Appendix 1 Profile of audited entities (Referred to in Paragraph 1.2)

Sl.	Name of the	
No.	Department	Objective/ Functions of the Department
1	Environment and Climate Change	The main objective of the Directorate of Environment and Climate Change (DoECC) under Environment Department is placing the environmental concerns at the forefront of sustainable development for maintaining the quality of life of the people of the State by strengthening environmental governance for maintaining environmental sustainability of the State; Integrating environmental aspects in the development processes; Investment in environmental management programmes in the State at community level and create a civic movement on upkeep of environmental sustainability.
2	Forest and Wildlife	The objectives are to conserve and expand unique and complex natural forests of Kerala for posterity, in particular with regard to water; biodiversity; extent; productivity; soil, environmental, historical, cultural and aesthetic values, without affecting their ecological processes, to conserve, maintain and enhance the existing gene pool of the State for posterity, to reduce pressure on forest through appropriate interventions, to sustainably conserve and manage biodiversity-rich and sensitive ecosystems such as mangroves, sacred groves, coastal areas, wetlands, homesteads, private plantations <i>etc.</i> , which are outside the control of the Forest Department, to meet the livelihood needs of tribals and other forest dependent communities, to improve the standard of living of the forest dependent tribals and village communities <i>etc.</i>
3	Public Works	The Public Works Department is the Statutory Authority for designing, planning, monitoring, constructing and undertaking maintenance of public works of the State Government such as Government Buildings, Roads, Bridges <i>etc.</i> , irrespective of the source of funds for the same
4	Science and Technology	The objectives are to promote new areas of Science and Technology and to play the role of a nodal Department for organising, coordinating and promoting Science & Technology activities in the country.
5	Industries and Commerce	The objectives are to create necessary industrial infrastructure and provide adequate logistical support to facilitate industrial growth in the state.
6	Power	The objective is to increase power generation to ensure availability of power in tune with increased demand.
7	Cultural Affairs	The Department of Culture is formed to preserve and promote Kerala's unique culture, art, literature and rituals.
8	Electronics and Information Technology	The Department aims to promote digital innovations and make Kerala No.1 digital state.

Sl. No.	Name of the Department	Objective/ Functions of the Department					
9	Port	The Department aims to enhance the productivity of the ports through innovation and implementation of latest technology solutions in various areas of Port operations and functions.					
10	Tourism The Department formulates policies and programs ordination of activities for the development and programs tourism in the State.						
11	Transport	Aims to have a sustainable, efficient, safe and internationally comparable quality of road infrastructure in general and State Highways infrastructure in particular to achieve enhanced connectivity, quick mobility to a level which accelerate socioeconomic development.					

Appendix 2 Statement showing age-wise analysis of Inspection Reports and paragraphs outstanding in Departments (Referred to in Paragraph 1.7.1.1)

Sl. No.	Name of Department	Numb	er of Inspe outstan		ports	Nı	umber of pa outstan		hs
		Older than five years	Between three to five years	Up to three years	Total	Older than five years	Between three to five years	Up to three years	Total
1	Cultural Affairs	57	26	9	92	195	212	67	474
2	Electronics & Information Technology	17	2	5	24	159	12	45	216
3	Industries & Commerce	54	20	4	78	158	179	42	379
4	Ports	11	5	0	16	29	18	0	47
5	Tourism	14	2	2	18	68	19	21	108
6	Transport	161	101	32	294	872	1,083	422	2,377
7	Power	19	6	2	27	67	33	10	110
8	Environment	4	2	6	12	18	23	45	86
9	Public Works	257	31	39	327	1,124	255	355	1,734
10	Forests and Wildlife	70	32	62	164	191	125	463	779
11	Science and Technology	18	2	4	24	55	15	15	85
	Total	682	229	165	1,076	2,936	1,974	1,485	6,395

Appendix 3
Statement showing age-wise analysis of Inspection Reports and Paragraphs outstanding in Public Sector Undertakings
(Referred to in Paragraph 1.7.1.2)

SI.	Name of PSU	Z	Number of Pending IRs	Pending I	Rs	Numbe	Number of Paragraphs outstanding	aphs out	standing
o Z		Older than five Year	Between three to five years	Up to three Years	Total	Older than five Year	Between three to five years	Up to three Years	Total
1	The Kerala State Coir Corporation Limited	1	1	0	2	3	9	0	6
2	Autokast Limited	2	0	0	2	6	0	0	6
3	Bekal Resorts Development Corporation Limited	2	0	1	3	7	0	L	14
4	Foam Mattings (India) Limited	2	0	1	3	6	0	7	13
2	Forest Industries (Travancore) Limited	3	1	1	5	111	10	10	31
9	Handicrafts Development Corporation of Kerala Limited	0	1	1	2	0	L	L	14
7	Indian Institute of Information Technology and Management-Kerala	1	1	0	2	3	8	0	111
8	Kerala Automobiles Limited	2	1	1	4	9	L	5	18
6	Kanjikode Electronics and Electricals Limited	3	0	0	3	8	0	0	8
10	Kannur International Airport Limited	1	0	0	1	21	0	0	21
11	KCCP Limited	0	0	1	1	0	0	2	5
12	Kerala Electrical and Electricals Limited	1	1	1	3	1	5	12	18
13	Keltron Component Complex Limited	3	1	1	5	12	4	2	18
14	Keltron Electro Ceramics Limited	1	1	0	2	3	11	0	14
15	Kerala Artisans Development Corporation Limited	1	0	1	2	4	0	12	16
16	Kerala Cashew Board Limited	0	0	1	1	0	0	8	8
17	Kerala Fibre Optic Network Limited	0	0	1	1	0	0	9	6
18	Kerala High Speed Rail Corporation Limited	1	0	0	1	1	0	0	1
19	Kerala Industrial Infrastructure Development Corporation	5	1	0	9	15	16	0	31

SI.	Name of PSU	Z	Number of Pending IRs	Pending I	Rs	Numbe	Number of Paragraphs outstanding	aphs out	standing
o Z		Older than five Year	Between three to five years	Up to three Years	Total	Older than five Year	Between three to five years	Up to three Years	Total
20	The Kerala Minerals and Metals Limited	1	1	2	4	2	8	13	23
21	Kerala Rail Development Corporation Limited	0	0	1	П	0	0	11	11
22	Kerala State Bamboo Corporation Limited	2	1	1	4	4	5	10	19
23	Kerala State Cashew Development Corporation Limited	0	1	1	2	0	L	15	22
24	Kerala State Coir Machinery Manufacturing Company Limited	0	1	0	1	0	7	0	7
25	Kerala State Drugs and Pharmaceuticals Limited	1	1	1	3	4	6	9	19
26	Kerala State Electronic Development Corporation Limited	1	1	1	3	5	3	13	21
27	Kerala State Film Development Corporation Limited	2	1	0	3	L	8	0	15
28	Kerala State Handloom Development Corporation Limited	1	1	1	3	9	2	12	20
29	Kerala State Industrial Enterprises Limited	3	0	0	3	19	0	0	19
30	Kerala State Information Technology Infrastructure Limited	2	1	0	3	L	9	0	13
31	Kerala State Maritime Development Corporation Limited	1	1	0	2	6	6	0	18
32	Kerala State Mineral Development Corporation Limited	0	1	1	2	0	3	9	6
33	Kerala State Palmyrah Products Development and Workers Welfare Corporation Limited	3	1	0	4	12	4	0	16
34	Kerala State Textile Corporation Limited	3	1	0	4	9	11	0	17
35	Kerala Tourism Development Corporation Limited	1	2	1	4	L	23	12	42
36	Kerala Tourism Infrastructure Limited	2	1	0	3	5	5	0	10
37	Kerala Transport Development Finance Corporation	4	2	0	9	31	20	0	51
38	Kinesco Power and Utilities Pvt Ltd	1	1	0	2	2	8	0	10

SI.	Name of PSU	Z	Number of Pending IRs	Pending I	Rs	Numbe	Number of Paragraphs outstanding	aphs out	standing
o Z		Older than five Year	Between three to five years	Up to three Years	Total	Older than five Year	Between three to five years	Up to three Years	Total
39	Kinfra Export Promotion Industrial Parks	1	1	1	3	3	10	4	17
40	Kinfra Film and Video Park	1	0	1	2	2	0	9	8
41	Kinfra International Apparel Parks Limited	1	1	1	3	2	4	3	6
42	Kerala State Industrial Development Corporation Limited	3	1	1	5	23	2	14	39
43	Malabar Cements Limited	3	1	1	5	8	7	10	25
44	Malabar International Ports and SEZ Limited	0	0	1	1	0	0	5	5
45	Marine Products Infrastructure Development Corporation	0	1	0	1	0	5	0	ν.
46	The Metal Industries Limited	0	1	1	2	0	8	9	6
47	Muziris Projects Limited	0	1	0	1	0	9	0	9
48	SAIL-SCL	3	1	0	4	14	8	0	22
46	Small Industries Development Corporation	2	1	1	4	14	9	14	34
50	Steel and Industrial Forgings Limited	6	1	1	8	5	9	9	20
51	Steel Industrials Kerala Limited	9	1	1	8	25	L	11	43
52	Sitaram Textiles Limited	1	1	0	2	3	7	0	10
53	The Kerala Ceramics Limited	0	1	0	1	0	2	0	2
54	The Travancore Cements Limited	2	1	0	3	4	11	0	15
55	TRACO Cable Company Limited	3	1	1	5	7	10	13	30
56	Transformers and Electricals Kerala Limited	1	1	1	3	1	7	8	16
57	The Travancore Cochin Chemicals Limited	1	1	1	3	1	1	6	8
58	Travancore Titanium Products Limited	0	1	1	2	0	5	5	10
59	Trivandrum Spinning Mills Limited	1	1	0	2	2	14	0	16
09	United Electrical Industries Limited	2	0	1	3	14	0	9	23
61	Vizhinjam International Seaport Limited	1	0	1	2	5	0	9	11

SI.	Name of PSU	Z	Number of Pending IRs	Pending II	Rs	Numbe	Number of Paragraphs outstanding	aphs out	standing
OZ		Older than five Year	Between three to five years	Up to three Years	Total	Older than five Year	Between three to five years	Up to three Years	Total
62	Kerala State Road Transport Corporation	38	7	7	52	154	73	09	287
63	Kerala State Electricity Board Limited	59	21	13	93	284	135	116	535
64	Kerala State Power Infrastructure Finance Corporation	0	0	1	1	0	0	5	5
92	Kerala State Construction Corporation	0	1	1	7	0	11	6	20
99	Road Infrastructure Company Kerala Limited	1	0	1	2	9	0	4	10
29	Kerala Forest Development Corporation	2	1	0	8	2	9	0	8
89	Roads and Bridges Development Corporation of Kerala Limied	2	1	0	8	L	6	0	16
	Total	197	84	09	335	825	292	505	1,894

Appendix 4
Details of Encroachment
(Referred to in Paragraph 2.1.7.4)

