safely designed and checked to carry the intended load without failure and that the Contractor has checked the effect of the Temporary Works on the Permanent Works and has found this to be satisfactory. The Employer and the Engineer shall not be responsible for any failure of such temporary structures and the Contractor is bound to take care of all expenses related to such failures, its rectification and subsequent remedial measures if any at no extra cost.

15. Deduction towards the cost of Bitumen if supplied by the Employer

15.1. The cost of bitumen will be recovered at the rate specified in contract data which is excluding cost of empty drum and empty drum of bitumen used on the work should be returned in good condition. If empty drum is not returned in good condition, the value of empty tar drum will be recovered at the rates specified in contract data as per rules. Also the rate for recovery of excess Bitumen used if any shall be double the issue rate or market rate whichever is more.

16. Contractors Technical Personnel at site

16.1. The contractor shall employ Technical personnel in addition to other supporting staff as detailed below for tenure of the contract for works supervision depending upon the cost of work.

a) For works, Estimated cost from Rs.500 lakhs to Rs.20 Crores-

- i. Works Manager- 1no.(Civil Engineering Graduate with minimum 3 years experience)
- ii. Site Engineer - 2 nos (1 no for supervision and 1 no for Quality Control) - (Civil Engineering graduate with minimum 1 year experience)
- iii. Supervisor - 2 nos (Civil Engineering Diploma holder with minimum 1 year experience)
- iv. Supervisor(Mechanical) (if required) - 1 no (Mechanical Engineering Diploma holder with minimum 1 year experience)

b) For works, Estimated cost above Rs.20 crores

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- i. Works Manager- 1no.(Civil Engineering Graduate with minimum 5 years experience)
- ii. Site Engineers- 3 nos (2 nos for supervision and 1 no for Quality Control) - (Civil Engineering graduate with minimum 3 years experience)
- iii. Supervisor - 4 nos (Civil Engineering Diploma holder with minimum 2 year experience)
- iv. Supervisor (Mechanical) (if required) - 1 no (Mechanical Engineering Diploma holder with minimum 2 year experience)

16.2. If the Contractor fails to employ the required engineering personnel at site as per the above, the Engineer-in charge shall impose a penalty for non-engaging the required personnel at site at the appropriate daily wages rates published by the Government (Finance Department - Enhancement of remuneration of daily wage personnel and persons on contract appointment) prevailing at the time of such non engagement on a per day basis. This amount shall be deducted from any moneys due to the contractor by way of this contract.

17. Contractors Equipments at site

17.1.The contractor shall own/hire/deploy the required tools and plants as specified in the Contract data for the satisfactory execution of the work

18. Special conditions for KVAT as per the Kerala Finance Act 2008

18.1.In case of Civil works awarded by Government of Kerala deduction towards KVAT at the prevailing rates(as provided in the Contract Data) will be done on the gross amount of bill payable for the Bidders every time. The VAT amount will be retained by the Engineer-in charge when the bill for the work is passed for payment and the amount so retained shall be credited to the Sales Tax Department. Necessary certificates in this regard shall be issued to the Contractor in due course.

19. Special condition towards contribution of Kerala Construction Workers Welfare Fund Board.

19.1.Deduction towards the Kerala Construction Workers Welfare Fund Board contribution will be made at the prevailing rate(as provided in the Contract Data) from any bill amount which includes cost of departmental materials and hire charges of departmental tools and plants . This amount shall be remitted to K.C.W.W.F. by the Engineer-in charge within 15 days of the payment to the Bidder. Necessary certificates in this regard shall be issued to the Contractor in due course.

20. Advance Payments

20.1.Mobilisation Advance

20.1.1. This clause shall be applicable only when so provided in 'Contract Data'.

20.1.2. Mobilization advance, shall not exceed 10% of the Contract price may be given, if applicable and requested by the contractor in writing within one month of the order to commence the work. Such advance shall be in two or more instalments as provided in the Contract Data. The first instalment of such advance shall be released by the Engineer-in-charge to the contractor on a request made by the contractor to

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the Engineer in- Charge in this behalf. The second and subsequent instalments shall be released by the Engineer- in- Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier instalment to the entire satisfaction of the Engineer-in-Charge.

20.1.3. Before any instalment of advance is released, the contractor shall execute an unconditional Bank Guarantee from a Nationalised or Scheduled Bank for the amount equal to the amount of advance and valid for the contract period. This Bank Guarantee shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

20.1.4. Mobilisation advance shall be deducted from the next immediate interim payment at the rate of 25% of the amounts of all Interim Payment Certificates until such time as the advance has been repaid, always provided that the advance shall be completely repaid prior to the expiry of the original/extended time for completion.

20.2. Secured Advance for non-perishable materials

20.2.1. This clause shall be applicable only for the items so provided in 'Contract Data'.

20.2.2. The contractor, on signing an indenture in the form to be specified by the Engineer-in- Charge, shall be entitled to be paid during the progress of the execution of the work up to 75% of the assessed value of any materials which are in the opinion of the Engineer-in- Charge non-perishable, non-fragile and non-combustible and are in accordance with the contract conditions and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered /deducted from the next payment made under any of the clause or clauses of this contract.

20.2.3. Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-Charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer- in-Charge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

20.2.4. Secured advance, if paid, shall be recovered from each succeeding interim payment to the extent materials have been incorporated into the Works.

20.3. All advance payments shall be completely recovered before end of 80% of Contract period.

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21. Clause 1.3 of ITB (Instructions to Bidders) stands modified by adding a new sub clause 1.3.7 as under

1.3.7 The Bidder shall have valid GST Registration.

22. Clause 3.3.5 of ITB stands modified as under

The rate quoted by the bidder shall include all taxes duties and Construction Workers Welfare Fund Contribution etc except the GST (Goods and Services Tax) and the Government will not entertain any claim whatsoever in respect of the same. However, in respect of GST, wherever legally applicable the same shall be paid by the contractor to the concerned Authorities as per the prevailing rules. The payment for any bills as per this contract shall be made for the total value of the works at the contract rate plus the applicable GST rate at the time of billing. Any variation in tax rate of GST (increase or decrease) after the last date of tender submission shall be adjusted at the time of settlement of bills. TDS and other deductions shall be made on payments excluding GST.

23. Clause 3.3.7 of ITB stands modified as under

No material will be issued by the department for executing the building works under this contract. However, for road works costing up to Rs. One Crore, bitumen will be issued departmentally. In cases where departmental supply materials were used in the work/works, where the tender item specification does not specify departmental supply specifically, then recoveries shall be made from the amount due to the Contractor for those departmental supply items at the rates based on the departmental data rate at the time of issuing technical sanction. Department Road roller will be issued, if available at the time of execution. If road roller is issued for a work, hire charges at the rates fixed by the department along with contractor's profit will be recovered from the bill submitted by the contractor.

24. Clause 4.3 of ITB stands modified by adding a new sub-clause 4.3.12 as under

4.3.12 Self attested Copy of the bidder's valid GST registration certificate issued by Government of India as per clause 1.3.7.

25. Clause 4.4 of ITB stands modified by adding a new sub-clause 4.4.1.9 as under

4.4.1.9 Self attested Copy of the bidder's valid GST registration certificate issued by Government of India as per clause 1.3.7

26. Clause 5.5.1 of Instruction to Bidders stands modified as under

For tender evaluation purpose, the bidder who has quoted the lowest total amount shall be considered as L1. If required, the Tender Inviting Authority may resort to negotiation with the L1 Bidder only, to explore the possibility of bringing down the high quoted rate items if any to an acceptable level. For this purpose, the **high quoted rates** are those for which the quoted rates are more than the current schedule of rates.

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27. Clause 7.7 of Instruction to Bidders stands modified as under

For item rate contracts, for each item in the BoQ, if the rate quoted by the bidder falls below 10% of the estimate rate for that item, then the additional performance guarantee is to be required to be deposited for that item. (If the rate quoted by the bidder for an item of work is "x%" below estimate cost where x lies above 10%, the additional performance guarantee for that item of work is equal to (x-10)% of the estimate amount for that item of work). The total of additional performance guarantee for the whole work is the total of individual additional performance guarantee for each item of work calculated as above. 50% of additional performance guarantee shall be in the form of Treasury fixed deposit and rest in the form of Guarantee issued from any Nationalised/Scheduled Bank/Kerala Financial Corporation or any other forms prescribed in Kerala PWD manual. Additional performance Guarantee shall be collected before the execution of agreement and shall be valid for a period not less than 28 (twenty-eight) days after the completion of works. The Bank Guarantee on installment basis with lesser period validity shall not be accepted. This will be released only after satisfactory completion of the work without any interest while passing the final contract bill.

28. Clause 4.1 of GCC stands modified as under

The Contract shall be an item rate Contract wherein the item rates are for the finished work as per the Contract Documents. The estimated cost is tentative based on the estimated quantities and is liable to change during execution as per the actual quantities executed and approved by the Engineer-in charge. The Contractor understands and agrees that the amount payable is assessed on a re-measurable basis in accordance with the BOQ rates. The Contract Price shall include payment for the supply of all labour (including payment to his Sub-Contractors), equipment, materials, plant and machinery, tools, transportation, formwork, scaffolding, works under this contract and all applicable taxes, duties, octroi, levies, royalties, fees, insurance premiums, contributions towards employees benefits including Employee State Insurance and Provident Funds, arrangement of power and water and all services and activities constituting the Scope of Work defined in the General Conditions of Contract. The Contract Price shall also include expenses for the Contractor's site establishment, infrastructure, overheads & profits, establishing site laboratories (for works costing more than Rs. 2 Crores), first tier quality control tests, expenses for all rectifications including that necessitated as a result of bad quality and all other charges required by the Contract to be borne by the Contractor and necessary for the proper execution and completion of the Work under the Contract, in conformity with the Contract Documents and according to the best engineering and construction practices and to the satisfaction of the Engineer-in-charge. Goods & Services tax (GST), wherever legally applicable, shall be paid by the contractor to the concerned Authorities and the Employer shall pay the applicable GST to the Contractor at the time of settlement of bills for the works done as per this contract.

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29. Clause 10.1 of General Conditions Contract stands modified as under

The Employer/Engineer-in charge reserves the right to vary the quantities of items or groups of items to be ordered as specified in the Bill of quantities, as may be necessary, during the execution of the Contract. The following are defined for the purpose of this clause

- 10.1.1 Abnormally High Quoted Rate (AHQR) -Items for which the quoted rate is having a deviation of more than 25% over the corresponding rate in the technically sanctioned estimate.
- 10.1.2 Abnormally Low Quoted Rate (ALQR) -Items for which the quoted rate is having a deviation of less than 25% below the corresponding rate in the technically sanctioned estimate.
- 10.1.3 For AHQR items, the Contractor is bound to execute up to the agreed quantity. In case of variation over the agreed quantity, the admissible rate for the excess quantity shall be limited to the technically sanctioned estimate rate modified by the overall tender excess/tender deduction subjected to a maximum of the PWD local market rate prevailing at the time of ordering the excess quantity.
- 10.1.4 For other items, the Contractor is bound to execute up to 25% over the agreed quantity. In case of variation over 25% of the agreed quantity, the admissible rate for the excess quantity shall be limited to the technically sanctioned estimate rate modified by the overall tender excess/tender deduction subjected to a maximum of the PWD local market rate prevailing at the time of ordering the excess quantity.
- 10.1.5 No increase shall be permitted within the original contract period and the rate in excess of market rate shall not be given under any circumstances. Upon rate revision shall be considered only in exceptional cases which shall be approved by the Employer for the enhanced rates based on the recommendation of the Engineer.
- 10.1.6 Subjected to clause 10.1.3 and 10.1.4, the department reserves the right to arrange such varied quantities of works through a separate contract.
- 10.1.7 For percentage rate contracts, in case of variation in quantities over 25% of agreed quantity, no change in rate will be permitted under any circumstances.

30. Clause 39.5.2 and 39.5.3 of the General Conditions of Contract stands modified as under

39.5.2 In the case of extra items whether additional, altered or substituted and for which similar items do not exist in the contract and rates exists in the prevailing departmental data rate, the rates shall be arrived at on the basis of the departmental data rate at the time of issuing technical sanction modified by overall tender excess/tender deduction except on cost of departmental material.

39.5.3 In the case of extra items whether additional, altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from the departmental schedule of rates the rates for such part or parts of items which are not

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covered in the schedule of rates shall be determined by the Engineer-in charge on the basis of the prevailing market rates(if available in the LMR published by the Department the same shall be taken) giving due consideration to the analysis of the rate furnished by the contractor with supporting documents, including contractor's profit, overheads and other allowed charges if any. This shall be added on to the departmental rate (including contractor's profit, overheads and allowed other charges if any) at the time of issuing technical sanction modified by overall tender excess/tender deduction except on cost of departmental material and market rate items.

31. Clause 36 of GCC stands modified by adding a new sub-clause 36.3 as under

36.3 Measurements for the works under this contract shall be made electronically through the online software system (PRICE software) of the Government. The Contractor shall use his login facility in the above Online system where in he can view, accept/reject the measurements of work done. The Contractor shall accept/reject the measurements within seven days of recording of measurements. If the contractor fails to accept/reject the measurements within the above period, it shall be deemed that, the Contractor has accepted the measurements and bills shall be prepared accordingly by the Departmental Officers. For works costing more than Rs. 5 Crores, the Contractor shall record the measurements electronically through the online software system (PRICE software) using his login credentials. The Contractor shall submit the recorded measurement through online to the concerned Field Engineer periodically for verification and check measurement. For recording measurements, the Contractor shall abide by all the prescribed rules for measurements recording, verification, check measurement and super checking prevailing in the Department.

32. Clause 39 of GCC stands modified by adding new sub-clauses 39.7 and 39.8 as under

39.7 For percentage rate contracts, the rate of extra item shall be arrived by applying the percentage tender excess/ tender deduction to the departmental data rate excluding the cost of departmental materials and market rate items as per the original schedule on which the tender is invited.

39.8 Wherever, the term "Market rate" appears in the clause 39, it shall mean all rates other than departmental schedule of rates currently CPWD Delhi SoR.

33. Clause 18 & 18.1 of Special Conditions of Contract stands modified as under

18. Special Conditions for GST deduction as TDS

18.1 As per the modified clause 3.3.5 of Instructions to Bidders, the rate quoted by the bidder shall include all taxes duties and Construction Workers Welfare Fund Contribution etc except the GST (Goods and Services Tax) and the Government will not entertain any claim whatsoever in respect of the same. Goods & Services Tax

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(GST), wherever legally applicable, shall be paid by the Contractor to the concerned Authorities and the Employer shall pay the applicable GST to the Contractor at the time of settlement of bills for the works done as per this contract. However, out of the total GST amount to be paid to the Contractor at the time of settlement of bills, an amount at the rate specified in the contract data shall be deducted as TDS and deposited at the Central Tax Department by the Employer. The Contractor shall be paid the balance amount of GST at the time of settlement of the Bills. The Employer shall give necessary certificates to the Contractor in this regard.

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Public Works Department
PRICE

34. Special conditions specific to the Work :-

34.1 Clause 6.1 of ITB (Instructions to Bidders) stands modified as under

6.1. Subject to clause 5, the Tender Inviting Authority with the consent of Tender Approval Committee will award the contract to the Bidder whose bid has been determined to be substantially responsive and who has offered the lowest evaluated bid price.

34.2 Clause 6.6.3 of ITB (Instructions to Bidders) stands modified as under

6.6.3. If the successful Bidder fails to furnish the required Performance Guarantee as detailed in clause 7 of Instruction to Bidders and enter into contract, within the above stipulated time, further ten days time will be allowed at the request of the bidder, for which the successful Bidder has to remit a fine equal to Rs.25,000/(twenty-five thousand only). This fine shall be remitted in the SBI Account No 37120692401 with IFSC SBIN0070028 in favour of Kerala Road Fund Board Project Management Unit and the original Bank challan shall be submitted at the office of the Agreement Authority before executing agreement

34.3 Clause 35 of General Conditions of Contract stands modified by adding new sub clause as under

35.7 Payment Process

35.7.1. All the payments to the SPV and the Contractor will be online.

35.7.2. Based on the Contract Agreement, the Contractor shall submit the bill to the SPV. After examination of the Bill, the SPV shall issue proceedings for payment.

35.7.2.1. SPV user shall upload the proceedings issued by the SPV for payment along with the copy of the bill passed for payment by the SPV.

35.7.2.2. Details of the Bill, payment recommended, deductions, applicable taxes, retention money, cumulative details of payment already made, etc shall be entered by the SPV in the online invoice in the Project Portal.

35.7.2.3. After verification of the submitted details KIIFB will make online payment to the contractor directly to his designated bank account registered by the SPV in the Project Portal.

35.7.2.3.1. The statutory and other deductions in the bill will be given to the SPV by KIIFB for remitting the amount to the authorities concerned.

35.7.2.3.2. The retention amount will be transferred to the SPV along with the bill deductions and the same shall be released to the Contractor only after the completion of contractual obligations.

35.7.3. If the fund release requisitions are not received within 2 weeks after the specific payment milestone has expired, the payment will be deferred to the next payment milestone and no interim payment will be entertained in between the payment milestones.

35.7.4. The physical progress of the work will be compared against the payment milestone.

35.7.5. Executive Committee of KIIFB chaired by Minister (Finance) will periodically review the progress of the project and oversee the utilisation and release of funds.

34.4 Clause 7.1 of General Conditions of Contract stands modified by adding a new sub clause

7.1.1 as under

7.1.1. Contract Documents shall be interpreted in the following order of Priority:

1. Articles of Agreement

2. Notice Inviting Tender

3. Letter of Acceptance of Tender indicating deviations, if any, from the conditions of Contract incorporated in the Tender document issued to the Bidder and/or the Bid submitted by the Bidder

4. Special conditions

5. Conditions of contract, including general terms and conditions, instructions to bidders, additional terms and conditions, Technical terms and conditions, erection terms and conditions, forming part of the Agreement.

6. MORTH Specifications, IRC codes, KHFBS Guidelines

7. Scope of works/Bills of Quantities/Schedule of works/Quantities

8. Contract Drawings and finalised work programme.

34.5 Clause 20.1 of Special Conditions of Contract stands modified as under

20.1 Mobilisation Advance

20.1.1. Mobilization advance upto 10% of the tendered value may be sanctioned by the SPV concerned, strictly on the assessment of the need thereof, if applied for by the contractor within one month from the date of award of contract. This advance is for facilitating the contractor to mobilize the work at site by development of machinery and various resources. Advance can be released in two or more instalments as considered appropriate and instalments subsequent to the first instalment shall be released after obtaining proof of utilization of the advance already released.

20.1.2. Request for Mobilization advance shall be considered only if it is included in the Notice Inviting Tender (NIT) as per CPWD stipulations. The request for Mobilization Advance after the stipulated time period of one month will be considered on furnishing proper clarifications for the delay and by delegating the power of engineer-in-charge as mentioned in clause 10 B (v) of the Central Public Works Department General Conditions of Contract (CPWD-GCC).

20.1.3. Bank Guarantee not exceeding 6 months from any nationalised/scheduled bank for 110% of the value of advance amount considered for release and valid till recovery of the advance shall be obtained prior to the release of each instalment of mobilization advance. The available Bank Guarantee shall not be less than 110% of the outstanding mobilisation advance for recovery at any stage.

20.1.4. Clarification regarding the renewal of Bank Guarantee must be included if the initial guarantee is for the full amount.

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20.1.5. The interest rate in effect as per the CPWD General Conditions of Contract as on the date release of the Mobilization Advance shall be charged on the Mobilization Advance and levied along with each instalment of recovery of the advance.

20.1.6. Recovery of advance shall be made on pro-rata basis to the value of work and interest shall be effected from the contractor's bills after the first 10% of the gross value of work has been executed and paid for. The entire advance is to be recovered by the time 80% of the gross value of the contract is executed and paid for.

34.6 Wherever it is mentioned as Chief Engineer, PWD, O/o Project Director, Project Management Unit, Kerala Road Fund Board may be read as Project Director, Project Management Unit, Kerala Road Fund Board.

34.7 Correction in clause 4.9 Schedule -B

Financial Statement

The Financial year 2014-15, 2013-14, 2012-13, 2011-12, 2010-11 may be read as 2018-19, 2017-18, 2016-17, 2015-16, 2014-15 respectively.

34.8 KIIFB Guidelines

Contractor shall comply all procedures and guidelines issued for the execution of KIIFB funded projects.

34.9 Additional Performance Guarantee

The calculation of additional performance guarantee shall be done based on G.O.(P)No.168/2019/Fin. dated. Thiruvananthapuram 07.12.2019 instead of clause 7.5 of ITB

34.10 Addition in clause 10 of Part III Special conditions of contract

10.3 Adjustment for cement component

Note :- For the application of this clause, index of ordinary portland cement has been chosen to represent cement group from the office of the Economic Adviser

10.5 Adjustment for Steel Component

Note in clause 10.5 may be read as :- For the application of this clause, index of Mild Steel - Long Products has been chosen to represent steel group from the Office of the Economic Adviser

10.6 Adjustment of POL (Fuel and lubricant) component

Note in clause 10.6 may be read as :- For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group from the office of the Economic Adviser

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10.7 Adjustment for Plant and Machinery Spares Component

Note in clause 10.7 may be read as :- For the application of this clause, index of Manufacture of Machinery for mining, quarrying and construction has been chosen to represent the Plant and Machinery Spares group from the office of the Economic Adviser.

10.8 Adjustment of other Materials Component

Note :- For the application of this clause, index of all commodities has been chosen published by the office of the Economic Adviser.

34.11. Bonus for timely completion

Clause 16 and 52.3.9 of GCC is modified as per GO(MS) No.1/2020/PWD Thiruvananthapuram dated 08-01-2020

34.12 Price Preference for the Labour Contract Societies

As per G.O.(MS) No. 41/2020/PWD Dated Thiruvananthapuram 19/03/2020 the approved Labour Contract Societies depending upon the class of Registration will be eligible for a price Preference upto 10% over the quoted amount of lowest bidder.

34.13. KIIFB Guidelines for preparing and submitting work bills

Contractor shall comply all procedures and guidelines issued in the Proceedings No. IA-2/2669/2018/KIIFB dated 02/04/2020 of CEO, KIIFB for preparing and submitting work bills.

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CO-OPERATIVE SOCIETY LTD. No: 10957

CHAIRMAN

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

Part V- TECHNICAL SPECIFICATIONS

1. General

- 1.1. The specifications and mode of measurements for Building works shall be in accordance with Central Public Works Department (CPWD) Specifications 2009 Volumes I and II and Kerala PWD Manual and that for Road and Bridge works shall be in accordance with MoRTH/IRC specifications with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the individual item specification in the Bill of Quantities. The entire work shall be carried out as per the above specifications in force with up to date correction slips issued up to the date of opening of tender.
- 1.2. For the item not covered under CPWD Specifications mentioned above, the work shall be executed as per latest relevant standards/codes published by B.I.S. (formerly ISI) inclusive of all amendments issued thereto or revision thereof, if any, up to the date of opening of tenders.
- 1.3. In case of B.I.S. (formerly I.S.I) codes/specifications are not available, the decision of the Engineer based on standards prescribed by ASTM, BS, DIN, AASHTO and similar organisations or acceptable sound engineering practice and local usage shall be final and binding on the contractor. However, in the event of any discrepancy in the description of any item as given in the bill of quantities or specifications appended with the tender and the specifications relating to the relevant item as per CPWD/MoRTH or other specifications mentioned above, or in drawings the former shall prevail.
- 1.4. The work shall be carried out in accordance with the design and drawings furnished by the Department. The drawings shall have to be properly co-related before executing the work. In case of any discrepancy noticed between the drawings, final decision, in writing of the Engineer shall be obtained by the contractor. For items, where so required, by the relevant clause in PWD Quality Control Manual, samples shall be prepared before starting the particular items of work for prior approval of the Engineer and nothing extra shall be payable on this account.
- 1.5. All materials to be used on works shall bear I.S. certification mark unless specifically permitted otherwise in writing. In case I.S. marked materials are not available (not produced), the materials used shall conform to relevant I.S. Code or CPWD/MoRTH specifications, as applicable in this contract.
- 1.6. In such cases the Engineer shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified as "Premium/First Quality" by the manufacturers shall be used unless otherwise specified. First tier Quality Control tests for all materials and work shall be done as per the procedure and frequency detailed in PWD Quality Control Manual. Proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the satisfaction of

For THE ORALUNGA LABOUR CONTRACT
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PROJECT DIRECTOR
Project Management Unit
Kerala PWD

Engineer. Manufacturer's test certificate shall also be produced by Contractor as required in the relevant provisions of the PWD Quality Control Manual. The contractor shall carryout Mix Design for all RCC works done by the labs approved by the Government. Reinforcement steel and Cement shall be as per the Finance Department circular No-8/2016/Fin dated 4-2-2016.

- 1.7. In respect of the work of other-agencies deployed in the same site through a separate contract by the Employer for doing work like electrification, air-conditioning, external services, other building work, horticulture work, etc. and any other agencies simultaneously executing other works, the contractor shall afford necessary coordination and facilities for the same. The contractor shall leave such necessary holes, openings, etc. for laying / burying in the work pipes, cables, conduits, clamps, boxes and hooks for fan clamps, etc. as may be required for the electric, sanitary air-conditioning, fire fighting, PA system, telephone system, C.C.T.V. system, etc. and nothing extra over the agreement rates shall be paid for the same.
- 1.8. Unless otherwise specified in the bill of quantities, the rates for all items of work shall be considered as inclusive of pumping out or bailing out water if required for which no extra payment will be made. This will include water encountered from any source such as rains, floods, or due to any other cause whatsoever.
- 1.9. Any cement slurry added over base surface (or) for continuation of concreting for bond is added its cost is deemed to have in built in the item unless otherwise/explicitly stated and nothing extra shall be payable or extra cement considered with consumption on this account.
- 1.10. The rate for all items in which the use of cement is involved is inclusive of charges for curing.
- 1.11. The contractor shall clear the site thoroughly of all scaffolding materials and rubbish etc. left out of his work and dress the site around the building to the satisfaction of the Engineer before the work is considered as complete.
- 1.12. Rates for plastering work, if any (excluding washed grit finish on external wall surfaces) shall include for making grooves, bands, chicken wire mesh over joints etc. wherever required and nothing extra shall be paid for the same.
- 1.13. The rates quoted for all brick/concrete work shall be deemed to include making openings and making good these with the same specifications as shown in drawings and/or as directed. No extra payment shall be made to the contractor on this account.
- 1.14. Rates for all concrete/plaster work shall include for making drip course moulding, grooves etc. wherever required and no extra shall be paid for the same.
- 1.15. Rates for flooring work shall include for laying the flooring in strips/as per sample or as shown in drawings wherever required and nothing extra shall be paid for the same.
- 1.16. The drawing(s) attached with the tender documents are for the purpose of tender only, giving the tenderer a general idea of the nature and the extent of works to be

For THE URALUNGAL LABOUR CONTRACT
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executed. The rates quoted by the tenderer shall be deemed to be for the execution of works taking into account the "Design Aspect" of the items and in accordance with the "Construction Drawings" to be supplied to the Contractor during execution of the works.

- 1.17. The quoted rate shall be for finished items and shall be complete in all respects including the cost of all materials, labour, tools & plants, machinery etc., all taxes, duties, levies, octroi, royalty charges, statutory levies etc. applicable from time to time and any other item required but not mentioned here involved in the operations described above. The Employer shall not be supplying any material, labour, plant etc. unless explicitly mentioned so.
- 1.18. There could be some restrictions on the working hours, movement of vehicles for transportation of materials and location of labour camp. The contractor shall be bound to follow all such restrictions and adjust the programme for execution of work accordingly.
- 1.19. The contractor shall also ensure that all work sites within the site are properly cordoned off by means of barricades and screens up to a height of 3.0 m above ground level at his own cost. The contractor shall use pre-coated GI sheets which are in good condition mounted on steel props.
- 1.20. Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth if required shall have to be done by the contractor at his own cost.
- 1.21. The Contractor will have to take prior approval of the Engineer-in charge for the Make of materials before procurement of the same. It may also be noted that if any of the makes does not comply with Standards, it will not be allowed for use. No claim what so ever shall be entertained on this account.
- 1.22. The contractor shall clear the site of all rubbish, remove all grass and low vegetation and remove all bush wood, trees, stumps of trees, and other vegetation only after consultation with the Field Engineer as to which bushes and trees shall be saved.
- 1.23. The contractor shall carry out the survey of the site and shall establish sufficient number of grids and level marks to the satisfaction of the Engineer-in-charge, who shall decide on the basis of this information, the general levels of the construction works.
- 1.24. Prior to commencement of construction, the contractor shall in consultation with the Engineer-in-charge, establish several site datum bench-marks, their number depending on the extent of the site. The bench-marks shall be sited and constructed so as to be undisturbed throughout the period of construction.
- 1.25. The Engineer-in charge might have got the soil investigation done and if so, copy of the report will be handed over to the contractor for their scrutiny upon specific request by the Contractor. The Contractor shall however inspect the site and study the findings from the trial pits or bores in order to assess the problems involved in and methods to be adopted for excavation and earthwork. The contractor shall ascertain for himself all information concerning the sub-soil conditions, ground water table levels and intensity of

rainfall, flooding of the site and all data concerning excavation and earthwork. The Employer shall not be responsible for any later claims of the contractor for any extra work required to be done on account of this and shall not pay any extra amount in this regard.

1.26. The Contractor shall set out the works using Total Station and during the progress of the building shall amend at his own cost any errors arising from inaccurate setting out. During the execution of the work contractor must cross check his work with the drawings. The contractor shall be responsible for all the errors in this connection and shall have to rectify all defects and/or errors at his own cost, failing which the Engineer-in charge serves the right to get the same rectified at the risk and cost of the contractor.

1.27. Cleaning up and handing over:- Upon completion of the work all the areas should be cleaned. All floors, doors, windows, surface, etc. shall be cleaned down in a manner which will render the work acceptable to the Engineer-in-charge. All rubbish due to any reason, shall be removed daily from the site and an area of up to ten metres on the outer boundaries of the premises will be cleaned by the contractor as a part of the contract. Upon completion of the Work, the contractor shall hand over to the Assistant Engineer the following:

- a) Written guarantee and certificates
- b) Maintenance manuals, if any, and
- c) Keys.

1.28. Samples :- The contractor shall submit to the Engineer-in charge samples of all materials for approval and no work shall commence before such samples are duly approved. Samples of materials for concrete works, masonry units, building insulation, finished hardware, door and windows, flooring materials etc. and every other work requiring samples as detailed in the PWD Quality Control Manual or as required by the Engineer-in charge shall be supplied to them and these samples will be retained as standards of materials and workmanship. The cost of procuring the samples shall be borne by the contractor. Throughout this specification, types of material may be specified by manufacturer's name in order to establish standard of quality, price and performance and not for the purpose of limiting competition. Unless specifically stated otherwise, the Bidder may assume the price of 'approved equivalent' except that the burden is upon the contractor to prove such equality, in writing.

1.29. Tests :- All materials and methods of tests shall conform to the latest rules, regulation and/or specifications as per the provisions laid out in the PWD Quality Control Manual and PWD Quality Control Laboratory Manual. The Engineer-in charge will have the option to have any of the materials tested and if the test results show that the materials do not conform to the specifications, such materials shall be rejected. The expenses to carry out tests as per frequency and procedure detailed in the PWD Quality Control Manual and PWD Quality Control Laboratory Manual will be deemed to be included in the Rates quoted.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 1802

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PROJECT DIRECTOR
Project Manager, West PWD
Kerala Road Board

1.30. Mode of Measurements:- All measurements will be taken in accordance with Kerala PWD manual.

1.31. The rates tendered by a Bidder for the work shall include the cost of:

- a) All labour and supervision thereof, all materials, tools, implements and plant of every description, ladders, cordage tackle, etc. as well as the provision of safe and substantial scaffolding required for the proper execution of the work in conformity with the various items of work;
- b) Supplying the requisite agency with necessary equipments, to set out the work as well as to afford facilities for such examination of the work as the Departmental Officers may at any time consider desirable, as also to count, weigh and assist in the measurement or check measurement of the work or materials;
- c) Providing and maintaining all temporary fences, shelters, lights, watchmen and danger signals and such other precautions as are necessary for the protection of the work or materials, as well as to protect the public and those connected with the work from accidents at the site of, or on account of the work;
- d) All sheds, mortar mills and mixing platform of every kind required for the proper execution of the work according to the specifications;
- e) All fees and royalties of materials and
- f) Finally clearing away of all rubbish, surplus materials, plant etc. on completion of the work and dressing and levelling of and restoring the site to a tidy condition, prior to handing over the work to the Assistant Engineer and also its maintenance until so taken over.

1.32. In the case of supplies of materials such as rubble, broken stones, gravel, sand etc. which may have to be measured prior to being used on the work, the Bidder must always stack or arrange them neatly on level ground or on ground cleared and levelled by him for the purpose in such manner as may be ordered by the Engineer so that they may be easily susceptible for inspection and measurement, the cost of such clearing, levelling and stacking or arranging being included in the rates for work. Each stack must be straight and of uniform section throughout and of the dimensions specified by the Field Engineer. Materials not stacked or arranged in accordance with instructions issued will not be measured and paid for.

1.33. The Bidder should state whether he has all the plant necessary for execution of the work. If the opinion of the Engineer-in charge, Bidder's own plant is neither sufficient nor suitable for the proper execution of the work, the department may supply other available plant and recover hire charges for the same. The decision of the Engineer-in charge in the matter shall be final and binding on the Contractor.

1.34. The Contractor shall bear the running expenses inclusive of pay of the departmental staff attached to such plant and cost of repairs of all Government plant while in his possession on hire as also the cost of restoring the same in good condition at the time of return, due allowance being made for fair wear and tear.

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10851

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Project Director
Project Management Unit
Kerala Road Fund Board

- 1.35. All materials and plant that are to be made over to the Bidder by the Department shall be handed over to him at the Section Office Store/yard and the charges for their handling, loading and unloading and conveyance to and from for the respective work as also for stacking the materials neatly and in regular heaps on the ground or sheds to which they are brought shall be deemed to be included in the rates for the work.
- 1.36. Unless otherwise specifically provide for in the Contract, the Contractor shall at his own cost keep all portions of the work free from water whether due to springs, or inclement weather and neat and sanitary condition and shall also see that drainage and sewage are prevented from entering the site of work or accumulating therein.
- 1.37. The Bidder shall be responsible for the proper use and bear the cost of protection of materials made over to him by the Department for use on the work and bear any loss form deterioration of from faulty workmanship or any other cause. The cost of materials thus allowed to deteriorate amounting as it does to and excess issue over sanctioned quantities, will be recovered at rates 20 percent over the actual cost. The orders of the Engineer-in charge in the matter shall be final binding on the Contractor.
- 1.38. The Contractor shall be responsible to see that the level or the other pegs, profiles, bench, marks masonry pillars or other marks set up by the Department for guidance in the execution of the work are not disturbed, removed or destroyed If the same is disturbed, it will be replaced by the Engineer at the cost of the Contractor.
- 1.39. Any materials brought to the site of work, or any work done by the Contractor but rejected by the Engineer-in-charge as being not up to the specifications shall in the case of materials supplied be then and there removed from or broken up at the site of work, and in the case of work done, the dismantled or rectified at the expense of the Contractor, as may be ordered by the Engineer-in-charge.
- 1.40. In all cases whether so specified in the contract or not, the work shall be executed in strict accordance with the Contractor's accepted bid and these specifications and with such further drawings and specifications and orders as may from time to time be issued by the Engineer-in charge.



PRO
Project
Kerala Road Fund Board
Thiruvananthapuram

Item Rate BoQ

Validate

Tender Inviting Authority: Project Director, PMU - KRFB

Work Name: KIIFB 2017-18 CONSTRUCTION OF HILL HIGHWAY FROM KODANCHERY TO KAKKADAMPOYIL (34.30 Km.) IN KOZHICKODE DISTRICT.

Contract No: PWD/PPQ-2019-2020/9574/PD KRFB (Re-tender)

Bidder Name : ULCCS LTD

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT Without Taxes	TOTAL AMOUNT In Words	TEXT #
Sl. No.	Item Description	Quantity	Units	Estimated Rate					
1	2	4	5	6	13		53		55
1									
1.01	APPENDIX A- ATTACHING SURRENDERED LAND TO ROW & FORMATION WORKS 2.4.3.B : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Brick / Tile work - In cement mortar Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Brick / Tile work - In cement mortar	1873.80/50	cum		700.0000		1311663.50	INR Thirteen Lakh Eleven Thousand Six Hundred & Sixty Three and Paise Fifty Only	

For THE URULUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 1955

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Project Management Unit
Kerala Road Fund Board



1.02	2.4.4.B : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Stone Masonry - Rubble stone masonry in cement mortar. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres. Dismantling Stone Masonry - Rubble stone masonry in cement mortar.	1733.1000	cum	600.0000	1039860.00	INR Ten Lakh Thirty Nine Thousand Eight Hundred & Sixty Only
1.03	2.4.4.D : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Stone Masonry - Dry rubble masonry Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Stone Masonry - Dry rubble masonry	30812.9620	cum	350.0000	10784536.70	INR One Crore Seven Lakh Eighty Four Thousand Five Hundred & Thirty Six and Paise Seventy Only
1.04	3.15 : Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material with in all lifts and lead upto 1000 metres by Mechanical Means Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material with in all lifts and lead upto 1000 metres by Mechanical Means	124377.5000	sqm	15.0000	1865662.50	INR Eighteen Lakh Sixty Five Thousand Six Hundred & Sixty Two and Paise Fifty Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 198/81

CHAIRMAN

PROJECT IMPLEMENTATION
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

1.05	2.1.1 : Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 300 mm to 600 mm Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 300 mm to 600 mm	222.0000 each	1000.0000	222000.00	INR Two Lakh Twenty Two Thousand Only
1.06	2.1.2 : Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 600 mm to 900 mm Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 600 mm to 900 mm	195.0000 each	2500.0000	487500.00	INR Four Lakh Eighty Seven Thousand Five Hundred Only
1.07	2.1.3 : Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 900 mm to 1800 mm Cutting of trees, including cutting of trunks, branches and removal of stumps, roots, stacking of serviceable material with all lifts and up to a lead of 1000 metres and earth filling in the depression/pit. Girth from 900 mm to 1800 mm	45.0000 each	8000.0000	360000.00	INR Three Lakh Sixty Thousand Only
1.08	3.11 : Removal of unserviceable soil including excavation, loading and disposal upto 1000 metres lead but excluding replacement by suitable soil which shall be paid separately as per clause 305. Removal of unserviceable soil including excavation, loading and disposal upto 1000 metres lead but excluding replacement by suitable soil which shall be paid separately as per clause 305.	15016.5000 cum	70.0000	1051155.00	INR Ten Lakh Fifty One Thousand One Hundred & Fifty Five Only

1.09	3.6 : Excavation for roadway in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m. Excavation for roadway in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m.	444035.9030 cum	152.0000	67493457.26	INR Six Crore Seventy Four Lakh Ninety Three Thousand Four Hundred & Fifty Seven and Paise Twenty Six Only
1.1	3.33 : Excavation in hilly area in ordinary rock not requiring blasting by mechanical means including cutting and trimming of slopes and disposal of cut material with all lift and lead upto 1000 metres. Excavation in hilly area in ordinary rock not requiring blasting by mechanical means including cutting and trimming of slopes and disposal of cut material with all lift and lead upto 1000 metres.	4910.0000 cum	500.0000	2456000.00	INR Twenty Four Lakh Fifty Five Thousand Only
1.11	3.8.A : Excavation for roadway in hard rock (blasting prohibited) with rock breakers including breaking rock, loading in tippers and disposal within all lifts and lead upto 1000 metres, trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections. Mechanised Excavation for roadway in hard rock (blasting prohibited) with rock breakers including breaking rock, loading in tippers and disposal within all lifts and lead upto 1000 metres, trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections. Mechanised	2401.8000 cum	1900.0000	4563420.00	INR Forty Five Lakh Sixty Three Thousand Four Hundred & Twenty Only
1.12	3.17 : Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of table 300-2. Construction of embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of table 300-2.	171927.1210 cum	200.0000	34385424.20	INR Three Crore Forty Three Lakh Eighty Five Thousand Four Hundred & Twenty Four and Paise Twenty Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10957

CHAIRMAN

Project Name: Channarayana
Kerala Road Fund Board

1. $\frac{1}{x^2} = x^{-2}$
 $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$
 $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$

2. $\frac{d}{dx} \frac{1}{x^2}$
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 $= -\frac{2}{x^3}$

[illegible]

FOR THE URUGUAY LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 1000

CHARM

2.06	12.7.B : Random Rubble Masonry (coursed/un-coursed) Work in Cement Mortar 1:3 in Foundation complete as per Drawing and Technical Specifications. Random Rubble Masonry (coursed/un-coursed) Work in Cement Mortar 1:3 in Foundation complete as per Drawing and Technical Specifications.	5185.4900	cum		4625.0000	23982891.25	INR Two Crore Thirty Nine Lakh Eighty Two Thousand Eight Hundred & Ninety One and Paise Twenty Five Only
2.07	od38324/2018, 2018 : Solid block masonry using pre-cast solid blocks (factory made) of size 40x15x20cm or nearest available size conforming to IS 2185 part 1 of 1979 for foundation and plinth with thickness 20 cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete	2144.7000	cum		5701.0000	12226934.70	INR One Crore Twenty Two Lakh Twenty Six Thousand Nine Hundred & Thirty Four and Paise Seventy Only
2.08	13.3 : Plastering with cement mortar (1:3) on brick work in sub-structure as per Technical Specifications. Plastering with cement mortar (1:3) on brick work in sub-structure as per Technical Specifications	30566.4000	sqm		258.0000	7886131.20	INR Seventy Eight Lakh Eighty Six Thousand One Hundred & Thirty One and Paise Twenty Only
2.09	od14887/2017_2018 : Dry rubble masonry using departmental rubble for foundation and retaining wall including all charges etc complete as per drawing and specification	27304.6200	cum		900.0000	24574158.00	INR Two Crore Forty Five Lakh Seventy Four Thousand One Hundred & Fifty Eight Only
2.1	15.6 : Laying of a geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escapes of the embankment material through the voids of the stone pitching/cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching. Laying of a geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escape of the embankment material through the voids of the stone pitching/cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching.	33300.0000	sqm		94.0000	3130200.00	INR Thirty One Lakh Thirty Thousand Two Hundred Only
2.11	15.4.A : Providing and laying Pitching on slopes laid over prepared filter media including boulder Stone/Boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications. Providing and laying pitching on slopes laid over prepared filter media including boulder Stone/Boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications	6816.0000	cum		2860.0000	19493760.00	INR One Crore Ninety Four Lakh Ninety Three Thousand Seven Hundred & Sixty Only

2.12	12.5 A.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15	4534.7000 cum	7100.0000	34326370.00	INR Three Crore Forty Three Lakh Twenty Six Thousand Three Hundred & Seventy Only
2.13	12.40 : Supply, Fitting and Placing un-coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications Supply, Fitting and Placing un-coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications	265.9080 MT	65000.0000	17284085.00	INR One Crore Seventy Two Lakh Eighty Four Thousand & Eighty Five Only
3					
3.01	APPENDIX C-DRAINAGE, GROSS DRAINAGE & FOOTPATH WORKS 3.13.1.B : Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Mechanical Means - (Depth upto 3 m) Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Mechanical Means - (Depth upto 3 m)	40242.0510 cum	240.0000	9658099.44	INR Ninety Six Lakh Fifty Eight Thousand & Ninety Nine and Paise Forty Four Only
3.02	od47026/2018_2019 : Providing 25mm dia dowel bars with TMT rods 3.00m long and 1.50m into the rock and 1.50m into the concrete @1.00m c/c wherever found necessary as per the technical drawing including cost of materials, labour charge conveyance etc. complete	520.0000 each	850.0000	442000.00	INR Four Lakh Forty Two Thousand Only

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3.03	12.4 : Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	2361.8470 cum	5895.0000	13921909.07	INR One Crore Thirty Nine Lakh Twenty One Thousand Nine Hundred & Nine and Paise Six Only
3.04	12.8 A.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15	4127.2900 cum	7100.0000	29303759.00	INR Two Crore Ninety Three Lakh Three Thousand Seven Hundred & Fifty Nine Only
3.05	13.6 : Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V : 20H towards drawing face. Complete as per drawing and Technical Specifications. Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V : 20H towards drawing face. Complete as per drawing and Technical Specifications	2054.0000 no	200.0000	410800.00	INR Four Lakh Ten Thousand Eight Hundred Only
3.06	12.8.B.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20	5703.1650 cum	7644.0000	43594993.25	INR Four Crore Thirty Five Lakh Ninety Four Thousand Nine Hundred & Ninety Three and Paise Twenty Six Only
3.07	0048526/2018_2019 : Construction of precast RCC Drain of M20 Grade with inner dimensions 80cm wide and 60cm high with 125mm thick base and side walls, with 25x25mm haunches made at the inside edges over a bed of 10cm thick with 6mm nominal size aggregate, including steel reinforcement. aggregate size not exceeding 12mm, true to line and grade including necessary connection at the intersecting drain, complete as per approved drawings and technical specifications	31478.0000 RM	4800.0000	151094400.00	INR Fifteen Crore Ten Lakh Ninety Four Thousand Four Hundred Only

3.08	od48527/2018_2019 : Construction of precast RCC cover slab of 10cm thick and 85cm width for Drain of M20 Grade including steel reinforcement, aggregate size not exceeding 12 mm, true to line and grade including conveying and fixing complete as per approved drawings and technical specifications	46094.7000 RM			1329.0000	61259856.30	INR Six Crore Twelve Lakh Fifty Nine Thousand Eight Hundred & Fifty Six and Paise Thirty Only
3.09	13.5.C.P.1 : Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M25 - Using concrete Mixer - Height upto 5m Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M25 - Using concrete Mixer - Height upto 5m	1009.0040 cum			8200.0000	8273832.80	INR Eighty Two Lakh Seventy Three Thousand Eight Hundred & Thirty Two and Paise Eighty Only
3.1	13.6 : Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications	447.0810 MT			67000.0000	29954427.00	INR Two Crore Ninety Nine Lakh Fifty Four Thousand Four Hundred & Twenty Seven Only
3.11	8.29.1 : Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC-98-1997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings Cable Duct Across the Road - Single row for one utility service Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC-98-1997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer	734.4010 RM			3850.0000	2827443.85	INR Twenty Eight Lakh Twenty Seven Thousand Four Hundred & Forty Three and Paise Eighty Five Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 1987

CHAIRMAN

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Kerala Road Fund Board
Thiruvananthapuram

3.12	13.9.A : Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material	308.2710	cum		2000.0000	812542.00	INR Six Lakh Twelve Thousand Five Hundred & Forty Two Only
3.13	042802/2019_2020 : Providing and laying 50 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	13575.0000	sqm		850.0000	11538750.00	INR One Crore Fifteen Lakh Thirty Eight Thousand Seven Hundred & Fifty Only
3.14	8.1.B : Construction of cement concrete kerb with top and bottom width 115 and 185 mm respectively, 325 mm high in M 20 Grade PCC Using Concrete Batching and Mixing Plant on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409 Construction of cement concrete kerb with top and bottom width 115 and 185 mm respectively, 325 mm high in M 20 Grade PCC Using Concrete Batching and Mixing Plant on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per clause 409	9050.0000	metre		545.0000	4932250.00	INR Forty Nine Lakh Thirty Two Thousand Two Hundred & Fifty Only
3.15	8.8 : Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces	3253.0450	sqm		200.0000	652609.00	INR Six Lakh Fifty Two Thousand Six Hundred & Nine Only