Name of Division	KFS data – Ex	KFS data – Extent of encroachment (ha)	ent (ha)	Audit observation	Under
	As on 31 March 2018	As on 31 March	Increase /		reporting
		2021	Decrease (-)		
		Terri	Territorial Divisions		
Thiruvananthapuram	0	0.59	0.59	Increased	1
Ranni	1.13	1.74	0.61	Increased	ı
Marayoor	0.03	0.03	0	Forest land to the extent of 1903 ha was converted to revenue	d to revenue
				land and <i>pattas</i> issued in 88.46 ha.	
Malayattoor	129.29	127.66	-1.63	Decreased. But 28.50 ha encroachment in Kalady range not recorded. Hence, there was 26.87 ha increase in encroachment.	28.50
Palakkad	190.58	37.69	-152.89	Decreased	1
Mannarkkad	2,700.34	664.28	-12.86	Decreased. An extent of 2,023.20 ha land used by tribes for	by tribes for
	(Actual 677.14 = 2,700.34			shifting cultivation reckoned as encroachment in 2016 statistics. Hence, actual decrease was only 12.86 ha.	ant in 2016 5 ha.
	- 2,023.20)				
Wayanad South	1,369.29 (Actual 668.03)	717.63	49.60	Increased.	
Kannur	11.02	99.09	39.64	Increased	ı
		Wil	Wildlife Divisions		
Periyar East	0.01	4.39	4.38	Increased	1
Wayanad	0	0.63	0.63	Increased, 354 ha area encroached was not	354
				reported. Hence, total increase in encroachment was 354.63 ha.	
Total	1,677.23	1,605.30	-71.93		382.50

Out of 11 selected divisions:

- There was encroachment of 1,605.30 ha in 10 selected divisions. No encroachments were reported in Parambikulam Tiger Reserve.
- In two divisions (Mannarkad and South Wayanad), the area originally shown in 2016 statistics was calculated erroneously. It was corrected later in 2020. So, the difference was adjusted in 2018 figures to arrive at the actual increase or decrease.
- There was under reporting of encroachment by 382.50 ha due to non-inclusion of encroachments in Malayattoor (28.50 ha) and Wayanad divisions (354 ha).

Appendix 5 Non implementation of sanctioned fencing projects (Referred to in Paragraph 2.1.8.1, 4th bullet)

Project Name	Details of Project
Krishi Raksha Padhathi	Government of Kerala accorded Administrative Sanction ²⁵⁷ (August 2014) for the project 'Krishi Raksha Padhathi' for the benefit of farmers to protect agricultural crops from the attack of wild animals through various measures such as construction of elephant-proof walls, stone pitched trenches, rail fence, bio-fence and solar fence for a length of 692 km ²⁵⁸ at areas susceptible to HWC. The total project cost was ₹259.81 crore and was planned to be implemented during the period 2014-16. Only ₹3.20 crore (0.01 per cent) was utilised under the scheme. The department could not furnish details of work done and/or the reason for failure to implement the scheme.
Integrated Tribal Development Project (ITDP)	To reduce HWCs in the Attappady tribal area, an amount of ₹2.66 crore was allotted ²⁵⁹ in December 2016 under Additional Tribal Sub Plan to Mannarkkad Forest Division for construction of 18.7 km Elephant proof trench in four locations and 2.3 km elephant proof wall in two locations under Attappady and Agali range. In two locations EPTs were constructed at a cost of ₹0.41 crore. But citing public protest in the construction and technical issue in executing the same the project was dropped and balance amount of ₹2.29 crore (including interest) was returned in January 2020. Absence of proper studies and ensuring public support before arranging the works led to lapse of fund received.
Construction of crash guard fencing	In order to reduce HWC, Government gave administrative sanction ²⁶⁰ (November 2018) for construction of crash guard fencing in South Wayanad division, Kalpetta for a total length of 25.7 km in four locations under Pulpally and Meppady range for an amount of ₹13.90 crore. The work was technically sanctioned in October 2019. The total length of the work was divided into four reaches and tenders invited as four separate works. Out of the four works two works were not awarded due to delay in finalization of tenders. In respect of two other works though awarded (February 2021), the works could not be commenced as the estimate of two works were prepared without considering actual site condition and hence revised. Ultimately none of the works were started and the objective of reducing HWC by constructing the preventive structure was not achieved.

G.O.(MS) No. 73/2014/F&WLD dated 28 August 2014
Solar fencing-106 km, Elephant-proof trench-340 km, Elephant-proof wall-139 km, Rail fencing-61 km, Bio-fence-46 km
Palakkad District Collector's order No. B2-1790/14/ITDP dated 01 December 2016
GO MS No. 46/2018/F&WLD dated 12 November 2018

Appendix 6 Lapses in functioning of Rapid Response Team (Referred to in Paragraph 2.1.8.8)

Item	Guidelines for management of HEC	RRT Guidelines	Observations on six selected divisions where RRTs are functioning
Staff pattern	The RRT should ideally consist of a biologist and a veterinarian to address all aspect of the conflict	Biologist and a veterinarian not envisaged	Except in RRT Wayanad wildlife division no RRT is having a biologist and/or a veterinarian.
Formation of Primary response team (PRT)	Develop Primary Response Team (PRT) in each village who could work as first level of defence to drive the elephant and keep crowd away till the time the RRT reaches	No provision	Orders/ guidelines for forming PRTs were not issued and no PRTs were seen functioning in selected divisions.
Equipment/ Tools	The persons should be well equipped and disciplined	List of tools to be maintained is given	None of the RRTs have adequate tools and equipment as envisaged in the RRT guidelines of the Department (March 2019).
Training	RRTs and PRTs have to be adequately trained and equipped in HEC mitigation.	Highly trained, experienced and well equipped. Required skills given.	No separate training module was seen designed for the teams. The existing Forest Officers are deputed to RRT without a separate training. Audit noticed instances in which forest staff and temporary watchers were injured / died during elephant driving operations which could have been reduced with proper training.

Appendix 7 Details of rent paid for the period from 2019-20 to 2021-22 (Referred to in Paragraph 2.3.4.1, 3rd bullet)

(₹ in lakh)

					(₹ in lakh)
Sl. No.	Head of Account	2019-20	2020-21	2021-22	Total
1	2235-Social Security and Welfare	756.63	2,035.46	1,633.64	4,425.73
2	2014-Administration of Justice	714.44	931.18	1,065.63	2,711.25
3	2055-Police	347.10	619.07	662.55	1,628.72
4	2030-Stamps and Registration	124.54	240.35	273.02	637.91
5	2054-Treasury and Accounts Administration	133.21	299.26	130.95	563.42
6	2043-Collection Charges Under State Goods and Services Tax	145.74	212.39	185.87	544.00
7	2230-Labour, Employment and Skill Development	172.77	181.88	161.14	515.79
8	2051-Public Service Commission	139.34	169.36	194.19	502.89
9	2039-State Excise	128.59	208.00	165.97	502.56
10	2204-Sports and Youth Services	118.82	123.63	174.95	417.40
11	3452-Tourism	20.88	28.11	360.58	409.57
12	2202-General Education	134.02	142.87	99.35	376.24
13	2041-Taxes on Vehicles	100.22	163.23	108.10	371.55
14	2210-Medical and Public Health	104.11	121.24	145.37	370.72
15	2075-Miscellaneous General Services	94.34	96.40	156.87	347.61
16	2029-Land Revenue	88.66	130.07	125.18	343.91
17	2058-Stationery and Printing	89.65	155.04	76.01	320.70
18	2062-Vigilance	64.00	126.88	120.61	311.49
19	2045-Other Taxes and Duties on Commodities and Services	29.72	130.27	133.70	293.69
20	2225-Welfare of Scheduled Castes, Scheduled Tribes, Other Backward Classes and Minorities	60.58	86.46	144.76	291.80

Sl. No.	Head of Account	2019-20	2020-21	2021-22	Total
21	4408-Capital Outlay on Food, Storage and Warehousing	89.76	107.79	57.84	255.39
22	2052-Secretariat General Services	38.32	126.02	68.09	232.43
23	2053-District Administration	53.71	57.14	107.09	217.94
24	2402-Soil and Water Conservation	49.73	66.13	77.40	193.26
25	2203-Technical Education	23.66	31.68	133.50	188.84
26	2425-Cooperation	71.94	68.12	43.86	183.92
27	3475-Other General Economic Services	29.77	82.18	34.85	146.80
28	2059-Public Works	31.74	67.43	45.55	144.72
29	3451-Secretariat Economic Services	10.20	92.83	19.53	122.56
30	2702-Minor Irrigation	35.84	51.80	34.20	121.84
31	2056-Jails	21.29	50.43	38.67	110.39
32	2406-Forestry and Wildlife	6.83	54.96	34.77	96.56
33	2851-Village and Small Industries	25.42	43.61	24.24	93.27
34	3454-Census Surveys and Statistics	27.85	28.53	28.22	84.60
35	3435-Ecology and Environment	22.07	28.12	32.87	83.06
36	3054-Roads and Bridges	16.26	14.00	51.61	81.87
37	2205-Art and Culture	23.42	35.11	22.93	81.46
38	2217-Urban Development	23.10	30.02	27.65	80.77
39	2515-Other Rural Development Programmes	33.64	20.16	25.38	79.18
40	3051-Ports and Light Houses	15.74	14.71	38.76	69.21
41	2701-Medium Irrigation	23.23	24.42	17.72	65.37
42	2013-Council of Ministers	11.80	10.40	30.80	53.00
43	2404-Dairy Development	5.15	21.07	22.41	48.63

Sl. No.	Head of Account	2019-20	2020-21	2021-22	Total
44	2711-Flood Control and Drainage	16.98	16.17	15.09	48.24
45	3456-Civil Supplies	4.67	18.45	20.90	44.02
46	2401-Crop Husbandry	13.43	14.00	13.74	41.17
47	2040-Taxes on Sales, Trade etc.	9.91	8.95	13.18	32.04
48	2405-Fisheries	7.80	6.69	17.18	31.67
49	2011-Parliament/State/Union Territory Legislatures	0.00	25.23	5.85	31.08
50	2047-Other Fiscal Services	9.36	9.50	9.48	28.34
51	2403-Animal Husbandry	9.95	7.66	3.70	21.31
52	2015-Elections	11.99	6.82	2.20	21.01
53	2700-Major Irrigation	4.55	4.88	8.51	17.94
54	4700-Capital Outlay on Major Irrigation	2.81	4.24	4.77	11.82
55	2853-Nonferrous Mining and Metallurgical Industries	2.27	2.91	5.37	10.55
56	2408-Food, Storage and Warehousing	10.42	0.00	0.00	10.42
57	3056-Inland Water Transport	3.15	2.81	1.83	7.79
58	4701-Capital Outlay on Medium Irrigation	1.55	0.00	4.25	5.80
59	2211-Family Welfare	0.49	2.59	0.00	3.08
60	2220-Information and Publicity	0.00	2.46	0.00	2.46
61	4405-Capital Outlay on Fisheries	0.35	0.50	0.75	1.60
62	2415-Agricultural Research and Education	0.11	0.09	0.08	0.28
	Total	4,367.62	7,461.76	7,263.26	19,092.64

Appendix 8 Details of works arranged without Hindrance Free land (Referred to in Paragraph 2.3.4.4)