For THE UPRALINGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 18853

CHAIRMAN

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

3.16	od39347/2018_2019 : Providing and fixing hand rails with 50mm GI class B pipe at 1.5m C/c to a height of 1.25m above foot path and 0.35m below footpath fixed with PCC M15 grade 20cmx20cmx35cm fixing hooks with 12mm square rod at bottom of vertical pipe for anchoring in to the concrete 1 No horizontal top and 1 no. bottom with 50mm class B GI pipe , framing the pipes with welded joint including fixing the hand rails as per lines and levels and plump. painting two coats with synthetic enamel paint etc including all cost labour charges etc complete	9050.0000	metre			2620.0000	23711000.00	INR Two Crore Thirty Seven Lakh Eleven Thousand Only
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4.01	<p>APPENDIX D-REHABILITATION OF BRIDGES AND CULVERTS</p> <p>2.4.1.B : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres -
 Cement Concrete Grade M-15 & M-20. - By Manual Means Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres - Cement Concrete Grade M-15 & M-20. - By Manual Means</p>	78.2300	cum			2000.0000	156460.00	INR One Lakh Fifty Six Thousand Four Hundred & Sixty Only

[Signature]

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

[Signature]
CHAIRMAN
For THE ORALUNICAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 100/2

4.02	12.1.5.B : Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material. Marshy Soil Depth upto 3 m (Excluding Shoring) - Mechanical Means Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material. Marshy Soil Depth upto 3 m (Excluding Shoring) - Mechanical Means	448.6220 cum		260.0000	116641.72	INR One Lakh Sixteen Thousand Six Hundred & Forty One and Paise Seventy Two Only
4.03	12.4 : Plain cement concrete 1:3:8 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days. Plain cement concrete 1:3:8 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	61.0960 cum		6000.0000	366576.00	INR Three Lakh Sixty Six Thousand Five Hundred & Seventy Six Only
4.04	12.8.A.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15	96.8000 cum		7600.0000	735680.00	INR Seven Lakh Thirty Five Thousand Six Hundred & Eighty Only
4.05	12.8.B.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M20	153.7340 cum		8100.0000	1245245.40	INR Twelve Lakh Forty Five Thousand Two Hundred & Forty Five and Paise Forty Only
4.06	12.8.D.2.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M25 - With Batching Plant. Transit Mixer and Concrete Pump Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M25 - With Batching Plant, Transit Mixer and Concrete Pump	114.0650 cum		8300.0000	946739.50	INR Nine Lakh Forty Six Thousand Seven Hundred & Thirty Nine and Paise Fifty Only

4.07	13.6 : Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications. Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications	20.7120 MT	77000.0000	1594824.00	INR Fifteen Lakh Ninety Four Thousand Eight Hundred & Twenty Four Only
4.08	16.8 : Applying epoxy mortar over leached, honey combed and spalled concrete surface and exposed steel reinforcement complete as per Technical Specification. Applying epoxy mortar over leached, honey combed and spalled concrete surface and exposed steel reinforcement complete as per Technical Specification	841.8000 sqm	3400.0000	2862120.00	INR Twenty Eight Lakh Sixty Two Thousand One Hundred & Twenty Only
4.09	18.9 : Removal of defective concrete, cleaning the surface thoroughly, applying the shotcrete mixture mechanically with compressed air under pressure, comprising of cement, sand, coarse aggregates, water and quick setting compound in the proportion as per clause 2807.1., sand and coarse aggregates conforming to IS: 383 and table 1 of IS: 9012 respectively, water cement ratio ranging from 0.35 to 0.50, density of gunite not less than 2000 kg/cum, strength not less than 25 Mpa and workmanship conforming to clause 2807.6 Removal of defective concrete, cleaning the surface thoroughly, applying the shotcrete mixture mechanically with compressed air under pressure, comprising of cement, sand, coarse aggregates, water and quick setting compound in the proportion as per clause 2807.1., sand and coarse aggregates conforming to IS: 383 and table 1 of IS: 9012 respectively, water cement ratio ranging from 0.35 to 0.50, density of gunite not less than 2000 kg/cum, strength not less than 25 Mpa and workmanship conforming to clause 2807.6.	665.0000 sqm	2400.0000	1596000.00	INR Fifteen Lakh Ninety Six Thousand Only
4.1	18.22 : Repair of RCC Railing : Carrying out repair of RCC m30 railing to bring it to the original shape. Repair of RCC Railing : Carrying out repair of RCC m30 railing to bring it to the original shape.	759.0000 metre	185.0000	140415.00	INR One Lakh Forty Thousand Four Hundred & Fifteen Only
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5.01	2.4.1.B : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres - Cement Concrete Grade M-15 & M-20. - By Manual Means	10.8000 cum		2000.0000	21600.00	INR, Twenty One Thousand Six Hundred Only
5.02	2.4.4.B : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Stone Masonry - Rubble stone masonry in cement mortar Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Dismantling Stone Masonry - Rubble stone masonry in cement mortar.	57.0000 cum		760.0000	43320.00	INR, Forty Three Thousand Three Hundred & Twenty Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 18357

CHAIRMAN

PROJECT SUPERVISOR
Project Management Unit
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Thiruvananthapuram

5.03	2.4.1.A : Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres Lime Concrete, cement concrete Grade M-10 and below - By Manual Means Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres - Lime Concrete, cement concrete grade M-10 and below - By Manual Means	30.1200 cum			650.0000	19578.00	INR Nineteen Thousand Five Hundred & Seventy Eight Only
5.04	12.1.B.2 : Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, removal of stumps and other deleterious matter, only for dressing of sides and bottom and backfilling with approved material. Ordinary Soil - Depth 3 M to 6 M- Mechanical Means Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, removal of stumps and other deleterious matter, only for dressing of sides and bottom and backfilling with approved material. Ordinary Soil - Depth 3 M to 6 M- Mechanical Means	723.9300 cum			260.0000	188221.80	INR One Lakh Eighty Eight Thousand Two Hundred & Twenty One. and Paise Eighty Only
5.05	12.1.4.A : Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material. Hard Rock (blasting prohibited) - Mechanical Means Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material. Hard Rock (blasting prohibited) - Mechanical Means	180.3400 cum			1900.0000	342646.00	INR Three Lakh Forty Two Thousand Six Hundred & Forty Six Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY ID. No: 10951

CHAIRMAN

Project Management Unit
Kerala Road Fund Board
KRRFB

5.06	od18999/2017, 2018 : Putting up Ring bund with cross section size of 1.5m. at bottom 1.0m at top	44.0000	metre			3500.0000	164000.00	INR One Lakh Fifty Four Thousand Only
5.07	od47026/2018, 2019 : Providing 25mm dia dowel bars with TMT rods 3.00m long and 1.50m into the rock and 1.50m into the concrete @ 1.00m c/c wherever found necessary as per the technical drawing including cost of materials, labour charge conveyance etc. complete	120.0000	each			850.0000	102000.00	INR One Lakh Two Thousand Only
5.08	od47028/2018, 2019 : Sailing out water with 5 HP Engine and pumpset including conveyance of plant to the site, erection charges, cost of fuel, hire and working charges etc. complete.	48.0000	hour			200.0000	9600.00	INR Nine Thousand Six Hundred Only
5.09	12.8.B.1 : Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20	615.4780	cum			8000.0000	4923824.00	INR Forty Nine Lakh Twenty Three Thousand Eight Hundred & Twenty Four Only
5.1	13.5.C.p.2 : Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M25 - With Batching Plant, Transit Mixer and Concrete Pump Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M25 - With Batching Plant, Transit Mixer and Concrete Pump	22.4830	cum			8300.0000	186608.90	INR One Lakh Eighty Six Thousand Six Hundred & Eight and Paise Ninety Only
5.11	13.14 : Supplying, fitting and fixing in position true to line and level elastomeric bearing conforming to IRC: 83 (Part-II) section IX and clause 2005 of MoRTH specifications complete including all accessories as per drawing and Technical Specifications. Supplying, fitting and fixing in position true to line and level elastomeric bearing conforming to IRC: 83 (Part-II) section IX and clause 2005 of MoRTH specifications complete including all accessories as per drawing and Technical Specifications.	153600.0000	Cum cm			1.2000	184320.00	INR One Lakh Eighty Four Thousand Three Hundred & Twenty Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No: 10057

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

CIVILIAN

5.12	13.5.D p.2 : Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M30 - With Batching Plant, Transit Mixer and Concrete Pump - Height upto 5m Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M30 - With Batching Plant, Transit Mixer and Concrete Pump Height upto 5m	89.5330 cum			12000.0000	1074396.00	INR Ten Lakh Seventy Four Thousand Three Hundred & Ninety Six Only
5.13	13.5 : Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and Technical Specifications	25.5780 MT			75000.0000	1918350.00	INR Nineteen Lakh Eighteen Thousand Three Hundred & Fifty Only
5.14	14.6 : Construction of precast RCC railing of M30 Grade, aggregate size not exceeding 12 mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications Construction of precast RCC railing of M30 Grade, aggregate size not exceeding 12 mm, true to line and grade, tolerance of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications.	32.0000 RM			2430.0000	77760.00	INR Seventy Seven Thousand Seven Hundred & Sixty Only
5.15	14.9 : Drainage Spouts complete as per drawing and Technical specification Drainage Spouts complete as per drawing and Technical specification	10.0000 no			4513.0000	45130.00	INR Forty Five Thousand One Hundred & Thirty Only

For THE URALUNGA LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10557

CHAIRMAN

PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

5.16	55.26 : Providing and applying elastic, elastomeric membrane forming system with anticarbonation and breathing properties. The system should be based on solvent free acrylic polymers with selected mineral fillers and should be ultra-violet resistant, crack bridging type, carbonation resistant, breathable, environment friendly, water proofing coating. For anticarbonation, equivalent air layer thickness denoted as R or SD CO2 grater than 50 m and for breathability equivalent air layer thickness denoted as SD H2O shall be less than 4 m for vapour transmitting barrier. The system consists of one coat primer @ 75- 100 g/m2. The consumption of main polymer coating to give film thickness of 200-225 microns (Solid contents 70% + -3%) should be approximately. 400-450 g/m2 per two coats depending upon the method of application (either by roller or brush) and surface smoothness of the concrete. The total dry film thickness of the coating system should be minimum 200 microns for the above system. Polymer coating should be in suitable approved shades, including cost of materials, cleaning, chipping and removing the dirt particles of the concrete slab with wire brush and water labour charges for filling the bug holes, cracks.	775.7510 sqm	700.0000	543025.70	INR Five Lakh Forty Three Thousand & Twenty Five and Paise Seventy Only
5.17	13.8 : Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V : 20H towards drawing face. Complete as per drawing and Technical Specifications. Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V : 20H towards drawing face. Complete as per drawing and Technical Specifications	144.0000 no	200.0000	28800.00	INR Twenty Eight Thousand Eight Hundred Only
5.18	13.9.A : Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material/Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material	58.3200 cum	2000.0000	116640.00	INR One Lakh Sixteen Thousand Six Hundred & Forty Only

For THE UPALINGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10051

CHAIRMAN

A. A.
PROJECT DIRECTOR
Project Management Unit
Kerala Road Fund Board
Thiruvananthapuram

5.19	3.13.1.A : Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Manual Means - (Depth upto 3 M) M) Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Manual Means - (Depth upto 3 M)	63.1500 cum			250.0000	16419.00	INR Sixteen Thousand Four Hundred & Nineteen Only
5.2	12.4 : Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days. Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	13.2000 cum			6100.0000	80520.00	INR Eighty Thousand Five Hundred & Twenty Only
5.21	Od1000/9/2017_2018 : Dry rubble masonry for retaining walls using blasted rubble size below 40 mm including wedging them tightly with chips including all cost and conveyance of materials, labour charges etc. complete	302.7130 cum			2720.0000	823379.36	INR Eight Lakh Twenty Three Thousand Three Hundred & Seventy Nine and Paise Thirty Six Only
5.22	13.5.A : Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M15 - Height upto 5m Plain/Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications PCC Grade M15 - Height upto 5m	22.5000 cum			7200.0000	162000.00	INR One Lakh Sixty Two Thousand Only

5.23	5.15 : Providing and laying 25 mm thick mastic asphalt wearing course with paving grade bitumen (VG - 30) meeting the requirements given in table 500-40, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including providing antiskid surface with bitumen precoated finegrained hard stone chipping of 13.2 mm nominal size at the rate of 0.005cum per 10 sqm and at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces is not less than 100°C, protruding 1 mm to 4 mm over complete as per clause 516 Providing and laying 25 mm thick mastic asphalt wearing course with paving grade bitumen (VG - 30) meeting the requirements given in table 500-40, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including providing antiskid surface with bitumen precoated finegrained hard stone chipping of 13.2 mm nominal size at the rate of 0.005cum per 10 sqm and at an approximate spacing of 10 cm center to center in both directions, pressed into surface when the temperature of surfaces is not less than 100°C, protruding 1 mm to 4 mm over	124.8750 sqm		825.0000	103021.88	INR One Lakh Three Thousand & Twenty One and Paise Eighty Eight Only
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8.01	APPENDIX F - ROAD PAVEMENT WORKS 4.3.A : Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 3 per cent of slaked lime having minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub grade By Lime Stabilisation for Improving Sub-grade - By Mechanical Means Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 3 per cent slaked lime having minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub grade Lime Stabilisation for Improving Sub-grade - By Mechanical Means	48231.0000 cum		560.0000	27009360.00	INR Two Crore Seventy Lakh Nine Thousand Three Hundred & Sixty Only

For THE URALUNGA LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10897

CHAIRMAN

PROJECT DIRECTOR
Project Management Unit
Korata Road Fund Board
adilnawar@gmail.com

6.02	4.1.A.2 : Construction of granular sub-base by providing graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 Grading-II - Plant Mix Method Construction of granular sub-base by providing graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 Grading-II - Plant Mix Method	58370.4430 cum			2269.0000	132442535.17	INR Thirteen Crore Twenty Four Lakh Forty Two Thousand Five Hundred & Thirty Five and Paise Seventeen Only
6.03	4.12 : Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	44796.4410 cum			2300.0000	103031814.30	INR Ten Crore Thirty Lakh Thirty One Thousand Eight Hundred & Fourteen and Paise Thirty Only
6.04	5.1.a : Providing and applying primer coat with bitumen emulsion (SS) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means Providing and applying primer coat with bitumen emulsion (SS) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means.	223982.2000 sqm			48.0000	10751145.60	INR One Crore Seven Lakh Fifty One Thousand One Hundred & Forty Five and Paise Sixty Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10857

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6.05	5.2.b : Providing and applying tack coat with bitumen emulsion (RS) using emulsion pressure distributor at the rate of 0.25 - 0.30 kg per sqm on the prepared Granular Surface cleaned with mechanical broom. Providing and applying tack coat with bitumen emulsion (RS) using emulsion pressure distributor at the rate of 0.25 - 0.30 kg per sqm on the prepared Granular Surface cleaned with mechanical broom.	48367.4000	sqm		12.5000	6174592.50	INR Sixty One Lakh Seventy Four Thousand Five Hundred & Ninety Two and Paise Fifty Only
6.06	5.3.2.b : Providing and laying bituminous macadam with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using bitumen VG 30 crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction. Grading II - (19 mm nominal size) Providing and laying bituminous macadam with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using bitumen VG 30 crushed aggregates of specified grading premixed with bituminous binder, transported to site, laid over a previously prepared surface with paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction. Grading II - (19 mm nominal size)	12294.0810	cum		7503.0000	92242339.68	INR Nine Crore Twenty Two Lakh Forty Two Thousand Three Hundred & Thirty Nine and Paise Sixty Eight Only
6.07	od27350/2019_2020 : Bituminous concrete for grading II (13.2mm Nominal size) providing and laying bituminous concrete with 100-120TPH batch type HMP producing an average output of 75TPH using crushed aggregate of specified grading, average of bitumen content in mixing plant complete in all respect premixed bituminous binder using NRMDB at 2-5.6% of mix and filler, transporting the hot mix to site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled , vibratory & tandem Rollers to achieve the desired compaction as per MORTH clause 507 complete Grade II	6788.5880	cum		10600.0000	71959011.50	INR Seven Crore Nineteen Lakh Fifty Nine Thousand & Eleven and Paise Sixty Only

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6.08	55.24 : Providing and laying bituminous concrete with 80-100 TPH hot mix plant producing an average out put of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder (NRMB) @ 5.4 percent of mix and filler, transporting the hotmix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause NO. 507 complete in all respects (using 7% shredded plastic)	840.0000	cum	10850.0000	8946000.00	INR Eighty Nine Lakh Forty Six Thousand Only
6.09	55.22 : Supplying and laying interlocking tile 100 mm or nearest size thickness, minimum strength M 40 including providing a layer of 6 mm aggregate for 5 cm thickness, then laying interlock cobbles in lines and levels as per the directions of the departmental officers at site inclusive of all cost & conveyance charges etc.; complete. Supplying and laying interlocking tile 100 mm or nearest size thickness, minimum strength M 40 including providing a layer of 6 mm aggregate for 5 cm thickness, then laying interlock cobbles in lines and levels as per the directions of the departmental officers at site inclusive of all cost & conveyance charges etc.; complete.	68476.0000	sqm	1220.0000	83540720.00	INR Eight Crore Thirty Five Lakh Forty Thousand Seven Hundred & Twenty Only
6.1	14.1.C.1 : Furnishing and Placing Reinforced Cement Concrete Grade M30 Using Concrete Mixer in super-structure as per drawing and Technical Specification. Furnishing and Placing Reinforced Cement Concrete Grade M30 Using Concrete Mixer in super structure as per drawing and Technical Specification	137.2810	cum	7960.0000	1092756.76	INR Ten Lakh Ninety Two Thousand Seven Hundred & Fifty Six and Paise Seventy Six Only

For THE URULUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No- 10057

CHAIRMAN

Project Name :
Kerala Road Stand Board
Thiruvananthapuram

6.11	14.2 : Supplying, fitting and placing HYSD bar reinforcement in super-structure complete as per drawing and technical specifications	8.2370 MT			68000.0000	560116.00	INR Five Lakh Sixty Thousand One Hundred & Sixteen Only
7							
7.01	APPENDIX G-ROAD SAFETY APPURTENANCES od12810/2019_2020 : Providing and fixing of retro-reflectors cautionary, mandatory and informatory sign with 7years warranty manufactured as per IRC 67 made of Type XI micro prismatic grade sheeting vide clause 801.3.3 fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 60 cm, 60 cm below ground level including painting over exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.
60 cm equilateral triangle	230.0000 each		4693.0000	1079390.00	INR Ten Lakh Seventy Nine Thousand Three Hundred & Ninety Only	
7.02	od12811/2019_2020 : Providing and fixing of retro-reflectors cautionary, mandatory and informatory sign with 7years warranty manufactured as per IRC 67 made of Type XI micro prismatic grade sheeting fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 60 cm, 60 cm below ground level including painting over exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.
60 cm circular	12.0000 each		5845.0000	70140.00	INR Seventy Thousand One Hundred & Forty Only	

7.03	od12992/2019_2020 : Providing and fixing of retro-reflectolised cautionary, mandatory and informatory sign with 7 years warranty manufactured as per IRC :67 made of Type XI micro prismatic grade sheeting wide clause 801.3.3 fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 80 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.
80 mm rectangular	48,0000 each		7316.0000	351168.00	INR Three Lakh Fifty One Thousand One Hundred & Sixty Eight Only
7.04	od12993/2019_2020 : Providing and fixing of retro-reflectolised cautionary, mandatory and informatory sign with 7 years warranty manufactured as per IRC :67 made of Type XI micro prismatic grade sheeting wide clause 801.3.3 fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 80 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.
45 cm rectangular	50,0000 each		6000.0000	300000.00	INR Three Lakh Only


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7.05	od12994/2019_2020 : Providing and fixing of retro-reflectoris cautionary, mandatory and informatory sign with 7 years warranty manufactured as per IRC 67 made of Type XI micro prismatic grade sheeting fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 80 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc. 75 cm octagon	6.0000 each			7350.0000	44100.00	INR Forty Four Thousand One Hundred Only
7.06	od12995/2019_2020 : Providing and fixing of retro-reflectoris cautionary, mandatory and informatory sign with 7 years warranty manufactured as per IRC 67 made of Type XI micro prismatic grade sheeting fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with suitable back supporting frame of MS angle 25x25x3 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 80 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc. 50 cm x 60 cm rectangular (Single chevron etc.)	190.0000 each			6320.0000	1010800.00	INR Ten Lakh Ten Thousand Eight Hundred Only

7.07	od12999/2019_2020 : Providing and erecting retro-reflectorised Object Hazard Marker 300mm x 900mm &br>Providing and erecting retro-reflectorised Object Hazard Marker sign with 07 years warranty, manufactured as per IRC 67 USING Type IV ASTM D 4956-09 micro prismatic retro reflective sheeting fixed over aluminium sheetg. 2 mm thick / aluminium composite material sheeting 4 mm thick with suitable back support frame and supported on a mild steel angle iron post 75mmx75mmx6mm, firmly fixed 30cm above ground level by means of properly designed foundation with M 15 grade cement concrete 30cmx30x45cm, 45cm below ground level including painting all non-reflective faces with epoxy paint 2 coats over epoxy primer as per approved drawing and clause 801.&br>300 mm x 900 mm	48,0000 each		4000.0000	192000.00 INR One Lakh Ninety Two Thousand Only
7.08	ud12996/2019_2020 : Providing and fixing of direction and place identification retro-reflectorised sign with 7 years warranty manufactured as per IRC :87 made of Type XI micro prismatic grade sheeting fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with area not exceeding 0.9 sqm, with suitable back supporting frame of MS angle 40x40x6 and supported on GI pipe pole 50mm NB conforming to IS 1239 firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 60 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.	20.6200 sqm		12000.0000	247440.00 INR Two Lakh Forty Seven Thousand Four Hundred & Forty Only



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7.09	od12997/2019_2020 : Providing and fixing of direction and place identification retro reflectorised sign with 7 years warranty manufactured as per IRC :67 High Intensity Micro Prismatic Type XI grade sheeting fixed over aluminium sheeting, 2 mm thick/ aluminium composite material sheeting 4 mm thick with area exceeding 0.9 sqm. with suitable back supporting frame of MS angle 40x40x6 and supported on suitably designed GI pipe pole not less than 50mm NB, 2 Nos. conforming to IS 1239, firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete min size 45 cm x 45 cm x 60 cm, 60 cm below ground level including painting all exposed surface with 2 coats of epoxy painting over epoxy primer and as per approved drawing and clause 801 including lettering symbols etc.	30.9600	sqm			12500.0000	387000.00	INR Three Lakh Eighty Seven Thousand Only
7.1	od12998/2019_2020 : Providing and erecting overhead signs with retro reflectorised sign with 7 years warranty manufactured as per IRC
made of High Intensity Micro Prismatic (Type XI) grade sheeting fixed over corrosion resistant 2mm thick aluminium alloy sheet with vertical and lateral clearance given in clause 802.2 and 802.3 and installed as per clause 802.7 over
designed support system of aluminium alloy or galvanised steel trestles and trusses of sections and type as per structural design requirements and approved plans
Truss and Vertical Support	50.4010	tonne			106000.0000	5292105.00	INR Fifty Two Lakh Ninety Two Thousand One Hundred & Five Only
7.11	8.13 : Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads on Bituminous Surface @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads on Bituminous Surface @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	15030.0040	sqm			480.0000	7214401.92	INR Seventy Two Lakh Fourteen Thousand Four Hundred & One and Paise Ninety Two Only

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7.12	8.14.1 : Reinforced cement concrete M15 grade Kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc. 5th Kilometre stone (precast) Reinforced cement concrete M15 grade Kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc. 5th Kilometre stone (precast)	7.0000 each		4545.0000	31815.00	INR Thirty One Thousand Eight Hundred & Fifteen Only
7.13	8.14.2 : Reinforces cement concrete M 15 grade Kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc Ordinary kilometer stone (precast) Reinforces cement concrete M 15 grade Kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc. Ordinary kilometer stone (precast)	28.0000 each		3000.0000	84000.00	INR Eighty Four Thousand Only
7.14	8.16 : Reinforced cement concrete M-15 grade boundary pillars of standard design as per IRC:25-19767, fixed in position including finishing and lettering but excluding painting. Reinforced cement concrete M-15 grade boundary pillars of standard design as per IRC:25-19767, fixed in position including finishing and lettering but excluding painting	1136.0000 no		1200.0000	1363200.00	INR Thirteen Lakh Sixty Three Thousand Two Hundred Only
7.15	8.23.A : Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fittings to be galvanised by hot dip process, all fillings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 811.3 Erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fittings to be galvanised by hot dip process, all fillings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 811.3	10105.0000 metre		3315.0000	33498075.00	INR Three Crore Thirty Four Lakh Ninety Eight Thousand & Seventy Five Only

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CO-OPERATIVE SOCIETY LTD. No- 10093

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Project Management Unit
Kerala Road Fund Board

7.16	od45952/2018_2019 : Providing and erecting street light mounted on a steel circular hollow pole of standard specifications for street lighting, 9 m high spaced 40 m apart, 1.8 m overhang on both sides if fixed in the median and on one side if fixed on the footpath, fitted with sodium vapour lamp and fixed firmly in concrete foundation.	83.0000 each		42627.0000	3538041.00	INR Thirty Five Lakh Thirty Eight Thousand & Forty One Only
7.17	od13000/2019_2020 : Providing and fixing lighting on bridges, mounted on steel hollow circular poles of standard specifications, 5 m high fixed on parapets with cement concrete, 20 m apart and fitted with sodium vapour lamp	20.0000 each		20118.0000	402360.00	INR Four Lakh Two Thousand Three Hundred & Sixty Only
7.18	8.35 : Providing and fixing reflective road studs (Raised Pavement Marker) of 'category A' made out of ASA/HIPS/ABS moulded body with shanks and conforming to ASTM D 4280, strong enough to support a load of more than 13.635 T when tested in accordance with ASTM D 4280, reflective panel conforming to ASTM D 788, and reflectivity conforming to clause 804.4, including installation, drilling, fixing with adhesive etc. with 2 years warranty for the road stud as well as for in field performance as per clause 804.7.3 Road Markers/Road Stud with Lense Reflector :- Providing and fixing reflective road studs (Raised Pavement Marker) of 'category A' made out of ASA/HIPS/ABS moulded body with shanks and conforming to ASTM D 4280, strong enough to support a load of more than 13.635 T when tested in accordance with ASTM D 4280, reflective panel conforming to ASTM D 788, and reflectivity conforming to clause 804.4, including installation, drilling, fixing with adhesive etc. with 2 years warranty for the road stud as well as for in field performance as per clause 804.7.3	39570.5000 no		207.0000	8191093.50	INR Eighty One Lakh Ninety One Thousand & Ninety Three and Paise Fifty Only

For THE URDALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10357

CHAIRMAN

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Project Management Unit
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Thiruvananthapuram

7.19	od13001/2019_2020 : Providing and erecting retro-reflectorised Object Hazard Marker 450mm x 900mm &br& Providing and erecting retro-reflectorised Object Hazard Marker sign with 07 years warranty, manufactured as per IRC 67 USING Type XI ASTM D 4956-09 micro prismatic retroreflective sheeting fixed over aluminium sheeting, 2 mm thick / aluminium composite material sheeting 4 mm thick with suitable back support frame and supported on a mild steel angle iron post 75mmx75mmx6mm, firmly fixed 30cm above ground level by means of properly designed foundation with M 15 grade cement concrete 30cmx30x45cm, 45cm below ground level including painting all non-reflective faces with epoxy paint 2 coats over epoxy primer as per approved drawing and clause 801. &br& 450mm x 900 mm	40,0000 each			5000.0000	200000.00	INR Two Lakh Only
7.2	od13002/2019_2020 : Providing and fixing retro-reflectorised ceramic tiles&br& Providing and fixing retro-reflectorised ceramic tiles of size 10cmx20cm using High Intensity Micro Prismatic (Type XI) grade sheeting with 7 years warranty fixed over 1st quality ceramic glazed tiles including cost of glue, cutting charges, fixing with suitable adhesive on concrete or other surface etc complete.	6520,0000 no			103.0000	671560.00	INR Six Lakh Seventy One Thousand Five Hundred & Sixty Only

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7.21	55.18 : Providing and fixing guard post and fixing guard post of size 200mmx200mm, 1400mm long, 800mm above ground level and 800mm below G.L. casted in M20 Grade concrete reinforced with 4 nos of 8mm dia longitudinal bars and 6mm dia stirrups @ 100mm c/c, firmly fixed in position by means of foundation of size 0.5mx0.5mx0.7m in M15 grade concrete below ground level including painting 2 coats on exposed surface with synthetic enamel paint in alternate white & black band 20cm wide Providing and fixing guard post Providing and fixing guard post of size 200mmx200mm, 1400mm long, 800mm above ground level and 800mm below G.L. casted in M20 Grade concrete reinforced with 4 nos of 8mm dia longitudinal bars and 6mm dia stirrups @ 100mm c/c, firmly fixed in position by means of foundation of size 0.5mx0.5mx0.7m in M15 grade concrete below ground level including painting 2 coats on exposed surface with synthetic enamel paint in alternate white & black band 20cm wide	3255.0000 no			2500.0000	8137500.00	INR Eighty One Lakh Thirty Seven Thousand Five Hundred Only
8							
8.01	APPENDIX H-WAYSIDE AMENITIES 2.3.1 : Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a load of 50 m. All kinds of soil	488.1900 cum			218.0000	106425.42	INR One Lakh Six Thousand Four Hundred & Twenty Five and Paise Forty Two Only
8.02	4.1.6 : Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	330.0000 cum			6200.0000	2046000.00	INR Twenty Lakh Forty Six Thousand Only
8.03	4.1.4 : Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	24.8400 cum			6800.0000	168912.00	INR One Lakh Sixty Eight Thousand Nine Hundred & Twelve Only

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For THE UPAJUNGAL LABOUR CONTRACT
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8.04	10.19 : Providing and fixing mild steel round holding down bolts with nuts and washer plates complete. Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	900.0000 kg			110.0000	99000.00	INR Ninety Nine Thousand Only
8.05	10.20 : Providing and fixing bolts including nuts and washers complete. Providing and fixing bolts including nuts and washers complete.	1300.0000 kg			120.0000	156000.00	INR One Lakh Fifty Six Thousand Only
8.06	10.26.1 : Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S. tube	1340.0000 kg			120.0000	163200.00	INR One Lakh Sixty Three Thousand Two Hundred Only
8.07	10.26 : Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-Charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-Charge, (for payment purpose only weight of stainless steel	4400.0000 kg			648.0000	2851200.00	INR Twenty Eight Lakh Fifty One Thousand Two Hundred Only
8.08	10.16.1 : Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes	2400.0000 kg			120.0000	288000.00	INR Two Lakh Eighty Eight Thousand Only

For THE URALUNGAL LABOUR CONTRACT
CO-OPERATIVE SOCIETY LTD. No. 10957

Project Management Unit
Kerala Road Fund Board

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8.09	12.50 : Providing and fixing precast galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling self tapping screws of size (5.5x55mm) with EPDM seal, complete upto any pitch in horizontal/vertical or curved surfaces, excluding the cost of purins, rafters and trusses and including cutting to size and shape wherever required. Providing and fixing precast galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+0.05%), total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns.	819.2000 sqm			1200.0000	743040.00	INR Seven Lakh Forty Three Thousand & Forty Only
8.1	13.48.3 : Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications. Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture	98.4000 sqm			200.0000	19580.00	INR Nineteen Thousand Six Hundred & Eighty Only
8.11	11.3.1 : Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete 40 mm thick with 20 mm nominal size stone aggregate	432.0000 sqm			475.0000	205200.00	INR Two Lakh Five Thousand Two Hundred Only


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 Kerala Road Fund Board
 Thiruvananthapuram

For THE URAJINGAL LABOUR CONTRACT
 CO-OPERATIVE SOCIETY LTD. No. 10897

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8.12	21.5 : Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee /angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I level adjusting hangers 6 mm dia. with necessary cadmium plated machine screws all complete as per approved architectural drawings and direction of the Engineer-in-Charge (level adjusting hangers, ceiling cleats and expansion hold fasteners to be paid for separately). Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) consisting of tee /angle sections, of approved make conforming to IS : 733 in frames of false ceiling including aluminium angle cleats with necessary C.P brass/ stainless steel sunk screws, aluminium perimeter angles fixed to wall with stainless steel rawl plugs @ 450 mm centre to centre and fixing the frame work to G.I level adjusting hangers 6 mm dia. with necessary cadmium plated	96.0000 kg		628.0000	60288.00	INR Sixty Thousand Two Hundred & Eighty Eight Only
8.13	4.1.5 : Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	9.9240 cum		6400.0000	63513.60	INR Sixty Three Thousand Five Hundred & Thirteen and Paise Sixty Only
8.14	7.6.1 : Coursed rubble masonry (first sort) with hard stone in foundation and plinth with: Cement mortar 1:6 (1 cement : 6 coarse sand)	26.6030 cum		5000.0000	133015.00	INR One Lakh Thirty Three Thousand & Fifteen Only
8.15	5.1.3 : Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	3.0380 cum		7565.0000	22982.47	INR Twenty Two Thousand Nine Hundred & Eighty Two and Paise Forty Seven Only
8.16	2.25 : Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	24.6400 cum		165.0000	4098.60	INR Four Thousand & Ninety Eight and Paise Sixty Only

A. A.

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8.17	6.3.2 : Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) With Modular bricks	30.7050 cum			10600.0000	325473.00	INR Three Lakh Twenty Five Thousand Four Hundred & Seventy Three Only
8.18	5.3 : Reinforced cement concrete work in beams, suspended floors, roofs, having slope up to 15°; landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (Zone III) : 3 graded stone aggregate 20 mm nominal size); Reinforced cement concrete work in beams, suspended floors, roofs, having slope up to 15°; landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (Zone II) : 3 graded stone aggregate 20 mm nominal size).	8.9600 cum			9500.0000	85120.00	INR Eighty Five Thousand One Hundred & Twenty Only
8.19	9.1.1 : Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Second class teak wood	0.4570 cum			220000.0000	100540.00	INR One Lakh Five Hundred & Forty Only
8.2	9.5.1.1 : Second class teak wood 35 mm thick shutters	5.8000 sqm			4750.0000	27550.00	INR Twenty Seven Thousand Five Hundred & Fifty Only
8.21	9.9.1.1 : Second class teak wood 35 mm thick	8.2220 sqm			6000.0000	41110.00	INR Forty One Thousand One Hundred & Ten Only
8.22	17.2.1 : Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required; W.C. pan with ISI marked white solid plastic seat and lid	2.0000 each			4481.0000	8962.00	INR Eight Thousand Nine Hundred & Sixty Two Only

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8.23	17.7.2 : Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require. White Vitreous China Wash basin size 830 x 450 mm with a single 15 mm C.P. brass pillar tap	2.0000	each			2648.0000	5296.00	INR Five Thousand Two Hundred & Ninety Six Only
8.24	17.18.1 : Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete. 10 litre capacity - White	2.0000	each			1100.0000	2200.00	INR Two Thousand Two Hundred Only
8.25	17.32.1 : Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing. Circular shape 450 mm dia	2.0000	each			1200.0000	2400.00	INR Two Thousand Four Hundred Only
8.26	17.34.1 : Providing and fixing toilet paper holder. C.P. brass	2.0000	no			1000.0000	2000.00	INR Two Thousand Only
8.27	17.35.2.1 : 75 mm diameter Sand Cast iron S & S pipe as per IS : 1729	2.0000	metre			1000.0000	2000.00	INR Two Thousand Only
8.28	17.50.1.3 : 100 mm inlet and 100 mm outlet Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS: 15905	2.0000	no			2000.0000	4000.00	INR Four Thousand Only
8.29	17.69.2 : Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour. Waste coupling 38 mm dia of 83 mm length and 77 mm breadth, weighing not less than 60 gms	2.0000	each			298.0000	596.00	INR Five Hundred & Ninety Six Only
8.3	13.7.2 : 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement : 4 fine sand)	277.2040	sqm			320.0000	88705.28	INR Eighty Eight Thousand Seven Hundred & Five and Paise Twenty Eight Only
8.31	13.32.1 : Pointing on tile brick work with cement mortar 1:3 (1 cement : 3 fine sand). Flush / Ruled / Struck or weathered pointing	9.0000	sqm			250.0000	2250.00	INR Two Thousand Two Hundred & Fifty Only

8.32	13.33.1 : Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand). Flush/ Ruled pointing	15.4000 sqm			250.0000	3850.00	INR Three Thousand Eight Hundred & Fifty Only
8.33	13.43.1 : Applying one coat of water thinable cement primer of approved brand and manufacture on wall surface. Water thinable cement primer	277.2040 sqm			49.0000	13583.00	INR Thirteen Thousand Five Hundred & Eighty Two and Paise One Hundred Only
8.34	13.46.1 : Finishing walls with Acrylic Smooth exterior paint of required shade. New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	277.2040 sqm			130.0000	36036.52	INR Thirty Six Thousand & Thirty Six and Paise Fifty Two Only
8.35	11.36 : Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	34.5510 sqm			980.0000	33869.78	INR Thirty Three Thousand Eight Hundred & Sixty Nine and Paise Seventy Eight Only

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8.36	8.12 : Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with: 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-charge.	34.3610 sqm		3786.0000	130056.39	INR One Lakh Thirty Thousand & Fifty Six and Paise Thirty Eight; Only
8.37	a. Flamed finish granite stone slab Jet Black, Cherry Red, Ellie Brown, Cat Eye or equivalent. Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with: 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-charge. b. Flamed finish granite stone slab Jet Black, Cherry	10.0800 sqm		3355.0000	33919.20	INR Thirty Three Thousand Nine Hundred & Nineteen and Paise Twenty Only
8.38	7.25.1.2 : Stone work (machine cut edges) for wall lining etc. (vertical work) upto 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade. (To be secured in the backing and the sides by means of cramps and pins which shall be paid for separately). 50 mm thick	11200.0000 sqm		480.0000	5376000.00	INR Fifty Three Lakh Seventy Six Thousand Only
8.38	30.2.10.2 : Grassing with selection No. 1 grass including watering and maintenance of the lawn for 60 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately). With grass Turf					
Total In Figures					1549387879.28	INR One Hundred Fifty Four Crore Ninety Three Lakh Eighty Seven Thousand Eight Hundred & Seventy
Quoted Rate in Words						INR One Hundred Fifty Four Crore Ninety Three Lakh Eighty Seven Thousand Eight Hundred & Seventy Nine and Paise Twenty Eight Only

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No. 04/HH-DPR/HED/NATPAC

23rd February 2017

Chief Engineer (R&B)
Government of Kerala

Dear Sir,

Sub: Development of Hill Highway in Kerala – General Report – reg:

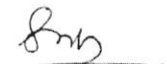
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Kindly find enclosed a general report towards the development of Hill Highway from Kasargode to Trivandrum. It is suggested that the Hill Highway be developed in phases and accordingly the development has been envisioned through three phases. A rough cost estimate has also been worked out towards this end and comes out to Rs 3316 crores.

The report is submitted for your kind perusal.

Thanking you
Yours truly




Director

Encl: As above

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1. BACKGROUND

Geographically, Kerala State has three distinct regions. viz. coastal, mid lands and high-ranges. The density of population in the coastal region is very high followed by midlands having moderate density. Both coastal and midlands have well connected road network and transportation system. The high ranges on the other hand have limited connectivity by road and the quality of road surface leaves much to be desired.

There has been a long-standing demand for a highway connecting Thiruvananthapuram District in the South and Kasaragod District in the North through the hilly regions of the State. The idea of a hill highway from north to south connecting hilly locations was initially conceived by farmers themselves, who perceived the lack of transportation facility as a root cause for the under development of the region. The Finance Commission set up by Central Government in 1954 gave green signal to the formation of a hill highway. In 1966, the Public Works Department Committee met at Kasargode and finalised the route of hill highway. Government of Kerala declared hill highway as State Highway vide G.O.(RT.) No: 282/97 PW& T dated 3rd January 1997.

The proposed hill highway envisages the development of the much needed North-South corridor through the hilly regions by upgrading/improving the existing network optimally. With the development of the proposed hill highway, distance from many production centers in the hilly regions to major market and commercial centers of the State gets reduced drastically. At present, farmers in the hilly regions are not getting due price for their products. Moreover, those who reside in such regions have to bear a higher cost for transporting the goods and services they require regularly.

Development of the Hill highway will greatly improve existing connectivity to many settlements especially for the tribal communities and will pave the way for greater integration of the marginal societies with the mainstream. Development of the Hill highway will provide the much-needed boost to the tourism sector by providing better connectivity to major tourist centers in the State. Thus, the proposed hill highway not only provide a quick access to Central and South Kerala from the economically backward districts, but also, can act as catalyst to overall socio-economic development of the hilly region.

2. HILL HIGHWAY ROUTE

Realizing the importance of this, Government of Kerala declared Hill Highway from Kadukkara in Thiruvananthapuram District to Nandarapadave in Kasaragod District *vide* G.O. (RT.) No: 282/97 PW& T dated 3rd January 1997. Subsequently, the State Government decided to take up the development of the Highway in two phases:

Phase-I from Nandarapadave in Kasaragod District to Palakkad Town

Phase-II from Palakkad Town to Kadukkara in Thiruvananthapuram District

2.1 Feasibility Study-Phase I

At the instance of Kerala PWD, NATPAC undertook a feasibility study in September 2001 and recommended the most feasible alignment for the Phase-I part of the proposed Hill Highway based on technical, economic, social and environmental considerations. The study was carried out in consultation with the Public Works Department and recommendation of the study was submitted to the Government in August, 2002. The alignment of the study was scrutinized and vetted by the concerned MLAs in the region and the PWD. Based on the decisions taken, the Government issued fresh orders stipulating the final alignment of Phase-I part of the Hill Highway covering a total length of 529 kms including a loop road of 111.2 kms to provide connectivity to hilly regions in Kozhikkode district.

2.2 Feasibility Study-Phase II

As part of One year Programme of Kerala State Council for Science, Technology and Environment, NATPAC undertook a study for Phase-II part of the Hill Highway starting from Palakkad Town to Parassala in Thiruvananthapuram District in 2005-06 and the findings of the study were reported to the State Government in March 2006. The routes identified by the study team were discussed with MLAs representing the respective regions and alignment was finalized. The total length of alignment in Phase II works out to 627.4 km.

2.3 Final Route

Based on the studies conducted by NATPAC and incorporating the suggestions from the people's representatives and PWD officials, the Government finalised the Hill Highway Route with a total length of 1267 km as in the Table 1 vide GO (MS) No. 44/2009/PWD dated 06-07-2009. Figure 1 shows the final route for the proposed Hill Highway between Kasaragod and Thiruvananthapuram Districts.

2.4 Hill Highway Route in Kozhikode District

For the Hill Highway stretch in Kozhikode District, there was a suggestion from the MLAs of the district to revise the route against the route notified vide GO. Based on the joint reconnaissance, the recommended Hill Highway route for Kozhikode District is:

Paluvai (District Border) - Vilangadu - Kannukulam - Kayakodi - Thottilpalam - Mullankunnu - Chembanoda - Peruvannamoozhi - Chakkittappara - Chembra - Koorachundu - Kallanode - Thalayad - Malapuram - Thevarnada - Kodenchery - Meenmutty - Nellipoil - Pulloorampara - Punnakkal - Koodaranji - Kooompara - Aanakallumpara- Thazhe Kakkad - Kakkadampoil (District Border)

Table 2.1: Alignment of Hill Highway as per GO (MS) No. 44/2009/PWD

Sl. No.	District	Particulars of Route	Length (km)
1	Kasargode	Nandarappadavu-Puthige-Perla-Badiyadukka-Mulleriya-Athindi-Pandy-Padippu-Bandadukka-Erinjilamkode-Kolichal-18 th Mile-Vallikadavu - Chittarikkal - Cherupuzha	133
2	Kannur	Cherupuzha-Manjakkadu-Alakkode-Karuvanchal-Thavukunnu-Naduvil-Chemperi-Payyavoor-Ullikkal-Vallithode-Anappanthi-Karikkottkari-Edoor-Aralam-Kappukadavu-Perumpunna-Madappurachal-Manathana-Kottiyoor-Ambayathode-Boys Town	118
3	Wayanadu	-Boys Town-Mananthawady-4 th Mile-Anchukunnu-Panamaram-Kainatty-Kalpetta-Kappamkolli-Meppadi-Chooral mala-ArunapuzhaBoys Town-Valad - Kunhome (part of loop)	100
4	Kozhikkode	Vilangadu-Kallachi-Kadiyangadu-Thalayadu-Kodencheri-Thiruvampadi-Koodaranji-Koompara-Kakkadampoil (part of loop)	117
5	Malappuram	Arunapuzha-Thampurattikallu-Palunda-Edakkara-Karulai-Moothedam-Pookkottumpadam-Kalikavu-Keralam-Kizhakkethala-Tharissu-Pulvetta-Karinkalthoni-Ponppara-Kakkadampoi -Veliyamthodu - Pookkottumpadam (part of loop)	108
6	Palakkad	Ponppara-Edathinattukara-Kappuparambu-Thiruvizhamkunnu-Kottoopadam-Kumaramputhur-Mannarkkadu-Palakkadu-Kallingal-Puthunagaram-Kollengode-Nenmara-Vadakkengeri-Panthalamadam	138
7	Thrissur	Panthalamadam-Pattikadu-Vilangannur-Mannamangalam-Pulikkani-Palappilli-Nayattukundu-Vellikulangara-Vettilappara	67
8	Ernakulam	Vettilappara-Adivaram-Kadappara-Illithode-Chettinada-Panamkuzhy - Payyal - Kottappadi - Cheladu - Oonjappara - Nadukani - Neryamangalam - 6 th Mile -- Elamplasser - Kurathikudy - Perumbankuthu	117
9	Idukki	Perumbankuthu-Mankulam-Kallar-Iruttukanam-Kunchithanni-Anachal-Rajakkadu-Kuthunkal-Thinkalkadu-Myladumpara-Nedumkandam-Puliyannala-Kattappana-Elappara- Kuttikanam - Mundakayam	152
10	Kottayam	Mundakayam - Erumeli - Placheri	23
11	Pathanamthitta	Placheri - Ranni - Kumbazha - Konni - Pathanapuram	50
12	Kollam	Pathanapuram - Alimukku-Punalur (Town) - Anchal - Kulathupuzha -Madathara - Kollayil	63
13	Thiruvananthapuram	Kollayil-Palode-Peringamala-Thennur-Vithura-Thottumukku-Malayadi-Parndodu-Aryanadu-Kuttichal-Kallikadu-Vazhichal-Amboori-Kudappanammoodu-Anappara-Vellarada-Karakonam-Parassala	81
Total			1267