Sl. No.	Name of work	Division	Agreement No. & Date	Remarks
1	Construction of gate and compound wall around newly proposed Taluk HQs, Kunnamkulam.	Thrissur	43/2020- 21/SE/BCC/TSR dated 19/01/2021	The work could not be started for around 10 months due to non-cutting of trees at the site and delay in fixing boundary
2	Construction of administrative block at Govt. Polytechnic College, Kunnamkulam.	Thrissur	28/2020-2021/ SE/BCC/TSR dated 12/10/2020	Start of work delayed for 6 months due to non-cutting of trees from the site
3	Construction of compound wall for the campus of Govt. Medical College, Thrissur	Thrissur	28/19-20 /SE/BCC/TSR dated 01/10/2019	Work was delayed due to stay order of Honorable High Court
4	Construction of new building for Govt. UP School, Moorkanikkara.	Thrissur	22/19-20 /SE/BCC/TSR dated 13/6/2019	First extension was requested as the site was not provided hindrance free
5	Establishment & modernisation of drug stores under DME, Construction of Central warehouse - Phase II.	Thrissur	12/19-20 /SE/BCC/TSR dated 06/06/2019	3 months delay in executing agreement due to hindrance at the site
6	Construction of compound wall, Science and Arts College, Killimangalam.	Thrissur	48/2019- 20/SE/BCC/TSR dated 26/02/2020	The work could not start as planned due to delay in fixing the boundary
7	Construction of new building for Govt. LP School, Kaipamangalam	Thrissur	69/2019- 20/EE/B/TSR dated 04/12/2019	10 months delay in executing agreement as the old building at site was not demolished
8	Construction of new building for Govt. LP School, Thozhupadam	Thrissur	85/2019- 20/EE/B/TSR dated 13/03/2020	Site Handing Over (SHO) was delayed for six months due to site issues
9	RIDF XX - Construction of Community Health Centre for Paika Hospital	Kottayam	52/SEBSC/2016-17 dated 14/02/2017	SHO was eight months after executing agreement and the hindrances were at site till Nov 2018

Sl. No.	Name of work	Division	Agreement No. & Date	Remarks
10	Construction of new block for District PSC Office, Kottayam	Kottayam	85/SEBSC/2015-16 dated 15/02/2016	SHO was on 24/10/2016 but non- clearance of old building remained as hindrance
11	Construction of Architectural Block at RIT, Pampady	Kottayam	1/SEBSC/2016-17 dated 19/05/2016	Initial extension of time of 6 months was <i>inter alia</i> due to non-removal of hindrances like HT cable and waterline
12	Construction of examination hall and research centre at Govt. College, Kottayam	Kottayam	45/SEBSC/2019 - 20 dated 30/10/2019	SHO was on 09/10/2020 after one year due to hindrances at site
13	STDD - Construction of Govt. Tribal UP School, Kosady, Mundakayam	Kottayam	2/SEBC/2017-18 dated 17/04/2017	SHO was on 27/09/2017 only due to delay in forest permission and non-clearance of trees
14	Providing lady by- standers waiting area and toilet facilities at 3 rd floor of Cardiology & Cardiothoracic Block at Govt. Medical College	Kottayam	25/SEBC/2017-18 dated 07/07/2017	SHO was on 16/10/2017. The site was not available for work due to hindrances posed by electrical cables
15	Construction of new building for College of Pharmaceutical Science, Kottayam – Phase II	Kottayam	06/SEBSC/2019 - 20 dated 28/05/2019	Tender finalisation was in December 2018, selection notice was issued on 22/02/2019. SHO on 04/06/2019
16	Construction of public comfort station near car shed, ABC Block, Medical College, Kottayam	Kottayam	72/EE/BLDGS/KTM /2018-19 dated 02/02/2019	SHO was on 15/07/2019 after five months of agreement
17	Construction of new office complex for accommodating various Commissions, Pattom	Special Buildings Thiruvananth apuram	78/SEBSC/ 2018-19 dated 14/02/2019	Hindrance was not removed until May 2019
18	New Academic Block - Govt. Engineering College, Barton Hill	Special Buildings Thiruvananth apuram	25/SEBSC/ 2021-22 dated 11/08/2021	Hindrance was not removed until November 2021
19	ITI - Chakkai - Upgradation of the Institute to International	Special Buildings Thiruvananth apuram	25/SEBSC/2020-21 dated 19/08/2020	SHO was on 25/11/2020. The site was not clear for work as the permission from KRFB was not

Sl. No.	Name of work	Division	Agreement No. & Date	Remarks
	Standards - Workshop renovation, construction of main gate road <i>etc</i> .			obtained to connect the entrance to road
20	Renovation of the Principal's Office of the Govt. Medical College, Thiruvananthapuram	Special Buildings Thiruvananth apuram	11/SEBSC/2020-21 dated 03/07/2020	A hindrance free site was not actually handed over on time as the office was not shifted
21	Construction of School building for Govt. LP School Meenchanda, Kozhikode	Kozhikode	EE(BC)08/2019-20 dt.07/06/2019	The work was delayed due to delay in demolition of existing building by the corporation
22	Implementation of Plan Schemes during 2017-18 - Govt. Medical College, Kozhikode - Construction of new examination hall	Kozhikode	SE(K)120/2020-21 dated 21/10/2020	The delay in shifting of 3 phase electric lines and pipelines were the hindrances at site
23	USR to indoor basketball court storage room, Govt. Physical Education College, Kozhikode	Kozhikode	EE(BC)2/59/2020- 2021 Dt 01/10/2020	The site could not be handed over on time as the College was operating for rehabilitation of street dwellers
24	Construction of compound wall and gate for the Govt. Dermatology Hospital, Chevayur, Kozhikode	Kozhikode	SE(K)88/2020-21 dated 09/06/2020	The site was not handed over on time due to failure in removing trees
25	Construction of building for VHSE Block at GVHSS for Girls, Nadakkavu, Kozhikode	Kozhikode	SE(K)24/2018-19 dated 16/06/2018	SHO was delayed for 5 months after signing the agreement due to hindrance at site
26	Construction of building for Police Station, Kunnamangalam, Kozhikode	Kozhikode	SE(K)70/2018-19 dated 02/03/2019	SHO was only after 5 months of signing the agreement due to delay in demolition of existing quarters at the site
27	Higher Education Department - Construction of Academic Block for	Kozhikode	SE(K)62/2019-20 dated 24/12/2019	SHO was after 2 months of signing the agreement as a building at the site was not demolished

Sl. No.	Name of work	Division	Agreement No. & Date	Remarks
	SARBTM Govt: College, Koyilandy, Kozhikode District			
28	HSE Construction of Higher Secondary Block for Govt. Sanskrit HSS, Meppayil, Vatakara	Kozhikode	SE(K)62/2016-17 dated 27/02/2017	The work was delayed due to delay in allotting the site by the school authorities
29	Construction of Mini Civil Station, Balussery, Kozhikode	Kozhikode	SE (K) 23/2021-22 dated 09/08/2021	The work was delayed due to non-availability of site from the Revenue Department
30	NABARD - Assistance RIDF XXI - Infrastructure works in Govt. Taluk Hospital, Vatakara, Kozhikode	Kozhikode	SE(K)44/2019-20 dated 29/10/2019	As the work was for vertical extension it was delayed due to assessing strength of existing old building
31	Construction of Model Residential School (MRS) Maruthonkara, Kozhikode	Kozhikode	SE(K)11/2017-18 dated 26/05/2017	SHO was on 02/06/2017 but work was not started till Nov 2017 due to non-availability of hindrance free land
32	NABARD - RIDF - XXI - 2015-16 Infrastructure work construction of multipurpose hospital block of District Hospital, Mananthavadi, Wayanad	Wayanad	SE (K) 46/2017-18 dated 07/02/2018	17 months delay in clearing the site after SHO due to not dismantling the old building and removal of trees from the site
33	NABARD - RIDF XXII - 2016-17 Infrastructure works for additional Hospital building in Taluk Hospital, Sulthan Bathery, Wayanad	Wayanad	SE (K) 31/2018-19 dated 21/07/2018	SHO was on 09/11/2018 as clearance from District Disaster Management Authority was not obtained
34	Construction of School building of Govt. High School, Kurumbala, Wayanad.	Wayanad	No. EE/B/16/2020- 21 Dated 26/08/2020	SHO of the work was on 04/09/2020, but the site was not cleared by removing trees till 04/10/2021

Appendix 9
Details of works involving issues in Investigation, Estimation, Technical Sanction and Tendering (Referred to in Paragraphs 2.3.4.5, 2.3.6.1, 2.3.6.3)

S. No.	Name of work/Division	Investigation & Estimation issues (Paragraph 2.3.4.5)	Issues related to TS without structural design (Paragraph 2.3.6.1)	Issues related to awarding of work without ensuring competitive bidding (Paragraph 2.3.6.3)
1	Construction of multi-storied building for functioning of various Commissions, Pattom, Thiruvananthapuram/Special Buildings, Thiruvananthapuram	The planning, structural drawing, and preparation of estimates was done by a private agency. The BoQ tender included an item for pile foundation. Due to deficiencies in structural designs initially prepared by the agency which necessitated the changes in foundation and structural redesign after awarding the work.	Not applicable	The consultancy contract for the work of Investigation, Structural Design and Estimation of the Project was awarded to M/s Safe Matrix Pvt. Ltd. based on a single quotation for ₹27 lakh without executing agreement.
7	Higher Education - Technical - Rajiv Gandhi Institute of Technology, Kottayam - Construction of building for Architecture Block, Kottayam	As the investigation was not proper, excess quantity of 253 m³ hard rock were found to be removed owing to actual site conditions through chemical blasting during execution of work which necessitated in issue of revised AS (February 2019) and TS (February 2020) for ₹13.83 crore and ₹13.77 crore respectively. The change in scope post award of work resulted in excess expenditure to the tune of ₹1.63 crore.	Not applicable	Not applicable
ε	Home Department Judiciary - Construction of Court complex, Irinjalakuda, Thrissur	The soil investigation for the above work was entrusted to a private agency. The investigation by the agency could not reveal the presence of hard rock at shallow depths during investigation which resulted in extensive revision of foundation design and consequent delay in execution.	Not applicable	Not applicable

SI. No.	Name of work/Division	Investigation & Estimation issues (Paragraph 2.3.4.5)	Issues related to TS without structural design (Paragraph 2.3.6.1)	Issues related to awarding of work without ensuring competitive bidding (Paragraph 2.3.6.3)
4	Construction of first and second floor for 450 bedded Hostel for Ladies at Govt. Medical College, Kottayam/ Kottayam	Due to lack of effective site investigation, construction of retaining wall costing ₹80 lakh and reduction of scope of work viz., exclusion of toilet block and 6 rooms from the original plan was necessitated.	Not applicable	Not applicable
5	Construction of Model Residential School, Maruthonkara, Kozhikode/ Kozhikode	As the private agency which conducted the site investigation could not reveal the unsuitability of the location, number of quarters to be constructed was reduced from three to two by saving ₹100 lakh during execution of the work. Moreover, additional amount of ₹35 lakh was to be spent due to increasing depth of the column upto four meters and construction of additional diaphragm walls.	Not applicable	The TS was for constructing academic, administrative blocks, quarters, and other buildings without internal roads, at a cost of ₹19.75 crore. During execution, one out of three residential quarters costing ₹one crore was not taken up and instead, additional work of construction of internal road costing ₹65.30 lakh was entrusted to the same contractor without inviting fresh tender.
9	Construction of male and female ward to Gandhigram Hospital of Dermatology, Koratty, Thrissur/ Thrissur	The project was to construct two inpatient blocks as male and female wards. Due to poor investigation by PWD, the level difference of 2 meters on land, proposed for male ward, was not identified during planning stage leading to extra earth and foundation works during execution of the work.	TS was issued prior to obtaining the design resulting in cost escalation amounting to ₹81 lakh for concrete and reinforcement alone post award of work.	Not applicable