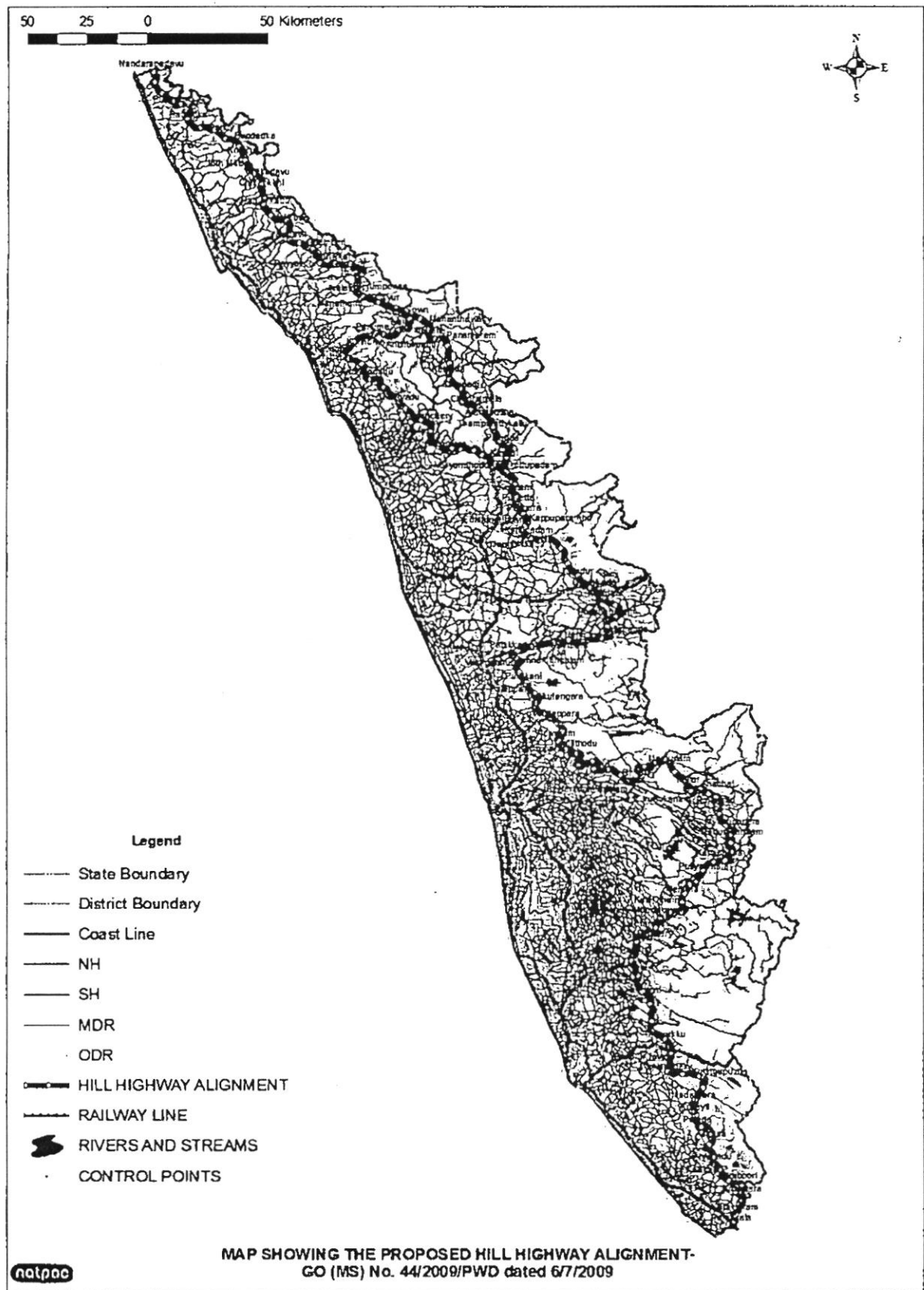


Fig. 2.1: Alignment Map of Proposed Hill Highway

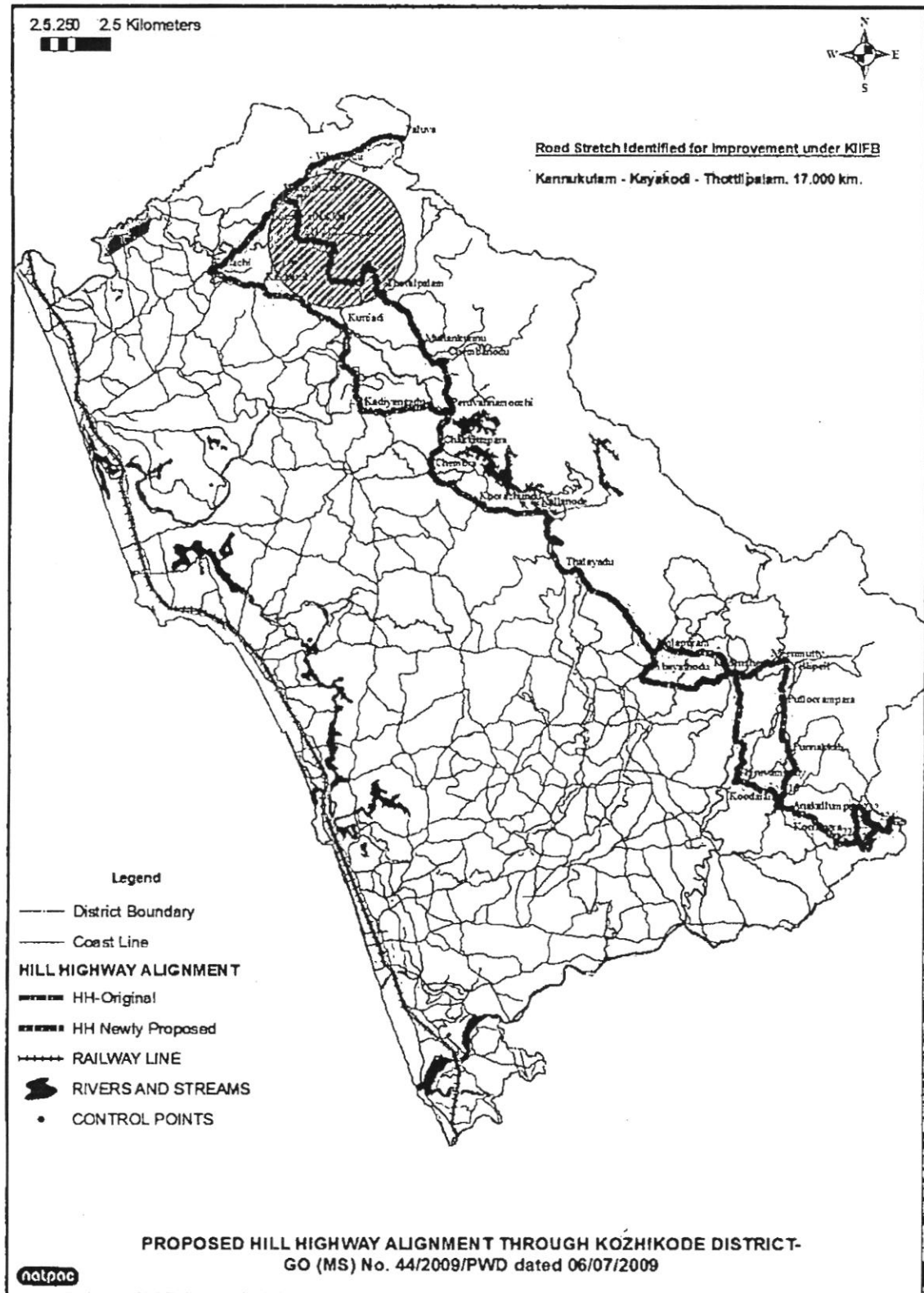


Fig 2.2: Original and New Alignment of Hill Highway Through Kozhikode District

3. EXISTING STATUS OF THE APPROVED ALIGNMENT

A review meeting presided by the Additional Chief Secretary (ACS) was held on 15.11.2016 in connection with the construction of Hill Highway. It was decided to stick on to the improvement of the alignment with State Highway standards of minimum 12m RoW and 7m CW. But during the last few years, some stretches of the alignment was improved with whatever land width available and only surface strengthening was done without any proper geometric improvements. Hence it was decided to conduct a joint inspection of the proposed alignment by Chief Engineer, PWD (R&B) and NATPAC to get the existing status of the alignment and also to find out the connectivity of the entire stretch. The assessment of land availability was one of the main objectives of the joint visit and the ACS asked the Chief Engineer to ensure the free surrendering of land for the required RoW by arranging discussions with the LSGD and local elected representatives to Assembly and Grama Panchayaths. Also it was decided in the meeting to prepare a priority list of road stretches from all districts to improve under Kerala Industrial Infrastructure Fund Board (KIIFB). The stretches should have enough RoW or free surrendering of land should be ensured.

As per the review meeting, the joint visit was made and the details of status of the entire stretch are given in **Table 3.1**. It was observed that, in most of the districts, some stretches were improved but the availability of 12m RoW was not considered. In Kannur, Kottayam and Pathanamthitta districts, more than 90% of the alignment was strengthened within the existing RoW. In Kasaragode district, DPR for 32kms of road stretch was prepared and submitted by NATPAC in 2014, but 18kms within the stretch was improved by PWD, without considering the DPR. Hence it was decided to select an additional 18kms. for preparation of DPR. In Kannur District, it was informed that most of the alignment has been improved under different schemes. In Wayanadu district, it was observed that, from Chooralmala to district border of the main alignment, no road is available but can be connected through Tea and Coffee Plantations to the neighbouring district of Malappuram. But for the loop road of Kozhikode District, 6kms. of missing link through Forest land is to be cleared from Forest Department for further connectivity to Kozhikode District. Similarly, around 8kms. of Forest stretch may be ensured from Forest Department for further connectivity from Wayanadu district to Malappuram district. For other districts, through connectivity is there, but the land availability is to be ensured.

Table 3.1: Existing Status of the Approved Hill Highway Alignment

Name of District	Road Stretch	Pavement	Length (km)	Land Width (m)
Kasaragod	Nandarapadavu to Morathana	BM&BC	8.30	
	Morathana to Chevar	DPR Submitted	13.50	
	Chevar to Idiyadukka	BM&BC	17.80	
	Idiyadukka to Badiyaduka	DPR Submitted	8.80	
	Badiyaduka to Edaparamba	BM&BC	15.30	
	Edaparamba to Pandi	PMC	4.00	8.0
	Pandi to Pallanchi	Forest Land	3.78	
	Pallanchi to Kolungal	PMC	25.50	8.0 to 9.0
	Kolungal to Vallikadavu	BM&BC	3.00	
	Vallikadavu to Nallanpuzha	PMC	7.90	7.0 to 9.0
	Nallanpuzha to Cherupuzha	BM&BC	2.50	
Kannur	Cherupuzha to Arangome	DFIP (HH Work in Progress)	17.93	8.0 to 10.0
	Arangome to Karuvanchal	BM&BC	4.70	10.0 to 12.0
	Karuvanchal to Puranjan	DFIP (HH Work in Progress)	13.25	10.0 to 12.0
	Puranjan to Payyavoor	HH Work in Progress	9.10	10.0 to 12.0
	Payyavoor to Ulikkal	DFIP (HH Work in Progress)	13.68	10.0 to 12.0
	Ulikkal to Koomanthodu	BM&BC	3.00	12.0
	Koomanthodu to Vallithodu	DFIP (HH Work in Progress)	3.40	12.0
	Vallithodu to Edoor	BM&BC	9.60	12.0
	Edoor to Manathana	HH Work in Progress	14.60	12.0
	Manathana to District Border (Chekuthanthodu)	BM&BC	20.00	12.0

Name of District	Road Stretch	Pavement	Length (km)	Land Width (m)
Wayanadu	District Border to Boys Town	PMC	0.60	7.0
	Boys Town to Kainatty Jn.	BM & BC	45.70	12.0 to 15.0
	Kainatty Jn. to Kalpetta	NH-766	4.00	12.0 to 20.0
	Kalpetta to Kappamkolly	BM & BC	7.00	8.0 to 10.0
	Kappamkolly to Meppady	BM & BC	2.10	10.0 to 15.0
	Meppady to Chooralmala	PMC	12.50	6.0 to 10.0
	Chooralmala to District Border	Mud Road	3.60	3.0 to 4.0
	Loop Road			
	Thavinjal (43 rd Mile) to Valad	BM & BC	9.20	10.0
	Valad to Kunkichira	PMC	10.00	5.0 to 8.0
	Kunkichira to District Border (Paluvai)	Forest Land	6.00	
Kozhikode	District Border (Paluvai) to Bhoomivathukkal	PMC	13.00	6.0 to 10.0
	Bhoomivathukkal to Kadiyangadu	BM & BC	25.00	6.0 to 12.0
	Kadiyangadu to Malappuram	PMC	40.00	6.0 to 12.0
	Malappuram to Malappuram	NH 766	1.00	20.0
	Malappuram to Koodaranhi	BM & BC	23.00	6.0 to 12.0
	Koodaranhi to Kakkadampoil	PMC	15.00	5.0 to 8.0
Malappuram	Arunapuzha to Pump House	Forest Land	8.00	
	Pump House to Farm Gate	PMC	3.00	3
	Farm Gate to Thampurattikallu	PMC	0.70	3.8
	Thampurattikallu to Pothukallu	BM&BC	5.20	8.0 to 10.0
	Pothukallu to Palunda	PMC	10.00	8.0 to 10.0
	Palunda to Edakkara	BM&BC	6.50	7.0 to 12.0
	Edakkara to Anand Nagar	PMC	13.60	7.0 to 10.0

Name of District	Road Stretch	Pavement	Length (km)	Land Width (m)
	Anand Nagar to Kizhakkethala	BM&BC	21.00	7.0 to 10.0
	Kizhakkethala to District Border (Olapara)	PMC	8.00	3.5 to 3.8
Malappuram (Loop Road)	Kakkadampoil to Moolepadam Br.	PMC	11.70	6.0 to 7.0
	Moolepadam Br. to Pookkottumpadam	BM&BC	21.30	6.0 to 12.0
Palakkad	Olapara to Kottappalla	PMC	1.50	5.0 to 7.0
	Kottappalla to Kumaramputhur	BM&BC	24.70	6.0 to 20.0
	Kumaramputhur to BPL Jn.	NH-966 & 544	46.00	
	BPL Jn. To Kodumba	BM&BC	5.70	6.0 to 20.0
	Kodumba to Vadakkethara	PMC	6.50	12
	Vadakkethara to Karippodu	BM&BC	12.00	7.0 to 18.0
	Karippodu to Kollengode	PMC	3.60	6.0 to 14.0
	Kollengode to Vadakkanchery	BM&BC	29.00	6.0 to 15.0
	Vadakkanchery to Vaniampara	NH 544	9.50	
	Vaniampara to Pattikadu	NH 544	10.70	
	Pattikadu to Vilangannur	BM&BC	5.60	15.0
Thrissur	Vilangannur to Vettilappara 13 th Mile	PMC	49.30	5.0 to 10.0
	Vettilappara 13 th Mile to Silverstorm	BM&BC	1.40	10.0 to 12.0
	Silverstorm to District Border	PMC	0.40	10.0
	District Border to Adivaram	PMC	22.70	8-10
	Adivaram - Kadappara	BM & BC + Paver block	1.10	11
Ernakulam	Kadappara to illithodu	PMC	3.40	7-15
	Vadakkambilly (Missing Bridge)			
	Vadakkambilly - Chettinada	PMC	2.00	8-9
	Chettinada to Panamkuzhi Junction	PMC	3.00	9

Name of District	Road Stretch	Pavement	Length (km)	Land Width (m)
Ernakulam (Contd.)	Panamkuzhi Junction to Payyal	PMC	11.60	8-9.5
	Payyal to Cheranganal	PMC	1.20	9
	Cheranganal to Chelad	BM&BC	10.80	6.8-11.5
	Chelad to Oonjappara	BM&BC	0.80	14
	Oonjappara to Nadukani	BM&BC	4.80	7-9.5
	Nadukani to Oonnukal Junction	BM&BC	8.70	7-8
	Oonnukal Junction to Neriya mangalam	BM&BC	8.70	7-8
	Neriya mangalam to 6 th mile	NH	9.50	7
	6 th Mile to Elamplasser	PMC	10.00	7-8
	Elamplasser to Kurathykudy Chappath	Earthen road	11.50	4-6
Idukki	Kurathykudy Chappath to Perumbankuth	Earthen road	8.00	4-6
	Perumbankuth to Mankulam	PMC	3.50	6-8
	Mankulam to Kallar	PMC	18.50	8-10
	Kallar to Iruttukanam	NH	6.20	9
	Iruttukanam to Althara Junction	PMC	5.50	9-11
	Althara Junction to Ellakkal bridge	PMC	5.40	8
	Ellakkal bridge to Rajakkad	PMC	7.20	8.5-9.5
	Rajakkad to Mayiladumpara	PMC	15.20	8.5-9.5
	Mayiladumpara to Puliyannala	BM & BC	22.60	9-20
	Puliyannala to Kattappana	BM & BC	7.10	9-20
	Kattappana to Swaraj	BM & BC	10.10	10-14
	Swaraj to Kuttikanam	PMC	30.90	8-10
	Kuttikanam to Mundakayam	NH	19.90	
Kottayam	Mundakayam to Karnkallummoozhy (Erumely)	BM & BC	15.10	8-10

Name of District	Road Stretch	Pavement	Length (km)	Land Width (m)
	Karnkallummoozhy (Erumely) to Plachery	BM & BC	7.60	9-10
Pathanamthitta	Plachery to Pathanapuram	PMC	50.20	8-15
Kollam	Pathanapuram to Punaloor Junction	PMC	13.90	12
	Punaloor Junction Agasthyacode	BM & BC	10.60	12
	Agasthyacode to Alanchery Jn.	PMC	2.20	7-12
Kollam (Contd.)	Alanchery Jn. to Kulathupuzha	BM & BC	17.20	7-12
	Kulathupuzha to Kollayil	PMC	17.80	10-18
	Kollayil to challimukku	PMC	1.60	10-15
Thiruvananthapuram	Challimukku to Palod	BM & BC	8.90	10-12
	Palod to Forest guard station	BM & BC	3.50	10-12
	Forest guard station to Koppam	PMC	10.00	8-12
	Koppam to Iruthalamoola	BM & BC	3.90	10-16
	Iruthalamoola to Parandode	PMC	4.90	10-12
	Parandode to Aryanadu	PMC	5.90	
	Aryanadu to Kuttichal jn	BM & BC	3.40	
	Kuttichal jn to Kallikkadu Jn	BM & BC	5.40	10-15
	Kallikkadu Jn to Vazhichal	BM & BC	8.10	10-15
	Vazhichal Jn Kudappanamoodu	PMC	8.20	9-17
	Kudappanamoodu to Parasala	BM & BC	18.80	9-17

*BM – Bituminous Macadam

BC - Bituminous Concrete

PMCC –Premix Chipping Carpet

4. DESCRIPTION OF HILL HIGHWAY ALIGNMENT

4.1 Kasargode District

The Hill Highway starts from Nanadarapadavu, in Kerala- Karnataka Border, in Kasargode District. The total length of the route in Kasargode is 133km, passes through Morathana, Anagadimogaru, Idiyadukka, Badiyadukka, Pandi, Athinadi, Kolichal, Chittarikkal and ends at Cherupuzha, the district border with Kannur. Of the 133km, DPR has been prepared by NATPAC for the 31.5 km long section from Morahana to Idiyadukka. The initial 400m section at Nandarapadavu is in Karnataka and is of earthen surface only and is to be formed to connect with all-weather road. The route passes through rolling to hilly terrain and has ROW varying from 6m to 15m. The land use is predominantly residential cum agricultural.

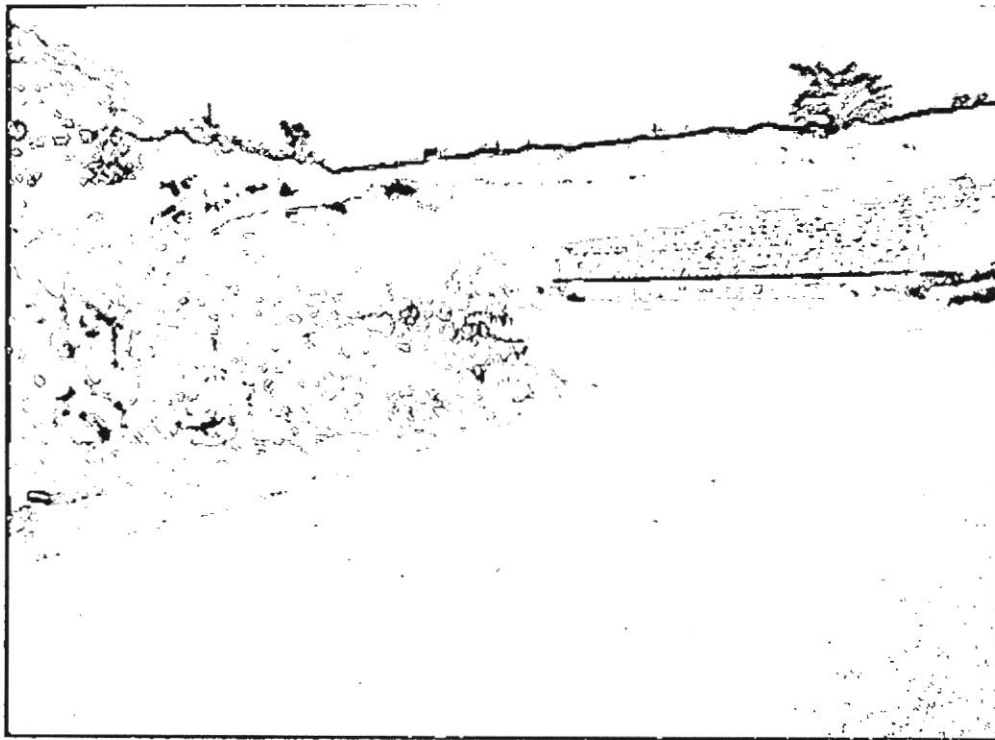


Fig. 4.1: Road section in Morathana-MiyapadavuSection

4.2 Kannur District

In Kannur district, the Hill Highway has traverses for a length of 118km, starting at Cherupuzha and ending at Boys Town in Wayanad border. Enroute places include

Alakkode, Karuvanchal, Chemperi, Payyavoor, Ullikkal, Vallithode, Karikkottkari, Aralam, Kottiyoor and Ambayathode. The DPR has been prepared for the section from Cherupuzha to Payyavoor and the work is under progress. Most of the remaining sections have been developed under various schemes of the state.

4.3 Wayanad District

In Wayanad district, the Hill Highway alignment commences from the Chekuthanthode which is located in the Wayanad - Kannur border situated at 11°50'37.5"N & 75°55'1.4"E. The existing corridor runs through the forest area for about 300m and thereafter on both sides is covered by agricultural land. The carriageway of this road section is 5.5m and the right of way is 7m. The alignment from Chekuthanthode passes through Boys town, 43rd mile, 44th mile, Thalapuzha, Puthenpura and then reaches the Manathavady town. The carriageway of this section is 5.5m and the right of way varies from 7m to 12m with the land use of agriculture & residential in LHS and agriculture & commercial area in the RHS. The section from Boys town to Manathavady is included in the Budget scheme for development.

From Manathavady town, the alignment connects 4th mile, 5th mile, Koolivaayal, Kaithakkad, Kainatty and then reaches the Kalpetta bypass. In this section, the available right of way varies from 10m to 11m with the carriageway varying from 6m to 8m. The pavement surfacing is with BM&BC and on both sides, agriculture land/residential and agricultural/commercial land use is observed throughout the road section.

The alignment from Kalpetta connects the towns namely Kappamkolli, Meppadi, Thanlilode, Chooramala, Attamala and then reaches Arunapuzha, which is located in Malapuram - Wayanad border. In this road section, carriageway of 2.5m to 5.5m is available with the right of way varying from 4 to 12m. The carriageway of 2.5m and ROW of 4 is spotted near Attamala. The pavement is surfaced with PMC from Meppadi to Chooramala whereas from Attamala to Arunapuzha unsurfaced road is found.

At 43rd mile, the alignment deviates to Venmani, Kattimoola, Valad, Karimbal, Kunhome and reaches Kunkichira which is a part of the Kozhikode loop. In this road section, carriageway of 3.5m to 7m is available with the right of way varying from 5 to 10m. The alignment enters Kozhikode District at Paluva and there is a missing link of about 6kms

through forest in Wayanad District. The total length of the proposed alignment in the Wayanad District is 100.9km



Fig. 4.2: Road section in Chekuthanthode



Fig. 4.3: Road section in Kalpetta Bypass

4.4 Kozhikode District (Newly Recommended Route)

The alignment starts at Paluvai and passes through Kannukulam, Thottilpalam, Peruvannamoozhi, Malapuram, Kodenchery, Koodaranji and Kakkadampoil and finally ends at Arunapuzha in the Malappuram border, with a total length of 117 km.

After connecting Kannukulam, the alignment passes through Kayakodi, Thottilpalam, Chembanoda, Peruvannamoozhy, Thevarnada, Kodenchery, Meenmutty, Pulloorampara and Aanakkallumpara. The right of way varies from 8m to 12m and carriageway width of 5.5m to 7m. The land use pattern in this section comprises of agricultural, residential and commercial.



Fig. 4.4: Road section in Kozhikode District

4.5 Malappuram District

The Hill Highway alignment enters Malappuram District at Arunapuzha River through a missing link of about 8kms of Forest and reaches Thampurattikallu. From Thampurattikallu, the proposed alignment connects Pothukallu, Palunda and reaches Edakara. In this section, the right of way varies from 8 to 12m with a carriageway of 3.8m to 7m. The pavement is surfaced with BM & BC and the land use along the section varies from forest area to residential/agriculture area.

The alignment from Edakara then runs through the towns of Maramvettichal, Palangara, Karulai, Anand nagar, Pookottumpadam, Chokkad, Kannath and reaches the town Kizhakkethala with the right of way varying from 7m to 10m and carriageway of 3.8m to 5.5m. The land use in this section is mostly agricultural and residential. The road section from Maramvettichal to Palangara has carriageway width of 3.8m. Development of road section from Anand Nagar to Kizhakkethala is proposed under KSTP scheme.

The road section after reaching Kizhakkethala passes through Tarissu, Pulvetta, and reaches Olappara with the right of way varying from 5.6m to 8m & carriageway of 3m to 3.8m, passing through the plantation and residential area. The alignment deviates to Kakkadampoil, Vendekkumpoil and Mulepadam with the right of way varying from 6m to 7m and carriageway of 3.8m to 5m.

Then the road after connecting Mulepadam passes through Mayiladi, Velianthode, Chandakunnu, Karulayi and ends at Pookottupadam with the right of way of 6m to 10m and carriageway of 5.5m to 7m. The land use pattern in this section varies from residential to commercial to agricultural.



Fig 4.5: Missing link in Arunapuzha

4.6 Palakkad District

In Palakkad district, the alignment commences at Olappara and passes through Kottapalla, Ambalapara, Thiruvizhankunnu, Kottapadam and Kumaramputhoor with the right of way varying from 5m to 10m and carriageway of 3.8m to 7m.

At Kumaramputhoor the alignment connects to NH 544 & NH 966 and passes through Kootupatha and joins SH 52 and then passes *via* Kallingal, Kodumba, Kallukuttiyal, Athikkad, Vadakkethara with the right of way varying from 5m to 10m and carriageway of 3.8m to 7m. In this section the pavement is surfaced with BM & BC with the varying land use of residential cum agriculture.

The alignment after reaching Vadakkethara passes through Puthunagaram, Kollamcode, Vallangi Bypass, Chittilancheri, Mudappalloor, Vadakancherry and ends at Vaniyampara with the right of way varying from 6m to 15m and carriageway width of 5.5m to 7m. The total length of the proposed alignment in the Palakkad district is 138.10km.

4.7 Thrissur District

In Thrissur district the alignment starts at Vaniyampara and overlaps with NH 766 upto Vilanganoor. Then the alignment passes through Kolaakundu, Mannamangalam, Kappela, Pullikanni and reaches Parapalli with the right of way varying from 5m to 10 and carriageway width of 3.8m to 5.5m.

From Parapalli, the road section passes through plantation land and runs through Nayattukundu and Vellikulangara with the right of way varying from 6m to 8m and carriageway width of 3.5m to 5.5m.

After reaching Vellikulangara, the alignment passes through Chaiyipankkudi, and ends at Vettilappara, the district border with Thrissur. In this section, the right of way varies from 5m to 10m and carriageway width ranges from 3m to 7m. The total length of alignment in Thrissur district is 67.3km.

4.8 Ernakulam District

The Hill Highway alignment in Ernakulam District has a total length of 110.9 km, starts from Vettilappara and ends at Perumbamkuthu. Continuity of alignment is missing at one location where a 400m road including a major bridge of length 160m is required. Replacement of one major bridge is required at Perumbamkuthu and the acquisition of forest land is crucial for the road development.

The Hill Highway route in Ernakulam district starts at Vettilappara, where the alignment traverses through the bridge constructed across the Chalakudi river, which acts as the physical district boundary between Thrissur and Ernakulam. After the bridge, the alignment traverses through palm plantation and rubber plantation and reaches Malayattoor Adivaram. The ROW of the section varies from 8 to 10 m and the carriageway width varies from 3.5 to 5.5 m. Premix chipping carpet is laid in this 22 km stretch as pavement surface course and the surface condition is poor. For the Adivaram-

Kadappara stretch, which has a length of 1.3 km, 7m carriageway with good surface is present. Here the ROW is 11 m. From Kadappara, the alignment deviates to Illithodu and reaches Vadakkambilly after crossing the Periyar River. Here a 400m road including a 160m span bridge is to be constructed.

From Vadakkambilly, the alignment traverses 1.4 km, has a carriageway width of 4 to 5.5 m and reaches Chettinada Junction. The next section, Chettinada to Panankuzhi junction, has 5.5 m wide carriageway and is provided with chipping carpet road. Here the ROW is 9 m and the length of the stretch is 3.7 km. From Panankuzhi to Payyal, the alignment traverses through residential cum agricultural area with commercial pockets at few locations. A 200 m forest section is coming under this 10.5 km stretch. The ROW varies from 8 to 9.5 m and carriageway varies from 4 to 5.5 m. The Payyal to Cheranganal stretch of length 1.9 km passes through residential and commercial area with 5.5 m carriageway and 9 m ROW. The pavement surface of Vadakkambilly to Cheranganal is made up of premix chipping carpet and is in fair to good condition.

From Cheranganal, the alignment traverses through Chelad, Oonjampara, Nadukani, Onnukal and reaches Neriyaamangalam junction. The total length of this stretch is 32.8 km and the ROW varies from 6.8 to 14 m with a carriageway width of 4 to 6 m. A small portion of Forest land comes under Onnukal- Neriyaamangalam stretch. The entire pavement surface is provided with BM and BC and the alignment traverses through residential cum agricultural area with commercial pockets at few locations.

From Neriyaamangalam to 6th mile, the Hill Highway alignment overlaps with NH 85 for a length of 9.3 km. From 6th mile, the alignment deviates from NH and reaches Elamplassery. Here the pavement surface has premix chipping carpet with 3 to 4.5 m width and the ROW varies from 7 to 8 m. The road passes mainly through residential cum agricultural area and at some stretches, the road shares its boundary with forest land. From Elamplassery to Perumbamkuthu, the district border, earthen road of width 3 to 8 m is available. The road shares its ROW with Forest land for majority of its length. A lot of tribal settlements are present along this 15.3 km road. Construction of many culverts, minor bridges and one major bridge across Perumbamkuthu river for replacing the existing 2.5 m width bridge etc. are required and Forest land has to be acquired for realizing the alignment through Elamplassery – Perumbamkuthu stretch.

4.9 Idukki District

The total length of coastal highway in Idukki district is 154.1 km and it overlaps with many SHs and NHs.

From Perumbamkuthu, the district border, a narrow road of length 3 km, having carriageway width 2.5 to 4.2 m, surfaced with Premix chipping carpet, is available to reach Mankulam junction, a small town in Idukki District. Further, the alignment traverses through Residential/ agricultural and Forest/ Cardamom Reserve forest (CRF) and reaches Kallar in NH 85 after running through a length of 17.9 km. From Kallar to Iruttukanam, the Hill Highway alignment overlaps with NH 85 for a length of 6.1 km and then deviates to Munnar bypass road and reaches Althara junction. Length of this stretch is 5.3 km and ROW varies from 9 to 11m with a carriageway width of 4.5 to 5.5 m. The road stretch from Althara junction to Rajakkad passes through Ellakkal bridge having a ROW of 8 to 9.5 m with a carriageway width of 4 to 5.5 m. The stretch spanning 12.2km is already proposed by the PWD to be developed in the KIIFB Scheme. Then the alignment reaches Myladumpara after passing through a 14.7km length through agricultural cum residential area. The ROW of this portion varies from 8.5 to 9.5 m with a carriageway width of 4.3 to 5.5m. The road stretch from Perumbamkuthu to Myladumpara is surfaced with Premix Chipping Carpet and is in fair condition.

After Mayladumpara, the Hill Highway alignment overlaps with SH 19 up to Puliyanmala for a length of 27.9km, with SH 33 from Puliyanmala to Kattappana for a length of 6km and with SH 41 from Kattappana to Swaraj for a length of 10.9km, where BM & BC surfacing has been provided and remains in fair to good condition. Swaraj to Kuttikkanam, a 29.7 km long stretch, is surfaced with premix chipping carpet to a width of 5.5 to 8m within a ROW of 8 to 10m. After Kuttikkanam the Hill Highway alignment overlaps with NH 183 upto Mundakkayam, the district boundary.

4.10 Kottayam District

In Kottayam district, the Hill Highway alignment passes through Erumely, Karinkallumoozhi and reaches Plachery by traversing a distance of 22 km through Residential and agricultural land use with small pockets of commercial and forest area. From Mundakkayam to Karinkallumoozhi, the alignment overlaps with NH 183A for a

length of 14.5 km. The entire length is surfaced with BM & BC layers, has a carriageway width of 5.5 to 7 m and the road is in good condition.

4.11 Pathanamthitta District

In Pathanamthitta district the proposed hill highway alignment overlaps with SH 8 from Plachery to Pathanapuram. The total length of this stretch is 48.6 km and carriageway width varies from 5 to 7 m within a ROW of 8 to 15m. The entire stretch is already handed over to KSTP for improvement.

4.12 Kollam District

In Kollam district, the hill highway alignment starts from Pathanapuram and passes through Punaloor, Agastyacode, Alanchery, Kulathupuzha and Kollayil and ends at Challimukku, the district boundary. The total length of hill highway in Kollam district is 61.2 km.

The 13.3 km long Pathanapuram to Punalur stretch is a part of SH 8 and the same has been handed over to KSTP for improvement. From Punalur, the alignment passes through SH 48 having 12 m ROW and 5.5 m carriageway and reaches Agastyacode after traversing a distance of 10.4 km. Agasthycode to Alanchery is a 2 km stretch, passing through Residential/ agricultural/commercial area with 7 – 12 m ROW and 5 to 8 m wide Carriageway. After Alancehry, the hill highway alignment overlaps with SH 59 for a length of 16.7 km and reaches Kulathupuzha and then overlaps with SH 2 for a length of 18.7 km and reaches Challimukku. At few locations, the alignment shares its boundary with forest area.

4.13 Thiruvananthapuram District

In Thiruvananthapuram district, the proposed Hill Highway alignment starts from Challimukku on SH 2 and passes through Palode, Koppam, Iruthalamoola, Parandode, Aryanadu, Kuttichal, Kallikkadu, Vazhichal and Kudappanamoodu and ends at Parasala, the State border.

From Challimukku to Palode, the Hill Highway alignment uses SH 2 and this 8.7 km stretch is surfaced with BM & BC layers with a carriageway width of 6 m and ROW of 10

to 12 m. The 3.6 km long Palode – Forest guard Station road stretch is surfaced with BM & BC layers with a carriageway width of 5 to 6 m and ROW of 10-12 m. The Forest Guard Station - Koppam stretch is already included in the RICK scheme for development. The Koppam - Iruthalamoola stretch having a length of 4.5 km overlaps with SH 45, where BM & BC surface is provided. After Iruthalamoola, the alignment deviates to Parandode and then reaches Aryanadu after traversing a length of 9.4 km. This section is also included in the RICK scheme for development. From Aryanadu to Vazhichal section, the ROW varies from 10 to 15 m and carriageway width varies from 6 to 7 m. This 16.4 km long stretch is surfaced with BM & BC layers and is in good condition. Premix Chipping Carpet surface is present in 8.2 km long Vazhichal to Kudappanamoodu section, and it has a carriageway width of 4 to 4.5 m with a ROW of 9 to 17 m. The surface of this section varies from poor to fair condition. From Kudappanamoodu to Parasala, the road is surfaced with BM & BC layers to a width of 5 to 7 m. The ROW varies from 9 to 17m and the length of this section is 18.1 km.

Thus, the total length of Hill highway in Trivandrum district is 79.8 km and passes mainly through Residential and agriculture land use. The alignment is edged with forest land at few locations.

4.14 Missing Links/Forest Sections

Out of the total 1267 kms of the Hill Highway length, about 14 kms is missing link passing through forest area, necessitating permission from concerned authorities for further development. Table 4.1 shows the details of forest sections enroute of the Hill Highway.

Table 4.1: Hill Highway Sections passing through Forest

Sl. No.	Section	Length (km)	District(s)
1	Kunkichira - Paluvai	6	Wayanad/Kozhikode
2	Arunapuzha - Thampurattikallu	8	Wayanad/Malappuram
Total		14 km	

In addition to the above list, there are sections with limited right of way (ranging from 4 m to 8m) passing through forest, and where bituminous road already exists. Widening of these sections will also mandate permission from forest authorities. It is suggested that an

early action be taken to get the necessary permissions for completing the missing links through the forest land.

5. PHASING OF SECTIONS

Considering the fact that, some of the portions of the Hill Highway are either developed under specific schemes or are under development, it is necessary to prioritise the sections enroute. This will help in suitable allocation of funds and also will help in efficient implementation. Accordingly the development is envisioned through three Phases. Phase I aims at developing those stretches where land availability is ensured. Also, a provision for overlay has been included for those sections which are already in a developed and standard condition. **Tables 5.1 to 5.4** shows the districtwise list of roads selected in each of the phases.

Table 5.1: List of Sections Identified for Development in Phase I

District	Section	Length (km)
Kasargode	Kolichal to Paramba	18.10
Wayanad	Valad to Kunkichira	11.1
	Meppady to Chooralmala	12.6
Kozhikode	Kannukulam to Thottilpalam	17.2
Malappuram	Pothukallu to Palunda	10.50
	Edakkara to Anand Nagar (Pookkottumpadam)	16.20
Palakkad	Kollengode to Vadakkanchery	28.0
Thiruvananthapuram	Vazhichal Jn Kodappanamoodu	8.2
Phasewise Total		121.90

Table 5.2: List of Sections Identified for Development in Phase II

District	Section	Length (km)
Kasargode	Nandarapadavu to Sunkathakatta	6.700
	Paramba to Nallompuzha	10.700
Wayanad	Chekuthanthodu to Boys Town	0.6
	Chooralamala to Arunapuzha	3.6
Kozhikode	Thottilpalam to Peruvannamoozhi	13
	Malapuram to Kodenchery	8.3
	Kodenchery to Koodaranji	15.4
	Koodaranji to Kakkadampoil	15
Malappuram	Kizhakkethala to Olapara	8.20
	Kakkadampoil to Mulepadam Br.	18.40
Palakkad	Olapara to Kottappalla	1.5
	Kodumba to Vadakkethara	6.5
	Karippodu to Kollengode	3.6
Thrissur	Vilangannur to Vellikulangara	32.0
	Vellikulangara to Vettilappara	19.0
Ernakulam	Vadakkambilly - Chettinada	1.4
	Chettinada to Panamkuzhi Junction	3.7
	Panamkuzhi Junction to Payyal	10.5
	Payyal to Cheranganal	1.3
	Cheranganal to Chelad	10.5
	Chelad to Oonjappara	2.0
	Oonjappara to Nadukani	4.0
	Nadukani to Oonnukal Junction	7.8
	Oonnukal Junction to Neriymangalam	8.5
Idukki	Rajakkad to Mayiladumpara	14.7
	Swaraj to Kuttikanam	29.7
Kollam	Punaloor Junction Agasthyacode	10.4
	Agasthyacode to Alanchery Jn.	2.0
	Kulathupuzha to Kollayil	17.3
	Kollayil to challimukku	1.4
Total		287.694

Table 5.3: List of Sections Identified for Development in Phase III

District	Section	Length (km)
Kasargode	Athinadi to Kolichal	26.00
Wayanad	Kunkichira to District Border (missing link)	6
	Manathavady -Kainatty-Meppadi	34.2
	Kainatty - Kalpetta Bypass- Kappamkolli	7.3
	Boy's Town to Manathavady Town	14.3
Kozhikode	Paluvai to Kannukulam	10
	Peruvanamuzhi to Malapuram (MDR)	33.7
	Kakkadampoli to Arunapuzha (Missing link)	5
Malappuram	Arunapuzha to Thampurattikallu (Missing Link)	10.00
	Mulepadam Bridge to Pookottupadam	21.40
Palakkad	Vadakkethara to Vadavanoor (SH 27)	12.6
	Kallingal to Kodumba	2.1
	Vadavannoor to Kollengode	3.6
Ernakulam	Vettilappara to Adivaram	22.0
	Adivaram - Kadappara	1.3
	Kadappara to illithodu	3.2
	Missing bridge	0.4
	6th Mile to Elamplasserri	9.8
	Elamplasserri to Kurathykudy Chappath	11.3
	Kurathykudy Chappath to Perumbankuth	4.0
Idukki	Perumbankuth to Mankulam	3.0
	Mankulam to Kallar	17.9
	Mayiladumpara to Puliyanmala(SH -19)	27.9
	Puliyanmala to Kattappana(SH-33)	6.0
	Kttappana to Swaraj (SH-41)	10.9
Kollam	Alanchery Jn. to Kulathupuzha	16.7
Thiruvananthapuram	Challimukku to Palode (SH 2)	8.7
	Palode to Forest guard station	3.6
	Koppam to Iruthalamoola	4.5
	Kuttichal jun to Kallikkadu Jun	5.3
	Kallikkadu Jun to vazhichal	7.9
	Kodappanamoodu to Parasala	18.1
Total		368.6

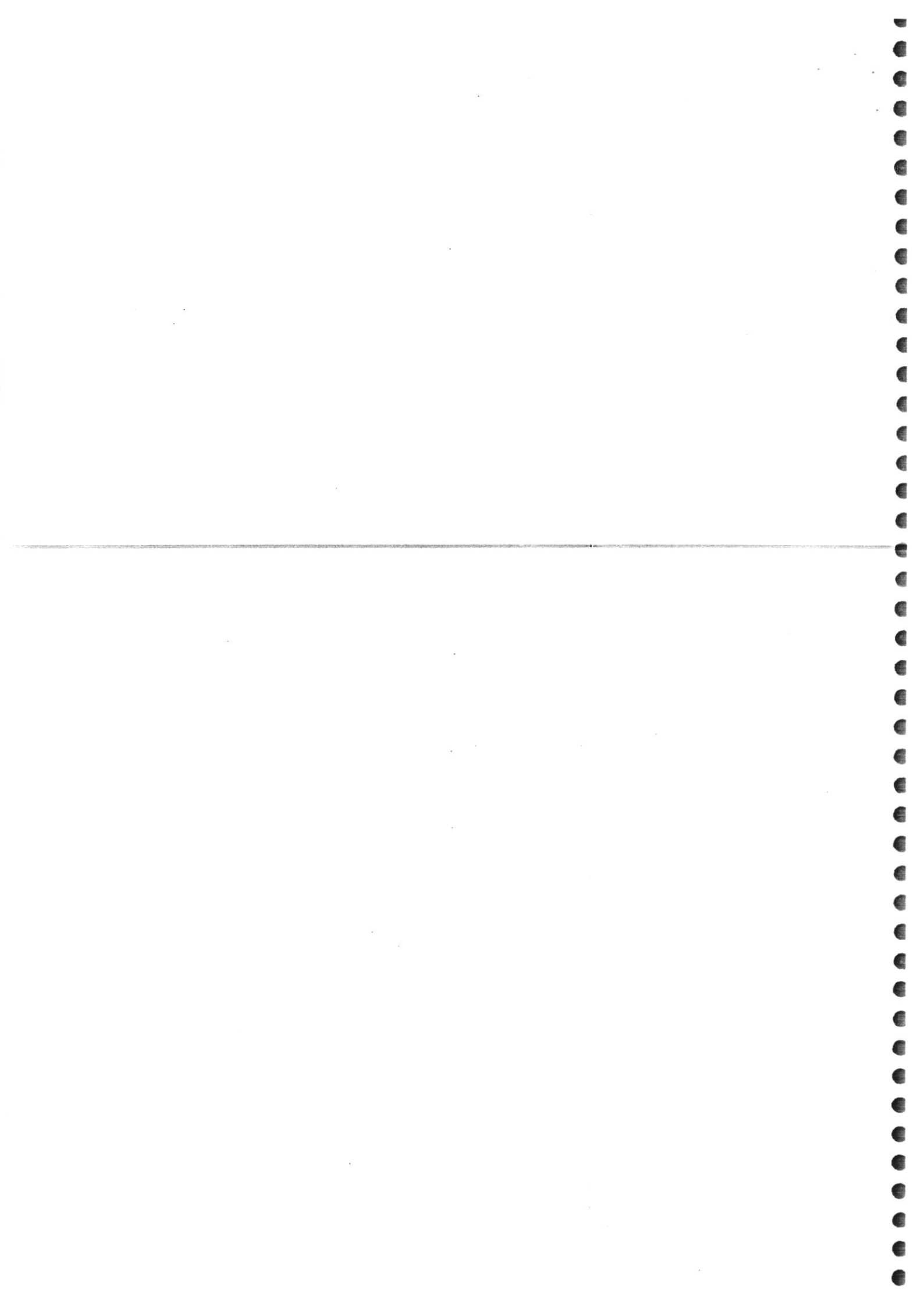


Table 5.4: List of Sections Identified for Overlay

District	Section	Length (km)
Kasargode	Sungathakatta to Athinadi	68.8
	Nallompuzha to Cherupuzha	2.7
Kannur	Cherupuzha to Boys Town	118
Wayanad	Kappamkolli to Meppadi	2.30
	43rd Mile to Valad	8.60
Malappuram	Palunda to Edakara	3.10
Kottayam	Karinkallummoozhy (Erumely) to Plachery	7.5
Thiruvananthapuram	Aryanadu to Kuttichal jn	3.3
Total		214.2

6. ROUGH COST ESTIMATE FOR IMPLEMENTING THE PROJECT

It is recommended that the Hill Highway be developed to standards. The cross section suggested is a two lane road with 12 m ROW and 7m carriageway provided with paved shoulders and side drains. The Hill Highway has been conceptualised as a chain of existing roads including NHs, SHs, PWD roads and other roads including forest trails. This necessitates that development is warranted only for those sections not belonging to NHs and SHs. Also it has been seen that some of the sections have already been developed or is under development under various other schemes of the Government. Correspondingly the remaining sections have been recommended to be developed in three phases. The phasewise details suggested for development and corresponding estimated cost are as given in **Tables 6.1** and **6.2**. No provision has been made in the estimate for improvement/maintenance of those sections falling under NH category or proposed to be developed under other schemes like KSTP, RICK etc.

It is estimated that a total of **Rs. 3316 Crores** is required for developing Hill Highway so as to make it fully functional and operational.

Table 6.1: Phasewise Summary of Cost of Development

Phase	Length (km)	Cost (Rs Crores)
Phase I	121.90	388.51
Phase II	287.69	1134.75
Phase III	366.81	1525.99
Overlay	213.04	266.28
Total	989.44	3315.54

**Note: Overlay is proposed for existing sections and the cost for the same is included in the total estimate*

Table 6.2: Estimated Phasewise Cost for Development of Hill Highway

District	First Phase		Second Phase		Third Phase		Overlay		Sections under Other Schemes/ NH	Total	
	Length (km)	Cost (Rs Crores)	Length (km)	Cost (Rs Crores)	Length (km)	Cost (Rs Crores)	Length (km)	Cost for overlay (Rs Crores)		Length (km)	(Rs Crores)
Kasargode	18.1	67.14	17.4	70.50	26	115.31	71.5	88.04		133	341.00
Kannur							118	146.30		118	146.30
Wayanad	23.7	87.59	4.2	17.11	61.8	224.02	10.9	13.70		100.6	342.42
Kozhikode	17.2	61.98	51.7	181.05	48.7	217.67				117.6	460.70
Malappuram	26.70	98.16	26.60	108.49	31.40	103.25	3.10	3.82	21.00	108.8	313.71
Palakkad	28	37.65	11.6	42.37	18.3	53.98			81.2	139.1	134.00
Thrissur			51	208.02		0.00			16.3	67.3	208.02
Ernakulam			49.6	178.00	52	245.57			9.3	110.9	423.58
Idukki			44.4	205.77	65.7	395.13			42	152.1	600.90
Kottayam							7.5	9.87	15	22.5	9.87
Pathanamthitta									48.6	48.6	0.00
Kollam			31.2	123.44	16.7	53.31			15	62.9	176.75
Thiruvananthapuram	8.2	35.99			48	117.74	3.3	4.54	21	80.5	158.27
Phasewise Total	121.9	388.51	287.7	1134.75	368.6	1525.99	214.3	266.28	269.4	1261.9	3315.54

7. SUMMARY

The report dealt with the prospects of the Hill Highway in Kerala, with a strategy to develop the routes in a phasewise manner. The existing status of the different sections has been explained and a rough cost estimate for developing the sections has also been worked out. It is estimated that a total of Rs 3316 crores is required for the development of Hill Highway to a standard two lane road. The alignment includes two missing links through forest with a total length of 14 kilometers in the districts of Wayanad, Kozhikode and Malapuram. In addition to this there are sections requiring widening, that share their boundary with forest. Also the realization of Hill Highway warrants construction of three bridges in the districts of Kasargode, Idukki and Ernakulam.