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SI. No.	Name of work/Division	Investigation & Estimation issues (Paragraph 2.3.4.5)	Issues related to TS without structural design (Paragraph 2.3.6.1)	Issues related to awarding of work without ensuring competitive bidding (Paragraph 2.3.6.3)
7	Construction of Golden Jubilee PG Block at Govt. Arts and Science College, Kozhikode/ Kozhikode	Not applicable	TS for this work was issued for ₹12 crore before finalising the structural design in which the pile foundation was provided for 200 numbers of piles of 500mm diameter. In the structural design, the diameter of pile was 500mm, 600mm and 700mm totaling to 240 numbers. Additional expenditure in this regard amounted to ₹53.16 lakh.	AS for the work was for ₹12 crore for constructing 3 storied building (G+2), and the work was awarded to M/s ULCCS Ltd., at their quoted rates based on tender. The scope of the work was later increased to five storied building with a revised (June 2019) cost of ₹19 crore. Department entrusted the additional work to the same contractor which tantamount to awarding of work costing ₹7 crore by waiving tender call.
∞	NABARD RIDF XXI construction of multipurpose hospital block at District Hospital, Manathavady, Wayanad/ Wayanad	Not applicable	Contract value of civil work was ₹30.75 crore. During execution the cost of work was enhanced due to changes in design approved by DRIQ board and site-specific issues post award of work resulting in increase of cost (₹32.92 crore) by ₹2.18 crore.	Not applicable
6	District Jail, Mananthavady, construction of Superintendent quarters, Staff quarters & Rest room for staff, Wayanad	The estimate and TS were for single storied load bearing structure. But during excavation, the soil strata was found to be weak, and the structure was converted into RCC. This indicates poor soil investigation before starting the work.	Not applicable	Not applicable
10	Govt. Taluk Hospital, Vatakara, Kozhikode	Not applicable	Not applicable	The work was retendered (19 January 2019) with bid opening date on 23 January 2019. But

SI. No.	Name of work/Division	Investigation & Estimation issues (Paragraph 2.3.4.5)	Issues related to TS without structural design (Paragraph 2.3.6.1)	Issues related to awarding of work without ensuring competitive bidding (Paragraph 2.3.6.3)
				without opening bid, the Govt. entrusted the work to the accredited agency M/S ULCCS Ltd. at the estimated cost of ₹12.87 crore.
11	Urgent maintenance works for manufacturing unit at Central Prison, Thrissur/ Thrissur	Not applicable	Not applicable	The work e-tendered twice but awarded on quotation basis since bids on e-tender was above EPAC. Major components in the BoQ were changed post award to include GI and poly carb sheets for roofing as against wood and MP tiles originally provided. Even though the scope of work had changed substantially, no fresh tenders were invited to ensure competitive bidding.
12	NABARD RIDF XXII, Infrastructure works for additional hospital building in Taluk Hospital Sulthan Bathery, Wayanad / Wayanad	Not applicable	Not applicable	EPAC and APAC for the work were ₹18.84 crore and ₹14.96 crore respectively. Post awarding of the work, additional work costing ₹3.88 crore was entrusted to the same contractor for constructing retaining wall, electrical room, compound wall, landscaping and power laundry (EPACAPAC) without ensuring competitive bidding.

Appendix 10 Details of Security Deposits not collected/short collected/expired Bank Guarantees (Referred to in Paragraph 2.3.5.3)

(₹ in lakh)

Sl. No.	Name of the Circle/Division	Name of the work	Security Deposit to be collected	Security Deposit collected	Non/short collection of Security Deposit	Remarks
PG/A	APG Not/Short collect	ted				
1	Central Circle/ Thrissur	Establishment & modernisation of drug stores under DME - Construction of Central Warehouse - Phase II, Govt. GMC - TCR - Medical College, Thrissur	6.73	0.00	6.73	Non collection of APG
2	South Circle/Kottayam	Higher Education - Technical - Rajiv Gandhi Institute of Technology, Kottayam - Construction of building for Architecture Block	58.47	5.18	53.29	Short collection of PG
3	South Circle/Kottayam	Higher Education - Technical - Rajiv Gandhi Institute of Technology, Kottayam - Construction of building for Architecture Block	36.17	0.00	36.17	Non collection of APG
4	North Circle/Wayanad	NABARD-RIDF-XXI (2015-16) Construction of multipurpose hospital block at District Hospital, Mananthavady, Wayanad	132.10	0.00	132.10	Non collection of APG
	T	Cotal			228.29	

Ext	ension of ToC withou	t extending PG				
1	North Circle / Wayanad	Construction of new building for Mechanical and Electrical Dept. in Govt. Engineering College, Thalappuzha, Wayanad	12.87	12.87	0.00	PG not extended
2	North Circle / Wayanad	NABARD-RIDF-XXI (2015-16) Construction of multipurpose hospital block, District Hospital, Mananthavady	76.86	76.86	0.00	PG not extended
3	North Circle / Kozhikode	Construction of flat type residential complex for Non- Gazetted Officers of Govt. Medical College, Kozhikode	52.87	52.87	0.00	PG not extended
4	North Circle / Kozhikode	Construction of Academic Block for SARBTM Govt. College, Koyilandi	13.68	13.68	0.00	PG not extended

5	North Circle/ Kozhikode	Construction of Women's Hostel for CKGM College, Perambra	2.72	2.72	0.00	PG not extended
6	Central Circle / Thrissur	Construction of new building for Govt. High School, Kattoor, Irinjalakuda	2.03	2.03	0.00	PG not extended
7	Central Circle / Thrissur	Construction of compound wall, Science and Arts College, Killimangalam	2.57	2.57	0.00	PG not extended
8	Central Circle / Thrissur	Construction of Student Utility Centre at Govt. Polytechnic College, Nedupuzha, Thrissur	4.57	4.57	0.00	PG not extended
9	Central Circle / Thrissur	Construction of W&C wards at General Hospital, Thrissur - Phase II	14.14	14.14	0.00	PG not extended
10	Central Circle / Thrissur	Providing additional facilities to Panampilly College, Chalakudy	5.07	5.07	0.00	PG not extended
11	South Circle/ Special Buildings, Thiruvananthapuram	Construction of 50 bedded ward and administrative block at PHC, Vamanapuram	14.16	14.16	0.00	PG not extended
12	South Circle/ Special Buildings, Thiruvananthapuram	ITI - Chakkai - Upgradation of the Institute to International Standards	7.06	7.06	0.00	PG not extended
13	South Circle/ Kottayam	Construction of Govt. Tribal UP School, Kosady, Mundakkayam	5.18	5.18	0.00	PG not extended
14	South Circle/ Special Buildings, Thiruvananthapuram	Building for accommodating Various Commissions, Pattom	82.04	82.04	0.00	PG not extended
	7	Cotal	295.82	295.82	0.00	

Ex	tension of ToC withou	t extending APG				
1	Wayanad	Construction of new building for Mechanical and Electrical Dept. in Govt. Engineering College Thalappuzha, Wayanad	22.30	22.30	0.00	APG not extended
2	Kozhikode	Construction of flat type residential complex for Non- Gazetted officers, Govt. Medical College, Kozhikode	300.42	300.42	0.00	APG not extended
3	Kozhikode	Construction of Academic Block for SARBTM Govt. College, Koyilandy	15.40	15.40	0.00	APG not extended
4	Kozhikode	Construction of Women's Hostel for CKGM College, Perambra	12.26	12.26	0.00	APG not extended
5	Thiruvananthapuram	Construction of examination hall and research centre at Govt. College, Kottayam	0.835	0.835	0.00	APG not extended
	· · · · · · · · · · · · · · · · · · ·	Fotal	351.21	351.21	0.00	

BG	BG released prior to completion of DLP									
1	North Circle / Kozhikode	Construction of Academic Block for SARBTM Govt. College, Koyilandi	90.74	90.74	0.00	PG released prior to completion of DLP				
		Total	90.74	90.74	0.00					

Detai	ls of BG expired		
Sl. No.	Building Circle	Name of Work	Amount (₹ in lakh)
1	South	Construction of new block for District Public Service Commission Office - Kottayam	6.50
2	North	General Education Department Annual Plan 2020-21- Construction of school building, Govt. Higher Secondary School, Munderi, Kannur	2.69
3	North	Govt. College, Kodanchery - Plan fund 2017 - 18 Centre of Excellence - Construction of new and modern library building in the College	12.75
4	North	Construction of additional block building to Ladies Hostel in Govt. College, Chittur, Palakkad.	14.99
5	South	Construction of a building for Pilgrim Centre at Ittiyappara, Ranni (Phase I)	128.86
		Total	165.79

Appendix 11 Details of Risk and Cost not realized/not assessed (Referred to in Paragraph 2.3.5.4)

Sl. No.	Division	Name of work	Foreclosed date	R&C amount to be collected (in ₹)	LD to be collected (in ₹)
1	Kollam	Construction of new building, Govt. Rest House, Kundara	09/12/2020	55,60,816	0
2	Kottayam	Construction of new block, District Public Service Commission	07/05/2018	53,76,017	0
3	Thrissur	Construction of Registration Complex, Thrissur	24/05/2014	1,52,72,073	0
4	Idukki	Construction of D block Civil Station, Idukki	13/06/2007	62,93,395	0
5	Ernakulam	Construction of mega office complex under Taxes Department, Ernakulam	28/05/2014	2,15,23,289	0
6	Kannur	General Education Department Annual Plan 2020-21, Construction of School building, GHSS, Munderi, Kannur	28/05/2021	31,65,589	11,83,165
7	Kozhikode	Govt. College, Kodencherry - Plan fund 2017-18 - Centre for excellence - Construction of new and modern library	19/02/2021	73,32,002	20,82,333
8	Palakkad	Construction of additional block building to Ladies Hostel, Govt. College, Chittur	06/04/2022	1,38,41,255	46,13,751
9	Idukki	Construction of additional Judicial Complex, Kattappana	09/12/2019	87,24,374	29,73,550
10	Ernakulam	Construction of Mini Civil Station Phase II, Aluva	28/04/2022	Not assessed	N.A.
11	Pathanamthitta	Construction of a building for Pilgrim Centre at Ittiyappara, Ranni	24/05/2019	Not assessed	N.A.
12	Kollam	Construction of new building for FWC, Kilikollur	13/10/2022	Not assessed	N.A.
13	Kollam	Maintenance work of buildings of Kuttalam Palace and construction of reception block	18/11/2021	Not assessed	N.A.
		Total		8,70,88,810	1,08,52,799

Appendix 12 Details of delay in execution of works (Referred to in Paragraph 2.3.6.2)