Cost Estimates for Development of 116 Highway from Kavayitri to Thiruvananthapuram

Road Stretch	Length (km)	C/L (m)	R/W (m)	Remarks/Remarks	Pavement						Road Furniture		Drainage		Other Works		Total Cost (Rs. Crores)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
					Gravel	Base	Sub-base	Back fill	Gravel	Base	Grating	Lighting	Drainage	Signage	Barriers	UT		Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Street	Markings	Signage	Barriers	UT	Stre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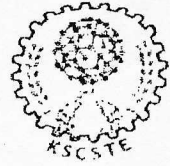
Location	Area (km²)	Population	Household	Phase	Year	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000	3010	3020	3030	3040	3050	3060	3070	3080	3090	3100	3110	3120	3130	3140	3150	3160	3170	3180	3190	3200	3210	3220	3230	3240	3250	3260	3270	3280	3290	3300	3310	3320	3330	3340	3350	3360	3370	3380	3390	3400	3410	3420	3430	3440	3450	3460	3470	3480	3490	3500	3510	3520	3530	3540	3550	3560	3570	3580	3590	3600	3610	3620	3630	3640	3650	3660	3670	3680	3690	3700	3710	3720	3730	3740	3750	3760	3770	3780	3790	3800	3810	3820	3830	3840	3850	3860	3870	3880	3890	3900	3910	3920	3930	3940	3950	3960	3970	3980	3990	4000	4010	4020	4030	4040	4050	4060	4070	4080	4090	4100	4110	4120	4130	4140	4150	4160	4170	4180	4190	4200	4210	4220	4230	4240	4250	4260	4270	4280	4290	4300	4310	4320	4330	4340	4350	4360	4370	4380	4390	4400	4410	4420	4430	4440	4450	4460	4470	4480	4490	4500	4510	4520	4530	4540	4550	4560	4570	4580	4590	4600	4610	4620	4630	4640	4650	4660	4670	4680	4690	4700	4710	4720	4730	4740	4750	4760	4770	4780	4790	4800	4810	4820	4830	4840	4850	4860	4870	4880	4890	4900	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130	5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000	6010	6020	6030	6040	6050	6060	6070	6080	6090	6100	6110	6120	6130	6140	6150	6160	6170	6180	6190	6200	6210	6220	6230	6240	6250	6260	6270	6280	6290	6300	6310	6320	6330	6340	6350	6360	6370	6380	6390	6400	6410	6420	6430	6440	6450	6460	6470	6480	6490	6500	6510	6520	6530	6540	6550	6560	6570	6580	6590	6600	6610	6620	6630	6640	6650	6660	6670	6680	6690	6700	6710	6720	6730	6740	6750	6760	6770	6780	6790	6800	6810	6820	6830	6840	6850	6860	6870	6880	6890	6900	6910	6920	6930	6940	6950	6960	6970	6980	6990	7000	7010	7020	7030	7040	7050	7060	7070	7080	7090	7100	7110	7120	7130	7140	7150	7160	7170	7180	7190	7200	7210	7220	7230	7240	7250	7260	7270	7280	7290	7300	7310	7320	7330	7340	7350	7360	7370	7380	7390	7400	7410	7420	7430	7440	7450	7460	7470	7480	7490	7500	7510	7520	7530	7540	7550	7560	7570	7580	7590	7600	7610	7620	7630	7640	7650	7660	7670	7680	7690	7700	7710	7720	7730	7740	7750	7760	7770	7780	7790	7800	7810	7820	7830	7840	7850	7860	7870	7880	7890	7900	7910	7920	7930	7940	7950	7960	7970	7980	7990	8000	8010	8020	8030	8040	8050	8060	8070	8080	8090	8100	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	8240	8250	8260	8270	8280	8290	8300	8310	8320	8330	8340	8350	8360	8370	8380	8390	8400	8410	8420	8430	8440	8450	8460	8470	8480	8490	8500	8510	8520	8530	8540	8550	8560	8570	8580	8590	8600	8610	8620	8630	8640	8650	8660	8670	8680	8690	8700	8710	8720	8730	8740	8750	8760	8770	8780	8790	8800	8810	8820	8830	8840	8850	8860	8870	8880	8890	8900	8910	8920	8930	8940	8950	8960	8970	8980	8990	9000	9010	9020	9030	9040	9050	9060	9070	9080	9090	9100	9110	9120	9130	9140	9150	9160	9170	9180	9190	9200	9210	9220	9230	9240	9250	9260	9270	9280	9290	9300	9310	9320	9330	9340	9350	9360	9370	9380	9390	9400	9410	9420	9430	9440	9450	9460	9470	9480	9490	9500	9510	9520	9530	9540	9550	9560	9570	9580	9590	9600	9610	9620	9630	9640	9650	9660	9670	9680	9690	9700	9710	9720	9730	9740	9750	9760	9770	9780	9790	9800	9810	9820	9830	9840	9850	9860	9870	9880	9890	9900	9910	9920	9930	9940	9950	9960	9970	9980	9990	10000	10010	10020	10030	10040	10050	10060	10070	10080	10090	10100	10110	10120	10130	10140	10150	10160	10170	10180	10190	10200	10210	10220	10230	10240	10250	10260	10270	10280	10290	10300	10310	10320	10330	10340	10350	10360	10370	10380	10390	10400	10410	10420	10430	10440	10450	10460	10470	10480	10490	10500	10510	10520	10530	10540	10550	10560	10570	10580	10590	10600	10610	10620	10630	10640	10650	10660	10670	10680	10690	10700	10710	10720	10730	10740	10750	10760	10770	10780	10790	10800	10810	10820	10830	10840	10850	10860	10870	10880	10890	10900	10910	10920	10930	10940	10950	10960	10970	10980	10990	11000	11010	11020	11030	11040	11050	11060	11070	11080	11090	11100	11110	11120	11130	11140	11150	11160	11170	11180	11190	11200	11210	11220	11230	11240	11250	11260	11270	11280	11290	11300	11310	11320	11330	11340	11350	11360	11370	11380	11390	11400	11410	11420	11430	11440	11450	11460	11470	11480	11490	11500	11510	11520	11530	11540	11550	11560	11570	11580	115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Road Network	Link ID	Link Name	Link Type	Link Length (km)	Phase 1				Phase 2				Phase 3				Phase 4				Phase 5				Phase 6				Phase 7				Phase 8				Phase 9				Phase 10				Phase 11				Phase 12				Phase 13				Phase 14				Phase 15				Phase 16				Phase 17				Phase 18				Phase 19				Phase 20				Phase 21				Phase 22				Phase 23				Phase 24				Phase 25				Phase 26				Phase 27				Phase 28				Phase 29				Phase 30				Phase 31				Phase 32				Phase 33				Phase 34				Phase 35				Phase 36				Phase 37				Phase 38				Phase 39				Phase 40				Phase 41				Phase 42				Phase 43				Phase 44				Phase 45				Phase 46				Phase 47				Phase 48				Phase 49				Phase 50				Phase 51				Phase 52				Phase 53				Phase 54				Phase 55				Phase 56				Phase 57				Phase 58				Phase 59				Phase 60				Phase 61				Phase 62				Phase 63				Phase 64				Phase 65				Phase 66				Phase 67				Phase 68				Phase 69				Phase 70				Phase 71				Phase 72				Phase 73				Phase 74				Phase 75				Phase 76				Phase 77				Phase 78				Phase 79				Phase 80				Phase 81				Phase 82				Phase 83				Phase 84				Phase 85				Phase 86				Phase 87				Phase 88				Phase 89				Phase 90				Phase 91				Phase 92				Phase 93				Phase 94				Phase 95				Phase 96				Phase 97				Phase 98				Phase 99				Phase 100				Phase 101				Phase 102				Phase 103				Phase 104				Phase 105				Phase 106				Phase 107				Phase 108				Phase 109				Phase 110				Phase 111				Phase 112				Phase 113				Phase 114				Phase 115				Phase 116				Phase 117				Phase 118				Phase 119				Phase 120				Phase 121				Phase 122				Phase 123				Phase 124				Phase 125				Phase 126				Phase 127				Phase 128				Phase 129				Phase 130				Phase 131				Phase 132				Phase 133				Phase 134				Phase 135				Phase 136				Phase 137				Phase 138				Phase 139				Phase 140				Phase 141				Phase 142				Phase 143				Phase 144				Phase 145				Phase 146				Phase 147				Phase 148				Phase 149				Phase 150				Phase 151				Phase 152				Phase 153				Phase 154				Phase 155				Phase 156				Phase 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KSCSTE - NATIONAL TRANSPORTATION PLANNING AND RESEARCH CENTRE

(An Institution under Kerala State Council for Science, Technology & Environment)
Sasthra Bhavan, Pattom P.O., Thiruvananthapuram - 695 004, Kerala, India
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No. 01/HH-KKD/RTD/NATPAC

02nd July 2018

The Principal Secretary
Public Works Department
Government of Kerala

Sir,


Sub: Hill Highway - Change of Alignment in Kozhikode District- reg.
Ref: Your letter No. PWD/H2/71/2017 dated 02.07.2018

It is informed that, in 2017 Feb, NATPAC had done a reconnaissance survey of the alternatives suggested for Hill Highway in Kozhikode district and had submitted a brief report towards the same. For the alignment suggested in reference, the observation made was as follows:

"This alternative is lying away from the hilly region than the original route. The fact is to be noted is that, this route is totally passing through private estate and very few houses (less than 10 nos.) are found enroute. Two quarries are also found to exist in the route. The alternative also warrants construction of a new bridge across Eeroodepuzha, the span being about 100 meters. Thus, the cost of construction will also be very high. Considering all the above factors, it is recommended that, the said alternative may not be considered as Hill Highway and the Original Route via Malapuram-Thevarnada-Kodenchery has to be kept as such. The alternative may be developed under some other schemes by PWD."

For a detailed assessment of the said alternative, field visits are required for confirming the technical feasibility. This will require a week's time.

Thanking you
Yours truly


Director

S. J. [Signature]

Handwritten: 07/07/2018 03:20 PM



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Hill Station
നാഗ്പാക്ക്-3(2)
Reaches

കേരള സർക്കാർ

സംഗ്രഹം

പൊതുമരാമത്ത് വകുപ്പ് - മലയോര പാതയുടെ - കാസറഗോഡ് മുതൽ തിരുവനന്തപുരം വരെ - പുതുക്കിയ അലൈൻമെന്റ് അംഗീകരിച്ച് ഉത്തരവ് പുറപ്പെടുവിക്കുന്നു.

പൊതുമരാമത്ത് (എച്ച്) വകുപ്പ്

സ.ഉ. (എം.എസ്) നം: 44/2009/പൊ.മ.വ.

തിരുവനന്തപുരം, തീയതി: 6-7-2009

പരാമർശം:- 1) ജി.ഒ.(ആർ.ടി) 13/05/പി.ഡബ്ല്യു.ഡി. തീയതി: 3-1-2005.

2) നാഗ്പാക് ഡയറക്ടറുടെ 21-5-09 -ലെ 101/HH/RRTD 2006/NATPAC നമ്പർ കത്ത്.

ഉത്തരവ്

സംസ്ഥാനത്തിന്റെ മലയോര പ്രദേശങ്ങളെ ബന്ധിപ്പിച്ചുകൊണ്ട് കാസറഗോഡ് ജില്ലയിലെ നന്ദാരപദവ് മുതൽ തിരുവനന്തപുരം ജില്ലയിലെ ചാറ്റാല വരെ ഒരു മലയോര ഹൈവേ നിർമ്മിക്കുന്നതിന് സർക്കാർ തയ്യാറായി തീരുമാനിക്കുകയും അതിന്റെ അലൈൻമെന്റ് തയ്യാറാക്കി റിപ്പോർട്ട് സമർപ്പിക്കുവാൻ നാഷണൽ ട്രാൻസ്പോർട്ടേഷൻ, പ്ലാനിംഗ് ആന്റ് റിസർച്ച് സെന്ററിനെ (NATPAC) ചുമതലപ്പെടുത്തുകയും ചെയ്തിരുന്നു. അപ്രകാരം കാസറഗോഡ് ജില്ലയിലെ നന്ദാരപദവ് മുതൽ പാലക്കാട് ടൗൺ വരെയും പാലക്കാട് ടൗൺ മുതൽ തിരുവനന്തപുരം ജില്ലയിലെ കടുക്കര വരെയും രണ്ടു ഘട്ടങ്ങളായി നാഗ്പാക് മലയോര ഹൈവേയുടെ പഠനം നടത്തുകയുണ്ടായി.

മുകളിൽ വായിച്ച സർക്കാർ ഉത്തരവ് പ്രകാരം മലയോര ഹൈവേയുടെ ഒന്നാംഘട്ടത്തിന് നാഗ്പാക് സമർപ്പിച്ച അലൈൻമെന്റ് അംഗീകരിക്കുകയുണ്ടായി. ഒന്നാംഘട്ടത്തിൽ വയനാട് ജില്ലയേയും മലപ്പുറം ജില്ലയേയും ബന്ധിപ്പിക്കുന്ന ഏകദേശം 70 കിലോമീറ്റർ നീളം വരുന്ന അരുണപ്പുഴ മുതൽ തമ്പുരാട്ടിക്കല്ലുവരെയുള്ള ഭാഗം വനഭൂമിയും നിലവിൽ റോഡുകൾ ഒന്നുംതന്നെ ഇല്ലാത്ത പ്രദേശങ്ങളായതിനാൽ അതുവഴിയുള്ള ഹൈവേക്ക് നാഗ്പാക് അലൈൻമെന്റ് തയ്യാറാക്കിയിരുന്നില്ല. പിന്നീട് പാലക്കാട് ടൗൺ മുതൽ കടുക്കര വരെയുള്ള രണ്ടാംഘട്ടത്തിന്റെ പഠനം നടത്തി നാഗ്പാക് റിപ്പോർട്ട് സമർപ്പിക്കുകയുണ്ടായി. ഒന്നാംഘട്ടത്തിലെ അരുണപ്പുഴ മുതൽ തമ്പുരാട്ടിക്കല്ലുവരെയുള്ള ഭാഗം ബന്ധിപ്പിക്കുന്നതിന് വനപ്രദേശത്തിന് പുറത്തുകൂടി ഒരു അലൈൻമെന്റും നാഗ്പാക് തയ്യാറാക്കി സമർപ്പിക്കുകയുണ്ടായി. പുതുക്കിയ അലൈൻമെന്റ് സർക്കാർ വിശദമായി പരിശോധിക്കുകയുണ്ടായി. സംസ്ഥാനത്തെ മലയോര പ്രദേശങ്ങളുടെ വികസനത്തിന് പരമാവധി പ്രയോജനപ്പെടുന്നവിധം കഴിവതും നിലവിലുള്ള പാതകളെ കോർത്തിണക്കിയാണ് നാഗ്പാക് ട്രാൻസ്പോർട്ടേഷൻ തയ്യാറാക്കിയിട്ടുള്ളത്.

A)

കാസർഗോഡ് മുതൽ തിരുവനന്തപുരം വരെയുള്ള നിർദ്ദിഷ്ട മലയോര ഹൈവേയുടെ അലൈൻമെന്റ്

കാസർഗോഡ്

നന്ദാരപദവ്-പുതയിതെ-പെർള-ബദിയടുക-മുളളരിയ-അത്തിനടി-പാണ്ടി-പടിപ്പ്-ബന്ദുക-ഇരഞ്ഞിലംകോട്-കോളിച്ചാൽ-പതിനെട്ടാംമൈൽ-വള്ളിക്കടവ്-ചിറ്റാരിക്കൽ-ചെറുപുഴ.

കണ്ണൂർ

ചെറുപുഴ-മണ്ണക്കാട്-ആലക്കോട്-കരുവഞ്ചാൽ-താവുകുന്ന്-നടുവിൽ-ചെമ്പേരി-പയ്യാവൂർ-ഉളിക്കൽ-വള്ളിത്തോട്-ആനപ്പന്തി-കരിക്കോട്ടകരി-എടൂർ-ആറളം-കാപ്പുകടവ്-പെരുമ്പുന്ന-മടപ്പുരച്ചാൽ-മണത്തറ-കൊട്ടിയൂർ-അമ്പായത്തോട്-ബോയ്സ് ടൗൺ.

വയനാട്

ബോയ്സ് ടൗൺ-മാനന്തവാടി-നാലാംമൈൽ-അഞ്ചുകുന്ന്-പനമരം-കൈനാട്ടി-കൽപ്പറ്റ-കാപ്പംകൊല്ലി-മേപ്പാടി-ചുരൽമല-അരുണപ്പുഴ.

കോളിക്കോട്

ബോയിസ് ടൗൺ-വാളാട്-കുഞ്ഞോം-വിലങ്ങാട്-കല്ലാച്ചി-കടിയങ്ങാട്-തലയാട്-കോടഞ്ചേരി-തിരുവമ്പാടി-കുടരഞ്ഞി-കുമ്പാറ-കക്കാടംപൊയിൽ-വെളിയത്തോട്.

മലപ്പുറം

അരുണപ്പുഴ-തമ്പുരാട്ടിക്കല്ല്-പാലുണ്ട-എടക്കര-കരുളായി-മുത്തേടം-പൂക്കോട്ടുപാടം-കാളികാവ്-കേരളം-കിഴക്കേത്തല(കരുവാരക്കുണ്ട്)-തരിശു-പുൽവേട്ട-കരിങ്കൽത്തോണി-പൊൻപാറ.

പാലക്കാട്

പൊൻപാറ-എടത്തിനാട്ടുകര-കാപ്പുപറമ്പ്-തിരുവിഴാങ്കുന്ന്-കോട്ടോപ്പാടം-കുമരംപുത്തൂർ-മണ്ണാർക്കാട്-ചന്ദ്രനഗർ(പാലക്കാട്-ടൗൺ)-കല്ലിങ്ങൽ-പുതുനഗരം-കൊല്ലങ്കോട്-നെന്മാറ-വടക്കഞ്ചേരി.

തൃശ്ശൂർ

പട്ടിക്കാട്-വിലങ്ങന്നൂർ-മാന്ദാംഗലം-പുലിക്കണ്ണി-പാലിപ്പിള്ളി-നായാട്ടുകുണ്ട്-വെള്ളികുളങ്ങര-വെറ്റിലപ്പാറ

എറണാകുളം

വെറ്റിലപ്പാല-അടിവാരം-കടപ്പാറ-ഇല്ലത്തോട്-ചെട്ടിനട-പാണങ്കുഴി-പയ്യാൽ-കോട്ടപ്പടി-ചേലാട്-ഉണ്ണത്താപ്പാറ-നാടുകാണി-നേര്യമംഗലം-ആറാംമൈൽ-എളപ്പ്ലാശ്ശേരി.

ഇടുക്കി

കുറത്തിക്കുടി-പെരുമ്പൻകുത്ത്-മാങ്കുളം-കല്ലാർ-ഇരുട്ടുകാനം-കുഞ്ചിത്തണ്ണി-രാജാക്കാട്-കുത്തുകൽ-തികൾക്കാട്-മൈലാടുംപാറ-നെടുങ്കുണ്ടം-പുളിയാമല-കട്ടപ്പന-ഏലപ്പാറ-കുട്ടിക്കാനം-മുണ്ടക്കയം.

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കോട്ടയം

മുണ്ടക്കയം-എരുമേലി-പ്ലാച്ചേരി.

പത്തനംതിട്ടറാന്നി-കുമ്പളം-കോന്നി-പത്തനാപുരം.കൊല്ലം

൧൪

പത്തനാപുരം-പുനലൂർ-അഞ്ചൽ-കുളത്തുപ്പുഴ-മടത്തറ-കൊല്ലായിൽ.തിരുവനന്തപുരംകൊല്ലായിൽ-പാലോട്-പെരിങ്ങമല-തെന്നൂർ-വിതൂര-തോട്ടുമുക്ക്-മലയടി-പറങ്ങാട്-ആര്യനാട്-കുറ്റിച്ചൽ-കള്ളിക്കാട്-വാഴിച്ചാൽ-അമ്പൂരി-കുടപ്പനമുട്-ആനപ്പാറ-വെള്ളാട-കാരക്കോണം-പാറശ്ശാല.

ഈ സാഹചര്യത്തിൽ കാസറഗോഡ് മുതൽ തിരുവനന്തപുരം വരെയുള്ള മലയോര ഹൈവേക്ക് അനുബന്ധമായി ചേർത്തിട്ടുള്ള അലൈൻമെന്റ് സർക്കാർ അംഗീകരിച്ച് ഇതിനാൽ ഉത്തരവാകുന്നു.

ഗവർണ്ണറുടെ ഉത്തരവിൻപ്രകാരം
ഒ.ജി. ജോസ്
പ്രിൻസിപ്പൽ സെക്രട്ടറി

56 ചീഫ് എഞ്ചിനീയർ (റോഡുകളും പാലങ്ങളും), തിരുവനന്തപുരം ഡയറക്ടർ, നാറ്റ്പാക്, ഡയറക്ടർ, പബ്ലിക് റിലേഷൻസ്, ജനറൽ അഡ്മിനിസ്ട്രേഷൻ (എസ്.സി.) ഡിപ്പാർട്ട്മെന്റ്. (വൈഡ് ഐറ്റം നം. 3422. തീയതി: 1-7-09.)

പകർപ്പ് :
പൊതുമരാമത്ത് (സി, ഡി, ജി, പിഎസ്) വകുപ്പ്.
കരുതൽ ഫയൽ/ഓഫീസ് പകർപ്പ്.

S. J. A.
സെക്ഷൻ ഓഫീസർ

ഉത്തരവിൻപ്രകാരം

സെക്ഷൻ ഓഫീസർ



കേരള സർക്കാർ

സംഗ്രഹം

പൊതുമരാമത്ത് വകുപ്പ് - കോഴിക്കോട് ജില്ലയിലെ മലയോര ഹൈവേയുടെ പുതുക്കിയ അലൈൻമെന്റ് അംഗീകരിച്ച് ഉത്തരവ് പുറപ്പെടുവിക്കുന്നു.

പൊതുമരാമത്ത്(എച്ച്)വകുപ്പ്

സ.ഉ.(കെ) നം.39/2018/പൊ.മ.വ തീയതി, തിരുവനന്തപുരം, 16/10/2018

- പരാമർശം:-
1. ജി.ഒ(എം.എസ്)നം.44/2009/പൊ.മ.വ, തീയതി 6/07/2009
 2. പൊതുമരാമത്ത് ചീഫ് എഞ്ചിനീയറുടെ(ആർ& ബി) 27/02/2017 ലെ C.E/R&B/G.L/H.Way/2016-17 നമ്പർ കത്ത്.
 3. നാറ്റ്പാക് ഡയറക്ടറുടെ 2/07/2018 ലെ 01/HH - KKD/RTD/ NATPAC നമ്പർ കത്ത്.

ഉത്തരവ്

കാസർഗോഡ് മുതൽ തിരുവനന്തപുരം വരെയുള്ള മലയോര ഹൈവേയുടെ അലൈൻമെന്റ് പരാമർശം (1) പ്രകാരം സർക്കാർ അംഗീകരിച്ച് ഉത്തരവായിട്ടുള്ളതാണ്. അത് പ്രകാരം കോഴിക്കോട് ജില്ലയിലെ മലയോര ഹൈവേയുടെ അലൈൻമെന്റ് താഴെ പറയും പ്രകാരമാണ്.