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Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
1	Urgent repairs and maintenance work at Kerala House, Mumbai	06 Months 08/09/2020	28/05/2022	Completed	2,72,59,337	20	09/03/2020	333
2	Construction of compound wall to Science and Arts College, Killimangalam, Thrissur	06 Months 05/09/2020	25/01/2022	Completed	1,02,75,582	17	06/03/2020	283
3	Construction of Architectural Block at RIT, Pampady, Kottayam	24 Months 30/05/2018	31/07/2022	Ongoing	11,69,48,494	50	31/05/2016	208
4	Construction of Golden Jubilee P.G. Block - Govt. Arts & Science College, Kozhikode	24 Months 08/05/2019	30/09/2022	Completed	10,00,57,295	41	09/05/2017	171
5	Providing global category Synthetic Surface at Paravattani Stadium football court, Thrissur	06 Months 01/09/2021	16/07/2022	Ongoing	89,23,776	10	02/03/2021	167
6	NABARD - RIDF XXII – 2016-17 Infrastructure works for additional hospital building at Taluk Hospital, Sulthan Bathery, Wayanad	18 Months 08/05/2020	30/09/2022	Ongoing	14,96,00,804	29	09/11/2018	161
7	Construction of retaining wall and compound wall in Govt. Polytechnic College, Pala	18 Months 22/06/2021	22/07/2022	Ongoing	2,12,22,440	13	23/12/2019	72
8	Painting works to Obstetrics' & Gynaecology Block, Medical College, Kottayam	06 Months 06/07/2019	07/03/2020	Completed	45,44,569	8	07/01/2019	133
9	Improvement works of ICU in Institute of Chest Diseases - Construction of Post Operative ICU and checkup facilities for Anesthesia Department, Improvement of drainage facilities in MCH and Converting the Hydrophobia Cell near Ward 2 to TMT Room and Procedure Room for Medicine Department, Medical College, Kozhikode	12 Months 11/05/2021	30/04/2022	Completed	1,79,75,114	12	06/01/2020	100
10	Construction of examination hall cum auditorium and library complex, Nursing College - Phase II, Kottayam	18 Months 09/10/2019	30/08/2021	Completed	3,47,05,064	23	10/04/2018	128
11	Construction of building for PHC Kottur under the scheme 'Setting up of laboratories in PHCs, Kozhikode	12 Months 21/05/2019	17/08/2020	Completed	1,51,36,340	15	22/05/2018	125
12	Kitchen blocks in various Aided Schools, Kaipamangalam, Thrissur	12 Months 11/03/2021	15/05/2022	Ongoing	82,91,067	14	12/03/2020	117

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
13	Construction of a new block for PWD Rest House, Erumely, Pathanamthitta	09 Months 24/06/2020	24/03/2021	Completed	1,30,80,730	9	25/09/2019	100
14	Construction of public comfort station near car shed in front of ABC Block, Medical College, Kottayam	06 Months 14/01/2020	29/07/2020	Completed	65,66,693	6	15/7/2019	100
15	Renovation of the Principal's Office of the Govt. Medical College, Thiruvananthapuram	09 Months 01/08/2021	01/05/2022	Ongoing	67,02,448	9	02/11/2020	100
16	NABARD - RIDF - XXI - 2015-16 Infrastructure work construction of multipurpose hospital block of District Hospital, Mananthavadi, Wayanad	24 Months 13/02/2020	31/05/2022	Ongoing	30,74,48,596	27	14/02/2018	112
17	Construction of Hospital building at Govt. Homeo Medical College, Kozhikode	18 Months 07/12/2017	07/05/2019	Completed	11,24,73,252	17	08/06/2016	94
18	Construction of MBBS Ladies Hostel - Phase II, Govt. Medical College, Thrissur	12 Months 16/01/2021	31/12/2021	Ongoing	2,12,18,522	11	17/01/2020	92
19	Construction of School Building, Govt. High School Kurumbala, Wayanad.	12 Months 03/09/2021	31/07/2022	Ongoing	78,13,411	11	04/09/2020	92
20	Construction of School Building, Govt. UP School, Chennalode, Wayanad	12 Months 14/01/2022	12/12/2022	Ongoing	74,29,029	11	15/01/2021	92
21	NABARD - Assistance RIDF XXI - Infrastructure works in Govt. Taluk Hospital, Vatakara, Kozhikode	18 Months 03/05/2021	31/08/2022	Ongoing	6,53,13,440	16	04/11/2019	89
22	Construction of Model Residential School (MRS) Maruthonkara, Kozhikode	18 Months 01/12/2018	26/02/2020	Completed	13,93,75,539	15	02/06/2017	83
23	Construction of new School building, Edanadu LP School, Karoor, Kottayam	12 Months 22/10/2021	01/09/2022	Ongoing	99,83,906	10	23/10/2020	83
24	Upgradation of the Institute to International Standards - Workshop renovation, Construction of main gate road etc., ITI – Chakkai, Thiruvananthapuram	12 Months 24/11/2021	30/09/2022	Ongoing	2,82,38,352	10	25/11/2020	83
25	Renovation & Extension of computer block, main building & Construction of toilet block, Govt. Women's Polytechnic College, Nedupuzha, Thrissur	12 Months 18/03/2021	17/12/2021	Completed	1,36,49,723	9	19/03/2020	75
26	Urgent maintenance and repairing work to the main building roof at Govt. Women's Polytechnic College Nedupuzha, Thrissur	12 Months 16/02/2021	15/11/2021	Completed	1,05,00,000	9	17/02/2020	75

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
27	LAC- ADS - 2017-18 - Construction of a building, GLP School, Anayamkunnu, Kozhikode	12 Months 05/11/2021	05/08/2022	Completed	1,29,22,650	9	06/11/2020	75
28	Construction of additional block, Dental College, Kozhikode	12 Months 19/12/2019	18/09/2020	Completed	3,65,59,196	9	20/12/2018	75
29	Construction of Naval Training Centre and cadets' accommodation block for ladies & boys at 1 Kerala Naval NCC at Akulam, Thiruvananthapuram	15 Months 22/12/2021	24/11/2022	Ongoing	8,55,38,037	11	23/09/2020	73
30	Construction of building at Block Primary Health Centre, Vamanapuram, Thiruvananthapuram	18 Months 31/01/2021	28/02/2022	Ongoing	5,66,42,931	13	01/08/2019	72
31	Construction of compound wall, Govt. Medical College, Thrissur	18 Months 09/04/2021	31/05/2022	Ongoing	2,41,03,790	14	10/10/2019	78
32	RIDF XX - Construction of Community Health Centre for Paika Hospital, Kottayam	24 Months 19/10/2019	31/03/2021	Completed	14,67,19,930	17	20/10/2017	71
33	Gender Budget 2015-16 - Providing lady by-standers waiting area and toilet facilities at 3rd Floor of Cardiology & Cardiothoracic Block at Govt. Medical College, Kottayam	10 Months 15/08/2018	08/04/2019	Completed	1,21,24,799	7	16/10/2017	70
34	Annual plan scheme - Modernisation of prisons - 2017-2018 - Construction of Superintendent quarters, Staff quarters and Rest room for staff, District Jail, Mananthavady	20 Months 11/12/2019	05/02/2021	Completed	1,54,79,288	14	12/04/2018	70
35	Vertical extension to be existing building for Labour Room and Operation Theatre of Chelakkara Hospital - Phase I, Thrissur	10 Months 13/11/2021	30/06/2022	Ongoing	96,83,139	7	14/01/2021	70
36	Construction of new building for Govt. School, Chengalloor, Thrissur	12 Months 03/02/2021	12/10/2021	Completed	1,28,52,052	8	04/02/2020	67
37	Establishment & modernisation of drug stores under DME - Construction of central warehouse - Phase II, Govt. Medical College, Thrissur	12 Months 02/07/2020	15/03/2021	Ongoing	1,45,92,574	8	03/07/2019	67
38	Construction of Academic Block for SARBTM Govt. College, Koyilandy, Kozhikode	18 Months 24/08/2021	21/07/2022	Ongoing	5,47,24,658	11	25/02/2020	61
39	USR to indoor basketball court storage room - Govt. Physical Education College, Kozhikode	10 Months 02/10/2021	30/03/2022	Completed	53,16,880	6	03/12/2020	60

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
40	Construction of compound wall and gate, Govt. Dermatology Hospital Chevayur, Kozhikode	10 Months 15/12/2021	30/06/2022	Ongoing	93,62,179	6	16/02/2021	60
41	Construction of administrative block 1st and 2nd floor, Govt. College, Kottayam	12 Months 10/11/2021	30/06/2022	Ongoing	1,70,53,936	8	11/11/2020	67
42	RIDF-XXII (2016-17) Infrastructure work in Taluk Hospital (Phase I) Vaikom, Kottayam	18 Months 13/02/2020	11/12/2020	Completed	11,61,60,948	10	14/08/2018	56
43	Construction of Govt. Tribal UP School, Kosady, Mundakayam, Kottayam	18 Months 26/03/2019	15/02/2020	Completed	2,07,03,550	10	27/09/2017	56
44	Construction of School building, Govt LP School Meenchanda, Kozhikode	09 Months 24/06/2020	03/11/2020	Completed	78,80,021	5	25/09/2019	56
45	Construction of new office complex for accommodating various Commissions, Pattom, Thiruvananthapuram	30 Months 07/09/2021	31/12/2022	Ongoing	32,81,66,604	16	08/03/2019	53
46	Construction of new building for LP School, Chettiparambu, Irinjalakuda, Thrissur.	20 months 08/03/2021	06/11/2021	Completed	2,11,05,690	8	09/07/2019	40
47	Providing additional facilities to Panampilly College, Chalakudy.	12 months 16/07/2021	12/10/2021	Completed	2,02,83,346	3	17/07/2020	25
48	Construction of Student Utility Centre at Govt. Polytechnic College, Nedupuzha, Thrissur	18 months 04/08/2021	19/02/2022	Completed	1,60,99,815	6	15/02/2020	33
49	Budget Work 2017-18 - additional work required for the completion of Taluk Head Quarters Hospital, Kodungallur	16 months 05/04/2021	27/07/2021	Completed	79,82,216	3	06/12/2019	19
50	Construction of new building for Govt. LP School Thozhupadam, Chelakkara LA Constituency	8 months 23/05/2021	13/10/2021	Completed	69,78,247	5	24/09/2020	63
51	Construction of new building for Govt. LP School, Kaipamangalam	12 months 11/12/2020	10/06/2021	Completed	59,62,166	6	12/12/2019	50
52	Construction of Gazetted Officers quarters in Govt. Engineering College, Mananthavady	24 months 27/05/2018	21/05/2019	Completed	10,37,10,288	12	28/05/2016	50
53	Health & FWD - Annual Plan - 2016-17 - Construction of Nursing School and Hostel - Phase – II in District Hospital, Mananthavady	15 months 25/11/2020	20/01/2021	Completed	1,57,27,190	2	26/08/2019	13
54	Construction of Mechanical Production Lab, - Phase II at Govt. Engineering College, Kozhikode	18 months 09/01/2022	30/05/2022	Completed	1,18,78,237	4	10/07/2020	22

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
55	HSE Construction of Higher Secondary Block for Govt. Sanskrit HSS, Meppayil, Vatakara	15 months 06/06/2018	29/08/2018	Completed	1,24,90,773	2	07/03/2017	13
56	UGC Scheme - Construction of Women's Hostel for CKGM College, Perambra in Koyilandy Taluk, Kozhikode	18 months 04/11/2019	26/02/2020	Completed	1,08,84,317	4	05/05/2018	22
57	Construction of building for Police Station at Kunnamangalam, Kozhikode	9 months 19/05/2020	24/09/2020	Completed	1,20,13,948	4	20/08/2019	44
58	Annual Plan 2017-18 - Construction of building for VHSE Block at GVHSS for Girls, Nadakkavu, Kozhikode	12 months 29/11/2019	27/02/2020	Completed	73,94,189	3	30/11/2018	25
59	NABARD - RIDF XXIII- Construction of additional infrastructure works for Govt. Girls Higher Secondary School, Parayanchery, Feroke, Kozhikode	16 months 09/10/2021	19/03/2022	Completed	1,79,84,214	5	10/06/2020	31
60	Perambra Constituency-Construction of entrance block, Terrace floor for existing HSS block and staircase for HS block for Avala Higher Secondary School, Kozhikode	12 months 23/05/2020	21/11/2020	Completed	1,19,81,523	6	24/05/2019	50
61	Construction of flat type residential complex for Non- Gazetted Officers, Govt. Medical College, Kozhikode	36 months 01/11/2020	21/11/2022	Completed	21,14,72,198	24	02/11/2017	67
62	Medical Education Service - Construction of flat type residential complex for Gazetted officers, Medical College, Kozhikode	30 months 14/02/2020	25/02/2021	Completed	11,48,86,651	12	15/08/2017	40
63	Construction of new building for Govt. LPBS, Kidangoor	12 months 06/03/2020	27/05/2020	Completed	80,05,514	3	07/03/2019	25
64	Construction of examination hall and research Centre at Govt. College, Kottayam	12 months 08/10/2021	08/03/2022	Ongoing	1,59,04,601	5	09/10/2020	42
65	NABARD - Construction of new building for Kunnumbhagam GHS, Kanjirappally	12 months 24/07/2022	31/12/2022	Ongoing	1,57,63,820	5	25/07/2021	42
66	Construction of new building for SKV Govt. HSS, Neendoor	12 months 22/10/2022		Ongoing	1,69,45,749	2	23/10/2021	17
67	Annual Plan - 2018- 19 - Construction of new building for Govt. Harijan Welfare LPS, Nerekadavu, Vaikom	12 months 12/07/2022		Ongoing	1,10,80,945	5	13/07/2021	42

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
68	Construction of new building - Phase II for College of Pharmaceutical Sciences, Kottayam	24 months 03/06/2021	30/04/2022	Ongoing	11,06,22,985	11	04/06/2019	46
69	NABARD RIDF XXIII - Infrastructure Works - Construction of new building at G H S Perambra plantation in Kozhikode - Construction of new building at Govt. UP School (Upgraded as GHS) Perambra plantation, Kozhikode	10 months 01/08/2022		Ongoing	1,52,17,994	4	02/10/2021	40
70	MLA-ADS 2019-20 - Infrastructure development for Kizhaparayar FHC, Meenachil, Panchayath	09 months 09/07/2022	30/11/2022	Ongoing	82,86,223	6	10/10/2021	67
71	Construction of five storied building for Vigilance Bureau office, Phase I, Muttathara, Thiruvananathapuram	18 months 12/04/2022	30/10/2022	Ongoing	8,86,12,746	7	13/10/2020	39
72	Renovation of the road from RCC Jn. to Principal Office front and formation of road from Manjadi road to Principal Office back - Govt. Medical College, Thiruvananthapuram	3 months 04/07/2022		Ongoing	97,23,255	6	05/04/2022	200
73	Construction of Court Complex, Irinjalakuda	30 months 31/07/2021	30/03/2022	Ongoing	26,89,00,000	8	01/02/2019	27
74	Construction of W&C wards - Phase II, General Hospital, Thrissur	20 months/ 12/03/2021	12/01/2022	Ongoing	5,65,53,759	10	13/07/2019	50
75	Annual Plan (2018-19) Construction of administrative block, Govt. Polytechnic College, Kunnamkulam	18 months 01/05/2022	01/09/2022	Ongoing	3,22,00,000	4	02/11/2020	22
76	Construction of new building, Govt. Upper Primary School, Moorkanikkara	18 months 07/02/2021	21/06/2021	Ongoing	1,68,56,667	4	08/08/2019	22
77	Construction of building for District Public Health Lab, Thrissur	17 months 13/12/2021	31/07/2022	Ongoing	1,49,73,720	8	14/07/2020	47
78	Construction of new building for GHS School, Kattoor, Irinjalakuda	18 months 07/08/2022		Ongoing	1,35,48,763	5	08/02/2021	28
79	Construction of school building of Govt. LP School, Erumapetty, Kunnamkulam, Thrissur	18 months 14/11/2022		Ongoing	79,94,399	1	15/05/2021	6
80	Construction of new building for Mechanical and Electrical Dept. Govt. Engineering College, Thalapuzha	18 months 20/07/2021	04/09/2022	Ongoing	5,14,54,314	13	21/01/2020	72

Sl. No.	Name of the work	Time of Completion in months / Upto	Date of Completion/ Extensions	Present status	APAC	Delay in months	Date of Site Handing Over	Delay in percentage
81	NABARD – RIDF - XXIII- Infrastructure works for School under RMSA - GHS Beenachi, Wayanad	18 months 24/08/2022		Ongoing	1,62,36,156	4	25/02/2021	22
82	Annual Plan - 2019-20 - Construction of school building of Govt. HS School, Meppadi, Wayanad	15 months 07/11/2022		Ongoing	1,05,67,125	2	08/08/2021	13
83	Construction of new building for Govt. ITI (SCDD), Elathur, Kozhikode	18 months 23/03/2022	22/07/2022	Ongoing	2,29,62,066	4	24/09/2020	22
84	Construction of new building for election warehouse for storage of EVM & VVPAT Machines at Chathamangalam, Kozhikode	18 months 22/01/2022	30/06/2022	Ongoing	2,85,87,050	5	23/07/2020	28
85	Implementation of Plan Schemes during 2017-18 - Construction of new examination hall, Govt. Medical College, Kozhikode	18 months 29/04/2022	29/12/2022	Ongoing	8,56,44,746	8	30/10/2020	44
86	Infrastructure development for Govt. Taluk Hospital, Thamarassery - Phase I	15 months 29/01/2022	30/07/2022	Ongoing	1,86,23,703	6	30/10/2020	40
87	Urgent repair works - Providing sheet roofing for preventing leaking and handrail in step for handicapped people and other repair works etc., Mini Civil Station, Mananthavady	7 months 12/06/2022		Ongoing	20,55,706	6	13/12/2021	86

Appendix 13 Details of works where Insurance not collected / deductions not effected (Referred to in Paragraph 2.3.6.4)

Sl. No.	Name of work	Division	APAC (₹ in lakh)	Insurance required for but not collected (₹ in lakh)	Penalty 0.2 per cent to be deducted for non- production of Insurance
1	Urgent repairs and maintenance work at Kerala House, Mumbai	Special Buildings Thiruvananthapuram	272	2.00	0.54
2	Construction of compound wall, Science and Arts College, Killimangalam	Thrissur	102	2.00	0.20
3	Construction of new building, Govt. Higher Secondary School, Kottathara	Wayanad	112	2.00	0.22
4	Construction of building for PHC Kottur under the scheme "Setting up of laboratories in PHCs"-Balussery LAC, Kozhikode	Kozhikode	151	2.00	0.30
5	Construction of examination hall cum auditorium and library complex, Nursing College - Phase II	Kottayam	347	2.00	0.69
6	Medical Education Services - Construction of additional block for Dental College, Kozhikode Phase IV & V	Kozhikode	365	2.00	0.73
7	Construction of MBBS Ladies hostel Phase II, Govt. Medical College, Thrissur	Thrissur	212	2.00	0.42
8	Construction of a new block, PWD Rest House, Erumely	Kottayam	130	2.00	0.26
9	Improvement works of ICU in Institute of Chest Diseases - Construction of Post Operative ICU and checkup facilities for Anesthesia Department, Improvement of drainage facilities in MCH and Converting the Hydrophobia Cell near Ward 2 to TMT Room and Procedure Room for Medicine Department, Medical College, Kozhikode	Kozhikode	179	2.00	0.36
10	ITI – Chakkai - Upgradation of the Institute to	Special Buildings Thiruvananthapuram	282	2.00	0.56
11	LAC ADS 2016-17 - Perambra Constituency - Construction of entrance block, terrace floor for existing HSS block and staircase, HS block, Avala HSS, Kozhikode	Kozhikode	119	2.00	0.24
12	Urgent maintenance and repairing works to the main building roof at Govt. Women's Polytechnic College, Nedupuzha, Thrissur	Thrissur	117	2.00	0.23
13	Renovation & Extension of computer block, main building and Construction of toilet block - Govt. Women's Polytechnic College, Nedupuzha, Thrissur	Thrissur	136	2.00	0.27

Sl. No.	Name of work	Division	APAC (₹ in lakh)	Insurance required for but not collected (₹ in lakh)	Penalty 0.2 per cent to be deducted for non- production of Insurance
14	Construction of new building, Govt. LP School, Chengaloor	Thrissur	128	2.00	0.26
15	Construction of W & C wards, General Hospital, Thrissur - Phase II	Thrissur	565	2.00	1.13
16	Construction of 50 bedded ward and administrative block, Block PHC, Vamanapuram	Special Buildings Thiruvananthapuram	566	2.83	1.13
17	Prisons - Annual Plan Scheme - Modernisation of prisons 2017-2018 - District Jail, Mananthavady- Construction of Superintendent quarters, Staff quarters and Rest room for staff	Wayanad	155	2.00	0.31
18	Construction of compound wall for the campus of Govt. Medical College, Thrissur	Thrissur	241	2.00	0.48
19	RIDF XXII (2016-17) H&FWD Infrastructure work, Taluk Hospital (Phase I) Vaikom, Kottayam	Kottayam	1,161	5.00	2.32
20	Construction of building for Police Station, Kunnamangalam	Kozhikode	120	2.00	0.24
21	NABARD assistance under RIDF XXIV (2018-19) – Infrastructure development for Govt. Taluk Hospital Thamarassery - Phase I - Part TS (First & Second Floor of OP Block)	Kozhikode	186	2.00	0.37
22	Construction of Student's Utility Center at Govt. Polytechnic College, Nedupuzha, Thrissur	Thrissur	160	2.00	0.32
23	Construction of new building for LP School, Chettiparambu, Irinjalakuda	Thrissur	211	2.00	0.42
24	Construction of examination hall and research centre, Govt. College, Kottayam	Kottayam	159	2.00	0.32
25	NABARD-RIDF XXIII Construction of additional infrastructure works, Govt. Girls Higher Secondary School, Parayanchery, Kozhikode	Kozhikode	179	2.00	0.36
26	Implementation of Plan Schemes 2017-18 – Govt. Medical College, Kozhikode - Construction of new examination hall	Kozhikode	856	4.28	1.71
27	Budget Work 2017-2018 H&FWD - additional work required for the completion of Taluk Head Quarters Hospital, Kodungallur	Thrissur	79	2.00	0.16
28	Construction of new building for Govt. UP School, Moorkanikkara	Thrissur	168	2.00	0.34
29	Construction of Mechanical Production Lab, Govt. Engineering College, Kozhikode - Phase II	Kozhikode	118	2.00	0.24