"ബോയിസ് ടൗൺ - വാളാട് - കണ്ടത്താം - വിലങ്ങാട് - കല്ലാച്ചി - കടിയങ്ങാട് - തലയാട് - കോടഞ്ചേരി - തിരുവമ്പാടി - കടരത്തി - കമ്പാറ - കക്കാടംപൊയിൽ - വെളിയംതോട്".

2. എന്നാൽ കോഴിക്കോട് ജില്ലയിലെ അലൈൻമെന്റ് സംബന്ധിച്ച് ലഭിച്ച പരാതികളുടെ അടിസ്ഥാനത്തിൽ കോഴിക്കോട് ജില്ലയിലെ മലയോര ഹൈവേയുടെ അലൈൻമെന്റ് പുതുക്കി നിശ്ചയിക്കുവാൻ 23/11/2016 ൽ ചേർന്ന യോഗത്തിൽ തീരുമാനിച്ചിരുന്നു.

3. ആയതിന്റെ അടിസ്ഥാനത്തിൽ NATPAC മുഖേന സാങ്കേതിക പരിശോധന നടത്തിയ ശേഷം കോഴിക്കോട് ജില്ലയിലെ മലയോര ഹൈവേയുടെ പുതുക്കിയ അലൈൻമെന്റ് സംബന്ധിച്ച പ്രോപ്പോസൽ പരാമർശം (2) ലെ കത്ത് പ്രകാരം പൊതുമരാമത്ത് ചീഫ് എഞ്ചിനീയർ(ആർ& ബി) അംഗീകാരത്തിനായി ലഭ്യമാക്കിയിരുന്നു..

4.സർക്കാർ ഇക്കാര്യം വിശദമായി പരിശോധിക്കുകയും കോഴിക്കോട് ജില്ലയിലെ മലയോര ഹൈവേയുടെ അലൈൻമെന്റ് താഴെ പറയും പ്രകാരം പുതുക്കി നിശ്ചയിച്ചുകൊണ്ട് ഉത്തരവാകുകയും ചെയ്യുന്നു.

"പാലുവായ് (ജില്ലാ അതിർത്തി) - വിലങ്ങാട് - കുന്നുകളം - കായകൊടി - തൊട്ടിൽ പ്ലാലം - മുളളൻ കുന്നി - ചെമ്പനോട - പെരുവണ്ണാമുഴി - ചക്കിട്ടപ്പാറ - ചെമ്പ്ര - കൂരാച്ചുണ്ട് - കല്ലാനോട് - തലയാട് - മലപ്പുറം - തൈയൂംപാറ - തേവർമല - കോടഞ്ചേരി - മീൻമുട്ടി - നെല്ലിപൊയിൽ - പുളളരാംപാറ - പുനക്കൽ - കൂടരഞ്ഞി - കൂമ്പാറ - ആനക്കല്ലംപാറ - താഴേകക്കാട് - കക്കാടം പൊയിൽ (ജില്ലാ അതിർത്തി)."

(ഗവർണ്ണറുടെ ഉത്തരവിൻ പ്രകാരം)

കെ എൻ സതീഷ്
സ്പെഷ്യൽ സെക്രട്ടറി

ചീഫ് എഞ്ചിനീയർ(നിരത്തുകൾ /പാലങ്ങൾ/ഭരണം),തിരുവനന്തപുരം
ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, കേരള റോഡ് ഫണ്ട് ബോർഡ് തിരുവനന്തപുരം
ജില്ലാ കളക്ടർ കോഴിക്കോട്
പ്രൊജക്ട് ഡയറക്ടർ, പി.എം.യു, കെ.ആർ.എഫ്.ബി, തിരുവനന്തപുരം
ഡയറക്ടർ, നാറ്റ്പാക്ക്, തിരുവനന്തപുരം
അക്കൗണ്ടന്റ് ജനറൽ(എ &ഇ/ആഡിറ്റ്), തിരുവനന്തപുരം
ധനകാര്യ വകുപ്പ് (U.O.No.467733/I &PWBI/2017/Fin, തീയതി 24/07/2017)
പൊതുഭരണ (എസ്.സി) വകുപ്പ്
പകർപ്പ്:ബഹു മുഖ്യമന്ത്രിയുടെ പി എസിന്
ബഹു.പൊതുമരാമത്ത് വകുപ്പ് മന്ത്രിയുടെ പി എസിന്
പൊതുമരാമത്ത് പ്രിൻസിപ്പൽ സെക്രട്ടറിയുടെ പി.എ
പൊതുമരാമത്ത് സ്പെഷ്യൽ സെക്രട്ടറിയുടെ സി .എ
കരുതൽ ഫയൽ / ഓഫീസ് കോപ്പി/വൈബ് സൈറ്റ്

Signature valid

Digitally signed by
MANOJ R
Date: 2018.07.20
14:23:14 IST
Reason: Approved

ഉത്തരവിൻ പ്രകാരം

സെക്ഷൻ ഓഫീസർ

S. I. A.
സെക്ഷൻ ഓഫീസർ



കേരള സർക്കാർ

സംഗ്രഹം



പൊതുമരാമത്ത് വകുപ്പ് - കേരളത്തിലെ മലയോര ഹൈവേ പദ്ധതിയുടെ അലൈൻമെന്റ് സർക്കാർ മുൻകൂർ അനുവാദമില്ലാതെ പുതുക്കിയ പി.എം.യു -കെ.ആർ.എഫ്.ബി പ്രോജക്ട് ഡയറക്ടറുടെ നടപടി സാധൂകരിച്ച് ഉത്തരവാകുന്നു.

പൊതുമരാമത്ത്(എച്ച്) വകുപ്പ്

സ.ഉ.(കെ) നം.26/2024/PWD തീയതി, തിരുവനന്തപുരം, 15-06-2024

- പരാമർശം:-
1. സ.ഉ.(കെ)നം.44/2009/പൊമവ തീയതി 06/07/2009
 2. സ.ഉ(സാധാ)നം.942/2017/പൊമവ തീയതി 10/07/2017
 3. ബഹു. മുഖ്യമന്ത്രിയുടെ ചീഫ് പ്രിൻസിപ്പൽ സെക്രട്ടറിയുടെ അധ്യക്ഷതയിൽ 5/10/2021, 21/12/2021, 12/01/2022, 25/02/2022, 15/03/2022, 10/11/2022 തീയതികളിൽ ചേർന്ന യോഗങ്ങളുടെ നടപടിക്കുറിപ്പുകൾ
 4. പ്രോജക്ട് ഡയറക്ടർ, പി.എം.യു-കെ.ആർ.എഫ്.ബി യുടെ 21.12.2022, 20.01.2023, 30.12.2023 തീയതികളിലെ PDKRFB/713/2022-PE5 നം. കത്തുകൾ

ഉത്തരവ്

കാസറഗോഡ് ജില്ലയിലെ നന്ദാരപ്പടവ് മുതൽ തിരുവനന്തപുരം ജില്ലയിലെ പാറശ്ശാല വരെ നീളുന്ന മലയോര ഹൈവേയുടെ അലൈൻമെന്റ് പരാമർശം (1) പ്രകാരം സർക്കാർ അംഗീകരിക്കുകയും തുടർന്ന് പരാമർശം (2) പ്രകാരം മലയോര ഹൈവേ പദ്ധതിയ്ക്ക് 3500 കോടി രൂപയുടെ ഭരണാനുമതി തത്വത്തിൽ നൽകുകയുണ്ടായി. 54 സ്ട്രെച്ചുകൾപ്പെട്ട പ്രസ്തുത പദ്ധതി കിഫ്ബി ഫണ്ടിൽ ഉൾപ്പെടുത്തി പി.എം.യു-കെ.ആർ.എഫ്.ബി മുഖേനയാണ് നടപ്പിലാക്കുന്നത്.

2. എന്നാൽ മേൽ പ്രകാരം അംഗീകരിക്കപ്പെട്ട സ്ട്രെച്ചുകളിൽ സൗജന്യ ഭൂമി ലഭ്യത, വനഭൂമി ലഭ്യത എന്നിവയിൽ ഉണ്ടായ തടസ്സം നിമിത്തവും ചില സ്ട്രെച്ചുകളിൽ കിഫ്ബി മാനദണ്ഡങ്ങൾ പാലിക്കാൻ സാധിക്കാത്ത സാഹചര്യം വന്നതിനാലും മലയോര ഹൈവേ പദ്ധതി നടപ്പാക്കുന്നതിൽ കാലതാമസം നേരിടുകയുണ്ടായി. തുടർന്ന് പദ്ധതി നടപ്പാക്കുന്നതിന് അനുയോജ്യമായ ബദൽ അലൈൻമെന്റുകൾ സംബന്ധിച്ച് നാറ്റ്പാക്ക് പഠനം നടത്തുകയും അതിൻ പ്രകാരം ശുപാർശ ചെയ്ത ബദൽ അലൈൻമെന്റുകൾ പരാമർശം (3) പ്രകാരം ചേർന്ന യോഗങ്ങൾ അംഗീകരിക്കുകയുണ്ടായി.

3. ബഹു. മുഖ്യമന്ത്രിയുടെ മുൻഗണനാ പദ്ധതികളിൽ ഉൾപ്പെട്ട മലയോര ഹൈവേ പദ്ധതി സമയബന്ധിതമായി പൂർത്തിയാക്കേണ്ടതിനാൽ സർക്കാരിന്റെ മുൻകൂർ അനുമതിക്ക്

കാത്തിരിക്കാതെ, പ്രസ്തുത ബദൽ അലൈൻമെന്റുകളുടെ അടിസ്ഥാനത്തിൽ വിശദമായ പ്രോജക്ട് പ്രൊപ്പോസൽ തയ്യാറാക്കി പി.എം.യു.-കെ.ആർ.എഫ്.ബി, കിഫ്ബിയുടെ സാമ്പത്തികാനുമതിയായി സമർപ്പിക്കുകയും പുതുക്കിയ അലൈൻമെന്റുകൾക്ക് കിഫ്ബിയുടെ സാമ്പത്തികാനുമതി ലഭ്യമായതിനെ തുടർന്ന് സാങ്കേതികാനുമതി ലഭ്യമാക്കി പദ്ധതി നടത്തിപ്പ് വിവിധ ഘട്ടങ്ങളിലായി പുരോഗമിച്ചു വരുന്നതായും സർക്കാരിന്റെ മുൻകൂർ അനുമതിയില്ലാതെ മലയോരഹൈവേയുടെ അലൈൻമെന്റ് പുതുക്കിയ നടപടി സാധ്യകരിക്കണമെന്നും പ്രോജക്ട് ഡയറക്ടർ പരാമർശം (4) പ്രകാരം അഭ്യർത്ഥിച്ചിട്ടുണ്ട്.

4. സർക്കാർ മേൽ വിഷയം വിശദമായി പരിശോധിച്ചു. മലയോരഹൈവേ പദ്ധതി നടപ്പാക്കുന്നതിലെ കാലതാമസം ഒഴിവാക്കുന്നതിനായി പ്രസ്തുത പദ്ധതിയുടെ അലൈൻമെന്റ്, സർക്കാരിന്റെ മുൻകൂർ അനുമതിയില്ലാതെ അനുബന്ധമായി ചേർത്തിരിക്കും പ്രകാരം പുതുക്കിയ പി.എം.യു - കെ. ആർ. എഫ്. ബി പ്രോജക്ട് ഡയറക്ടറുടെ നടപടി സാധ്യകരിച്ച് ഇതിനാൽ ഉത്തരവാകുന്നു.

(ഗവർണ്ണറുടെ ഉത്തരവിൻ പ്രകാരം)

കെ ബിജു ഐ എ എസ്
സെക്രട്ടറി

പകർപ്പ്:

പ്രോജക്ട് ഡയറക്ടർ, പി.എം.യു.-കെ.ആർ.എഫ്.ബി, തിരുവനന്തപുരം

ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, കിഫ്ബി, തിരുവനന്തപുരം

പ്രിൻസിപ്പൽ അക്കൗണ്ടന്റ് ജനറൽ(ഓഡിറ്റ്/എ&ഇ), തിരുവനന്തപുരം

പൊതുമരാമത്ത്(എസ്.സി) വകുപ്പ്(ഇനം.നം.2213)

ധനകാര്യ(ഇൻഫ്രാസ്ട്രക്ചർ) വകുപ്പ്(ഇൻഫ്രാ7/32/2023-ഫിൻ തീയതി 08.11.2023)

ഇൻഫർമേഷൻ ആന്റ് പബ്ലിക് റിലേഷൻസ് (വെബ് & ന്യൂ മീഡിയ) വകുപ്പ്

കരുതൽ ഫയൽ/ഓഫീസ് കോപ്പി (എച്ച്2/269/2022/പൊ.മ.വ)

ഉത്തരവിൻ പ്രകാരം,

Signed by

Priyanka T V

Date: 15-06-2024 18:14:09

പകർപ്പ് - ബഹു.പൊതുമരാമത്ത് വകുപ്പ് മന്ത്രിയുടെ പി.എസ്.

പൊതുമരാമത്ത് വകുപ്പ് സെക്രട്ടറിയുടെ സി.എ.

HILL HIGHWAY NEW ALIGNMENT

No.	District	Old Alignment	New alignment		Reason
			New alignment	Alignment changed portion	
1	Kasaragod	Nandarapadavu-Puthige-Perla-Badhiyadukka-Mulleria-Athinadi — Pandu — Paduppu- Bandhadukka-Irinjilamkode-Kolichal-Pathinettam Myle-Vallikkadavu — Chittarikkal Cherupuzha	Nandarappadavu- Sungathakka - Morthana - Baikkatta - Paivalikke — Chevar-Angadimogar — Ediyadukka-Mulleria - Padiyadhadkka- Edapparamba-VellacheryPandy- Kavungal-Sankarampady- Paduppu- Bandhadukka- ChoorithoduManadukkam- Kolichal- 18th mile- MalomVallikadavu- Chittarikkal-Cherupuzha	NO CHANGE (detailed route mentioned in new alignment) in original alignment	NO CHANGE (detailed route mentioned in new alignment) in original alignment
2	Kannur	Cherupuzha-ManjakkadAlakkode— Karuvanchal- Thavukunnu-Naduvil- ChemberiPayyavoor-Ulikkal-Vallithod- Anapanthi-Karikkottakari- EdoorAaralam-Kappukadavu- Perumbunna- MadappurachalManathana- Kottiyoor- Ambayathod-Boys Town	Cherupuzha-Manjakkad-Alakkode— Karuvanchal-Thavukunnu-Naduvil- Chemberi-Payyavoor-Ulikkal-Vallithod- Anapanthi-Karikkottakari-Edoor- AaralamKappukadavu-Perumbunna- Madappurachal-Manathana- AmbayathodBoys Town	NO CHANGE in original alignment	NO CHANGE in original alignment

3	Wayanad	Boys Town — Mananthavady -4 th mile- Anchukunnu- Panamaram — Kainatty-Kalpetta KappamkollyMeppadi- ChooralmalaArunappuzha	Boys Town- Mananthavady- Kalpetta Meppadi- Kalladi- (Wayanad tunnel) Maripuzha & Boys Town- Valad- Kunhome Niravilpuzha- Chunkakutty	Kalladi- (Wayanad tunnel) Maripuzha Kunhome Niravilpuzha- Chunkakutty	Alignment changed due to Objection from Forest dept in giving clearance in Chooralmala Aranappuzha reach
4	Kozhikode	Boys Town-Valad-Kunhome- Vilangad-Kallachi- KadiyangadThalayad- KodencheryThiruvambadi- Kudaranji — Kumbara- KakkadampoyilVeliyamthode	Chunkakutty- Poothampara- Moonamkai Thottilpalam- Mullankunnu- Chavaramuzhi bridge- Peruvannamuzhi 28th mile- Thalayad- Malapuram- Kodenchery- Pullurampara- Kakkadampoyil & Maripuzha- Anakkampoyil- Pullurampara	Chunkakutty- Poothampara Moonamkai Thottilpalam Mullankunnu- Chavaramuzhi bridge- Peruvannamuzhi Maripuzha- Anakkampoyil- Pullurampara	Alignment changed due to: 1. Objection from Forest dept in giving clearance in Valad- Kunhome-Vilangad reach 2. Connectivity from Wayanad after alignment change
5	Malappuram	Arunappuzha-ThampurattikalluPalunda- Edakara-Karulayi- Moothedam- PookkottumpadamKalikavu-Keralam- Kizhakkethala(Karuvarakundu)Tharishu -Pulvetta-KaringalthoniPonpara	Kakkadampoyil- Moolepadam- NilamburPookkottumpadam- Kalikavu- Karuvarakund- Chirakkal- Melattur Ucharakkadavu- Kanjirampara	Karuvarakund- Chirakkal- Melattur Ucharakkadavu- Kanjirampara	Alignment changed due to: 1) Objection from Forest dept for giving clearance in Aranappuzha — Thampurattikallu reach (omitted this reach) 2) For connectivity after alignment change in Palakkad (Kizhakkethala - Tharishu- PulvettaKaringalthoni-Ponpara reach)

6	Palakkad	Ponpara-Edathinattukara- Kappuparambu- ThiruvizhamkunnuKottappadam- KumaramputhoorMannarkkad- Chandranagar(Palakkad — Town)- Kallungal-Puthunagaram- KollegodeNenmara-Vadakkumcheri	Kanjirampara — Alungal — Palakkazhi- Alanallur — Kottopadam — Mannarkkad — Thachampara — Karimba — Kalladikode — Mundur — Muttikulangara - Koottupatha junction - (Kumaramputhoor- Chandranagar- Koottupatha through NH)- Gopalapuram- Kaikatty- Meenakshipuram (Moolakada) - Kannimarimedu- Meenara dam- Nedumani- Kollengode bypass — Panangattiri (Vattekkad)- VithanasseryNenmara bypass - Ayinampadam — Vadakkumcheri Thangom junction- (NH) Panthalamparam	Kanjirampara — Kumaramputhoor Kumaranpurathur to Koothupatha Koothupatha to Gopalapuram Gopalapuram to Nedumani Nedumani to Panangattiri — Kollengode Bypass Panangattiri to Thankom Junction	Alignment changed in the whole Palakkad district due to non availability of free surrender land for Hill Highway development
7	Thrissur	Pattikkad-Vilangannoor- Manthamangalam-PulikkanniPalippilli- Nayattukundu- Vellikulangara-Vetilappara	Panthalamparam- (NH)- PattikkadVilangannur- Pulikanni- VellikulangaraVetilappara	NO CHANGE in original alignment	
8	Ernakulam	Vetilappara-Adivaram- KadapparaIllithode-Chettinada- PanamkuzhiPayyal-Kottappdi- CheladUnjappara-Nadukani- Neriamangalam-6 th mileEdaplasseri	Vetilappara - Nellichode - Cutting Junction - Vellappara - Eladakkad - Chulli Manjapra - Eucali Junction- Illithode Abhayaranyam (elevated road)- Chettinada- Cheranganal- Neriamangalam 6th mile	Vetilappara — Manjapra- Eucali Junction Illithode - Abhayaranyam (elevated road)- Chettinada	Alignment changed due to Objection from Forest dept for giving clearance in Vetilappara Adivaram- Kadappara-Illithode- Chettinada- Panamkuzhi-Payyal- Kottappdi-Chelad- UnjapparaNadukani reach

9	Idukki	Kuruthikkudi- Perumbankuthu- Mankulam-Kallar- IruttukanamKunchithanni-Rajakkad- KuthunkalThingalkkad-Myladumpara- Nedumkandam-Puliyannala- Kattappana-Elappara- KuttikkanamMundakkayam	6th mile- (NH 566)- Iruttukanam – Anachal (Althara)- Chithirapuram -Power house - Power house jn- Kunchithanni - Ellackal - Valiyamullakkanam - Rajakkadu- Kuthunkal Myladumpara - Puliyannala - Kattapana Kuttikkanam — Mundakayam	Iruttukanam Elakkal Bridge	Alignment changed due to: 1) Objection from Forest dept for giving clearance in Kuruthikkudi- Perumbankuttu- MankulamKallar- Iruttukanam reach 2) Due to steep gradient in IruttukanamKunjithanni reach
10	Kottayam	Mundakkayam-Erumeli-Placheri	Mundakkayam-Erumeli-Placheri	NO CHANGE in original alignment	NO CHANGE in original alignment
11	Pathanamtitta	Ranni-Kumbhazha-Konni Pathanapuram	Placheri- Ranni- Kumbazha- KonniPathanapuram	NO CHANGE in original alignment	NO CHANGE in original alignment
12	Kollam	Pathanapuram-Punalur- AnchalKulathupuzha-Madathara- Kollayil	Pathanapuram- Kallukadavu jn- Punalur TB jn- Punalur KSRTC jn- AgasthyakodeAlencherry- Anchal- KulathupuzhaMadathara-Kollayil	NO CHANGE in original alignment	NO CHANGE in original alignment

13	Trivandrum	Kollayil - Palode — Peringammala Thennūr- Vithura- ThottamukkuMalayadi-Parandodu- AryanadKuttichal-Kallikkad- VazhichalAmboori- KudappanamooduAanappara-Vellarada- KarakkonamParassala	Kollayil- Challimukku- Palode- Peringammala- Guard station- Thennur- Ponnanchund- Koppam- Vithura Kalingu jnIruthalamoola- Aryanad- Kuttichal- Kallikkadu- Vazhichal- Kudappanamoodu Vellarada- Parassala	Vazhichal- Kudappanamoodu	Alignment changed due to non-availability of free surrender land for Hill Highway development in Vazhichal- Amboori- Kudappanamoodu reach
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07/03/2016 03:29/mb

Permanently No - 4

PROCEEDINGS OF THE CHIEF EXECUTIVE OFFICER
KERALA INFRASTRUCTURE INVESTMENT FUND BOARD.
THIRUVANANTHAPURAM

Present : Dr. K.M. Abraham, CFA

ORDER NO : PWD013-14/APR-1/2023/KIIFB Dated:23-05-2023

Sub: KIIFB Project - PWD013-14: "Construction of Hill Highway between Kodanchery and Kakkadampoyil km 83.900 to 119.250 in Kozhikode District" – Approval of Revised Sanction of funding - Orders Issued.

Read: 1. Proceedings Order No. PWD013-14-PA-01 dated 30-06-2018.
2. Proceedings Order No. PWD013-14/APR-2/2021/KIIFB dated 10-10-2021.

The Project "Construction of Hill Highway between Kodanchery and Kakkadampoyil km 83.900 to 119.250 in Kozhikode District" was approved for funding as per the Order read 1st above for an amount of Rs. 144 Crore to be executed by Kerala Road Fund Board (SPV). Financial sanction was later revised to Rs. 178,00,33,627 due to actual estimates for utility shifting (KSEB, KWA & BSNL), tender excess and addition of 12% GST as per Order read 2nd above.

Now, SPV has proposed another sub project revision necessitated due to the increased provisions in quantities as per actual site requirements as reported by SPV, R&R package for the Project affected peoples, increase in GST to 18% for the balance amount and increase in KSEB utility shifting provisions.

Later, the 7.217 km long stretch from Melecompara to Thazhekkakkad which could not be developed as per Hill Highway standards was excluded from the alignment but was decided to be developed to a jeepable track with bare minimum provisions based on the request of Hon'ble MLA.

In consideration of the above, the funding sanction for the Project stands revised to Rs. **198,35,22,039 (Rupees One Hundred and Ninety-eight Crore Thirty-five Lakh Twenty-two Thousand and Thirty-nine only)**, with the condition that estimate for the realignment portion (Melecompara to Thazhekkakkad reach) should not exceed the approved amount of Rs. 26.25 Crore under any circumstances.

While acting on the instant orders, SPV shall comply with the conditions mentioned in the Orders read above and Revision Report.

Encl: Revision Report

To

Dr. K. M. Abraham CFA

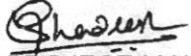
Chief Executive Officer

The Secretary to Government, Public Works Department

S. J. h.
03.05.2023

The Chief Executive Officer/Project Director-PMU, KRFB, Thiruvananthapuram
The Additional Chief Secretary (Finance)
Finance & Administration Division, KIIFB
Inspection Authority (AIW/TIW), KIIFB
Stock File/Office copy
Nodal Officer (www.kiifb.kerala.gov.in)

Forwarded / By Order


ASST. PROJECT MANAGER