Sl. No.	Name of work	Division	APAC (₹ in lakh)	Insurance required for but not collected (₹ in lakh)	Penalty 0.2 per cent to be deducted for non- production of Insurance
30	Annual Plan 2017-18 - Construction of building for VHSE Block at GVHSS for Girls, Nadakkavu, Kozhikode	Kozhikode	73	2.00	0.15
31	Providing additional facilities to Panampilly College, Chalakudy	Thrissur	202	2.00	0.40
32	UGC Scheme - Construction of Women's Hostel for CKGM College, Perambra, Koyilandy Taluk, Kozhikode	Kozhikode	108	2.00	0.22
33	Annual Plan - 2016-17 - Construction of Nursing School and Hostel, District Hospital, Mananthavady - Phase II	Wayanad	157	2.00	0.31
34	Renovation of the Principal's Office, Govt. Medical College, Trivandrum	Special Buildings Thiruvananthapuram	67	2.00	0.13
35	Construction of Naval training centre and cadets accommodation block for ladies & boys at 1 Kerala Naval NCC, Akulam	Special Buildings Thiruvananthapuram	855	4.28	1.71
36	Construction of a building, GLP School, Anayamkunnu, Kozhikode	Kozhikode	129	2.00	0.26
37	Construction of compound wall and gate, Govt. Dermatology Hospital, Chevayur, Kozhikode	Kozhikode	93	2.00	0.19
38	Construction of five storied building, Vigilance Bureau Office, Muttathara - Phase I, Thiruvananthapuram	Special Buildings Thiruvananthapuram	886	4.43	1.77
39	Construction of new building for election warehouse for storage of EVM & VVPAT Machines, Chathamangalam, Kozhikode	Kozhikode	285	2.00	0.57
40	Construction of new building, Govt. ITI (SCDD), Elathur, Kozhikode	Kozhikode	229	2.00	0.46
41	NABARD - RIDF XXII -2016-17 Infrastructure works for additional hospital building, Taluk Hospital, Sulthan Bathery, Wayanad	Wayanad	1,496	5.00	2.99
42	Vertical extension to the existing building for Labour room and Operation Theatre, Chelakkara Hospital	Thrissur	96	2.00	0.19
43	Construction of administration block 1 st & 2 nd floor	Kottayam	170	2.00	0.34
44	Retaining wall Govt. Polytechnic College, Pala	Kottayam	212	2.00	0.42
45	LP School, Karoor, Thrissur	Thrissur	99	2.00	0.20

Sl. No.	Name of work	Division	APAC (₹ in lakh)	Insurance required for but not collected (₹ in lakh)	Penalty 0.2 per cent to be deducted for non- production of Insurance
46	GMCTCR - Establishment and modernisation of drug stores under DME - Construction of central warehouse - Phase II	Thrissur	145	2.00	0.29
47	GLPS, Neerekadavu, Vaikom	Kottayam	110	2.00	0.22
48	Construction of new building for Mechanical and Electrical Dept, Govt. Engineering College, Thalapuzha	Wayanad	514	2.57	1.03
49	College of Pharmaceutical Sciences Phase II, Kottayam	Kottayam	1,106	5.00	2.21
50	Construction of Academic Block for SARBTM Govt. College, Koyilandy, Kozhikode	Kozhikode	547	2.74	1.09
51	Kunnumbhagam GHS, Kanjirappally	Kottayam	157	2.00	0.31
52	Construction of administrative block, Govt. Polytechnic College, Kunnamkulam	Kozhikode	322	2.00	0.64
53	Construction of building, District Public Health Lab, Thrissur	Thrissur	149	2.00	0.30
54	NABARD – RIDF - XXIII- Infrastructure works for School under RMSA - Samagra Shiksha Kerala GHS Beenachi, Wayanad	Wayanad	162	2.00	0.32
55	Construction of Court Complex, Irinjalakuda (Phase I)	Thrissur	2,689	5.00	5.38
	Total			131.12	37.27

Appendix 14 Details of works where less Defect Liability Period provided (Referred to in Paragraph 2.3.6.6)

Sl. No.	Name of work	Agreement by Circle/ Division	Agreed Probable Amount of Contract (₹ in lakh)	Agreement No. and Date	DLP as per agreement in months
1	SC ST Dept. IIMS Palakkad - Construction of third floor, Medical College block at Palakkad	North	786.86	SE(K)63/2019-20 26/12/2019	36
2	Construction of academic block, SARBTM Govt College, Koyilandy	North	547.25	SE(K)62/2019-20 24/12/2019	36
3	Construction of building, PWD Rest House, Sulthan Bathery	North	223.21	SE(K)58/2019-20 16/12/2019	36
4	Construction of a building, GMLPS, Marayoor	North	92.17	SE(K)56/2019-20 9/12/2019	36
5	Construction of E.Narayanan Memorial Auditorium, Engineering College, Thalassery	North	180.32	SE(K)60/2019-20 16/12/2019	36
6	Construction of new building, Govt. TTI for Men Model UP School, Kannur	North	92.57	SE(K)57/2019-20 10/12/2019	36
7	General Education Dept. Construction of building, KPR GHSS, Kalliassery	North	210.64	SE(K)55/2019-20 09/12/2019	36
8	Construction of three storied building, GHSS, Palayad	North	391.19	SE(K)61/2019-20 20/12/2019	36
9	Construction of Annexure to PWD Rest House, Vadakkanchery	North	222.77	SE(K)64/2019-20 26/12/2019	36
10	Construction of super speciality block, District Hospital, Palakkad	North	123.07	SE(K)54/2019-20 04/12/2019	36
11	Construction of new building for Mechanical and Electrical Dept. Govt. Engineering College, Thalappuzha	North	514.54	SE(K)69/2019-20 13/01/2020	36
12	Construction of School building, GMLP School, Chandakkunnu, Nilambur	North	106.66	SE(K)68/2019-20 09/01/2020	36
13	Construction of new building, Regional Public Health Laboratory, Puthupperiayaram, Palakkad	North	113.33	SE(K)67/2019-20 04/01/2020	36
14	Construction of PWD Complex, Kannur 1 st Phase, Block II	North	137.48	SE(K)65/2019-20 01/01/2020	36
15	Construction of new building and construction of second floor in existing building, GHS Theyyani	North	155.53	SE(K)66/2019-20 01/01/2020	36

Sl. No.	Name of work	Agreement by Circle/ Division	Agreed Probable Amount of Contract (₹ in lakh)	Agreement No. and Date	DLP as per agreement in months
16	Construction of School building of GHSS East Hill, Kozhikode	North	126.35	SE(K)79/2019-20 20/02/2020	36
17	Construction of new building, Kurikkathur Anganavadi, Kozhikode	Kozhikode	10.95	EE(BC)Price2/45 /2019-20 16/12/2019	36
18	Demolishing existing building and construction of new building for sub centre, Kuruvangad	Kozhikode	29.78	EE(BC)Price2/49 /2019-20 24/12/2019	36
19	LAC-ADS 2017-18 Construction of School building for Parayancheri Govt HSS for Boys, Puthiyara	Kozhikode	36.15	EE(BC)Price2/50 /2019-20 3/1/2020	36
20	Construction of Kitchen block at Govt. Technical School, Dwaraka, Wayanad	Wayanad	18.93	EE/B/26/2019-20 dated 06/12/2019	36
21	Construction of Heritage Museum at Kalloor, Noolpuzha	Wayanad	18.12	EE/B/27/2019-20 dated 09/12/2019	36
22	Kitchen blocks in various Aided School in Kaipamangalam	Thrissur	82.91	84/2019- 20/EE/B/TSR dated 06/03/2020	36
23	Construction of new building for Govt. LP School, Kaipamangalam	Thrissur	59.62	69/2019- 20/EE/B/TSR dated 04/12/2019	36
			4,280.40		

Appendix 15 Details of buildings pending handing over to user Department (Referred to in Paragraph 2.3.6.7)

Sl. No.	Name of work/building	Division	Date of completion	Expenditure (₹ in lakh)	Delay in months (upto 11/2022)
1	Construction of twin cottage for Village Office at Narippatta	Kozhikode	22/02/2020	46.35	33
2	Construction of building for Govt. UP School at Kumbalachola, Narippatta	Kozhikode	21/10/2020	81.90	25
3	LAC ADS 2017-18 - Construction of building, PHC, Kayakkody Grama Panchayat in Nadapuram LAC	Kozhikode	21/10/2020	41.61	25
4	Construction of Model Residential School, Maruthankara	Kozhikode	21/02/2020	810.83	33
5	LAC ADS 2017-18 - Construction of new building for PHC at Edachery	Kozhikode	21/10/2020	41.31	25
6	Construction of School building for Govt. HSS, Azhiyur	Kozhikode	29/07/2020	30.71	28
7	Construction of new building for Homeo Dispensary, Tunery	Kozhikode	29/09/2020	21.76	26
8	Construction of new building in Govt. Technical High School, Kozhikode	Kozhikode	17/05/2020	77.04	30
9	Construction of School building for Govt. UP School, Padinjattumuri	Kozhikode	01/06/2020	77.04	28
10	Construction of additional block for Dental College, Kozhikode	Kozhikode	18/09/2020	364.41	25
11	Construction of building for Kakkad Village Office	Kozhikode	20/09/2020	21.06	25
12	Construction of building for Mavoor Govt. HSS, Kunnamangalam	Kozhikode	29/01/2022	104.46	10
13	Construction of Model Police Station, Kunnamangalam	Kozhikode	05/04/2021	118.62	19
14	Construction of building for Parayancheri Govt. Vocational HSS	Kozhikode	09/02/2021	39.17	14
15	Construction of Anganwadi building at Kannanchinnanpalam, Perumanna	Kozhikode	13/08/2020	13.13	27
16	Construction of building for Azhchavattom Govt. HSS	Kozhikode	25/03/2022	26.57	8
17	Construction of Hospital building at Govt. Homeo Medical College, Kozhikode	Kozhikode	06/05/2019	11.03	29
18	Construction of new building for Veterinary Dispensary, Kakkadompoyil	Kozhikode	16/04/2019	40.67	16
19	Construction of quarters and rest rooms for District Jail, Mananthavady	Wayanad	05/02/2021	153.33	21
20	Construction of Nursing School and Hostel, District Hospital, Mananthavady	Wayanad	20/01/2021	174.07	22
21	Construction of classroom building for Polytechnic College, Dwaraka	Wayanad	27/03/2019	56.37	44

Sl. No.	Name of work/building	Division	Date of completion	Expenditure (₹ in lakh)	Delay in months (upto 11/2022)
22	Construction of electronic block for Govt. Poly Technic Meenangadi	Wayanad	09/01/2020	154.18	34
23	Construction of staff quarters at Ambalavayal Village Office	Wayanad	27/03/2020	22.91	32
24	Construction of staff quarters at Thomattuchal Village	Wayanad	27/05/2020	21.25	30
	Total		2,549.78		

Appendix 16 List of Buildings where handing over was delayed (Referred to in Paragraph 2.3.6.7)

Sl. No.	Name of work	Division	Date of completion	Date of handing over the buildings	APAC (₹ in lakh)	Delay in months
1	Construction of Women's hostel for CKGM College, Perambra	Kozhikode	26/02/2020	26/11/2021	102.83	20
2	Construction of building, PHC, Kottur	Kozhikode	31/08/2020	28/05/2022	143.71	20
3	Construction of flat type residential complex for Gazetted Officers, Govt. Medical College, Kozhikode	Kozhikode	25/02/2021	28/12/2021	771.30	10
4	Construction of classroom building for Govt. HSS, Achoor	Wayanad	05/05/2020	22/07/2021	55.23	13
5	Construction of new classroom building for Govt. LP School, Puliyarmala	Wayanad	18/10/2021	14/07/2022	29.10	8
6	Construction of Principal quarters of NMSM Govt. College, Kalpetta	Wayanad	12/08/2021	22/06/2022	29.24	9
7	Construction of permanent District Early Intervention Centre, Kalpetta	Wayanad	28/09/2019	18/12/2020	198.65	14
8	Construction of building for Govt. LP School, Ambalavayal	Wayanad	31/03/2020	18/02/2021	76.91	10
9	Construction of school building for Govt. Vocational Higher Secondary School, Ambalavayal	Wayanad	31/03/2020	18/02/2021	77.28	10
10	Construction of Heritage Museum, Kalloor	Wayanad	17/12/2020	16/09/2022	22.02	20

Appendix 17 Frequency of Quality Control Tests (Referred to in Paragraph 2.3.7.1, 2nd bullet)

Mate	erial			Test required			Frequency
	Water	pH value	Acidity	Alkalinity	Per cent of solids		3 tests from each source
	Cement	Fineness	Soundness	Setting time	Compressive strength	Consistency of standard cement	For every 50 tonnes
Mortar ingredients (400-4)	Sand	Deleterious constituents	Silt contents	Gradation	Bulking		For every 20 cum except gradation (40cum)
	Brick for Masonry (403-6)	Dimensional tolerance	Water absorption	Efflorescence	Compressive strength		As per table 400-7 and 400-8
	Laterite stones	Water absorption	Specific gravity		Compressive strength		Table 400-19
Concrete	Reinforcing steel (600-7)	Tensile strength	Proof stress	Percentage elongation	Elongation at maximum force	Bend and rebend test	2/3 per cast according to the weight at least two weeks before commencement of concrete works
		Slump					Every 5 cum
		Cube test slab					Every 20 cum
		Cube test columns					Every 5 cum

Appendix 18 List of works with Nil QC tests and without QC tests on masonry items (Referred to in Paragraph 2.3.7.1, 2nd bullet)

Sl. No.	Name of the work	Division	QC tests conducted	QC test on masonry works
1	Construction of compound wall and gate, Govt. Dermatology Hospital Chevayur, Kozhikode	Kozhikode	Nil	Not conducted
2	Construction of Mechanical Production Lab at Govt. Engineering College, Kozhikode - Phase II	Kozhikode	Nil	Not conducted
3	Construction of School building of Govt. U P School, Chennalode, Wayanad	Wayanad	Nil	Not conducted
4	Election commission construction of warehouse for storage of EVMs and VVPAT machines at Chathamangalam, Kunnamangalam	Kozhikode	Nil	Not conducted
5	Providing lady by-standers waiting area and toilet facilities at 3 rd Floor of Cardiology & Cardiothoracic Block at Govt. Medical College, Kottayam	Kottayam	Nil	Not conducted
6	Construction of Hospital Block, Govt. Homeo Medical College, Kozhikode	Kozhikode	Nil	Not conducted
7	USR to indoor basketball court storage room Govt. Physical Education College, Kozhikode	Kozhikode	Nil	Not conducted
8	ITI - Chakkai - Upgradation of the Institute to International Standards - Workshop renovation, Construction of main gate road <i>etc</i> .	Special Buildings Thiruvananthapuram	Nil	Not conducted
9	LAC - ADS - 2017-18 - Construction of a building for GLP School, Anayamkunnu, Karassery Grama Panchayath, Kozhikode	Kozhikode	Nil	Not conducted
10	Infrastructure development for Kizhaparayar FHC, Meenachil, Panchayath	Kottayam	Nil	Not conducted
11	NABARD – RIDF - XXIII- Infrastructure works for School under RMSA - GHS Beenachi, Wayanad	Wayanad	Nil	Not conducted
12	NABARD assistance under RIDF XXIV 2018-19 infrastructure development for Govt. Taluk Hospital, Thamarassery Phase I	Kozhikode	Nil	Not conducted
13	RUSA- FUND - Renovation of existing college building at SARBTM Govt. College Koyilandy, Kozhikode	Kozhikode	Nil	Not conducted
14	UGC Scheme - Construction of Women's Hostel for CKGM College, Perambra, Koyilandy Taluk Kozhikode	Kozhikode	Nil	Not conducted
15	Annual Plan 2017-18 - Construction of building for VHSE Block at GVHSS for Girls, Nadakkavu, Kozhikode	Kozhikode	NA	Not conducted

Sl. No.	Name of the work	Division	QC tests conducted	QC test on masonry works
16	Construction of flat type residential complex for Gazetted Officers at Govt. Medical College, Kozhikode	Kozhikode	NA	Not conducted
17	Construction of additional block for Dental College, Kozhikode, Phase IV and phase V	Kozhikode	NA	Not conducted
18	Construction of building for PHC, Kottur	Kozhikode	NA	Not conducted
19	Construction of examination hall and research Centre at Govt. College, Kottayam	Kottayam	NA	Not conducted
20	Construction of flat type residential complex for non-Gazetted officers at Govt. Medical College, Kozhikode	Kozhikode	NA	Not conducted
21	Construction of Mini Civil Station, Balussery	Kozhikode	NA	Not conducted
22	Construction of Model Residential School Maruthonkara, Kozhikode	Kozhikode	NA	Not conducted
23	Construction of new block for District PSC Office at Kottayam	Kottayam	NA	Not conducted
24	Construction of new building for Govt. ITI (SCDD), Elathur, Kozhikode	Kozhikode	NA	Not conducted
25	Construction of new building for Govt. LP School, Kaipamangalam	Thrissur	NA	Not conducted
26	Construction of new building for Govt. LPBS, Kidangoor	Kottayam	NA	Not conducted
27	Construction of plus two block for GVHS School, Desamangalam.	Thrissur	NA	Not conducted
28	General Education - Annual plan - 2017-18 - Construction of School building for Govt. LP School, Meenchanda, Kozhikode	Kozhikode	NA	Not conducted
29	Implementation of Plan Schemes during 2017-18 - Govt. Medical College, Kozhikode Construction of new examination hall	Kozhikode	NA	Not conducted
30	Construction of Golden Jubilee PG block at Govt. Arts and Science College, Kozhikode	Kozhikode	NA	Not conducted
31	Annual Plan 2017-18 - Construction of Academic Block for SARBTM Govt. College, Koyilandy	Kozhikode	NA	Not conducted
32	HSE Construction of Higher Secondary Block for Govt. Sanskrit H SS Meppayil, Vatakara	Kozhikode	NA	Not conducted
33	LAC ADS 2016-17 - Construction of Entrance block, terrace floor for existing HSS block and staircase for HS block for Avala HSS, Kozhikode	Kozhikode	NA	Not conducted
34	LAC-ADS (2018-19) LAC - Construction of building for Police Station, Kunnamangalam	Kozhikode	NA	Not conducted
35	NABARD - Construction of new building for Kanjirappally, Kunnumbhagam GHS	Kottayam	NA	Not conducted

Sl. No.	Name of the work	Division	QC tests conducted	QC test on masonry works
36	NABARD assistance RIDF XXI infrastructure works in Govt. Taluk Hospital, Vatakara, Kozhikode	Kozhikode	NA	Not conducted
37	NABARD RIDF XXIII - Construction of additional infrastructure works for Govt. Girls Higher Secondary School, Parayanchery, Kozhikode	Kozhikode	NA	Not conducted
38	NABARD RIDF XXIII - Construction of new building at Govt. UP School (Upgraded as GHS) Perambra, Kozhikode	Kozhikode	NA	Not conducted
39	RIDF XX - Construction of Community Health Centre for Paika Hospital	Kottayam	NA	Not conducted
40	STDD - Construction of Govt. Tribal UP School, Kosady, Mundakayam	Kottayam	NA	Not conducted

Appendix 19 Details of works without approved Design Mix (Referred to in Paragraph 2.3.7.1, 4th bullet)

Sl. No.	Name of the work	Division
1	NABARD assistance under RIDF XXIV (2018-19) - Infrastructure Development for Govt. Taluk Hospital Thamarassery – Phase I – Part -TS (first and second floor of OP Block)	Kozhikode
2	Construction of new building for election warehouse for storage of EVM & VVPAT Machines at Chathamangalam, Kozhikode	Kozhikode
3	Construction of additional block for Dental College, Kozhikode - Phase IV & V	Kozhikode
4	RUSA - FUND - Renovation of existing college building at SARBTM Govt. College, Koyilandy, Kozhikode	Kozhikode
5	Construction of compound wall and gate for the Govt. Dermatology Hospital, Chevayur, Kozhikode	Kozhikode
6	UGC Scheme - Construction of Women's Hostel for CKGM College, Perambra in Koyilandy Taluk, Kozhikode	Kozhikode
7	HSE Construction of Higher Secondary Block for Govt. Sanskrit HSS, Meppayil, Vatakara	Kozhikode
8	Construction of Mechanical Production Lab at Govt. Engineering College, Kozhikode - Phase II	Kozhikode
9	NABARD RIDF XXIII - Infrastructure works under RMSA(SSK) - Construction of new building at G H S Perambra Plantation in Kozhikode - Construction of new building at Govt. UP School (Upgraded as GHS) Perambra Plantation in Kozhikode	Kozhikode
10	Construction of plus two block for GVHS School, Desamangalam	Thrissur
11	Deposit Work - Vertical Extension to the existing building for Labour Room and Operation Theatre of Chelakkara Hospital - Phase I	Thrissur

Appendix 20 Lapses in setting up of Field Lab at site noticed during Joint Physical Verification (Referred to in Paragraph 2.3.7.2)

Sl. No.	Name of work	Division	Field Lab
1	NABARD - RIDF - XXI (2015-16) Infrastructure work like construction of multipurpose hospital block of District Hospital, Mananthavadi, Wayanad	Wayanad	Not available
2	NABARD RIDF XXII (2016-17) Infrastructure works for additional hospital building in Taluk Hospital, Sulthan Bathery, Wayanad	Wayanad	Not available
3	Infrastructure works for additional hospital building in Taluk Hospital, Vythiri	Wayanad	Not available
4	Construction of new building at Mental Health Centre, Kozhikode	Kozhikode	Not available
5	Construction of additional block for Dental College, Kozhikode	Kozhikode	Not available
6	Construction of new office complex for accommodating various Commissions at Pattom, Thiruvananthapuram	Thiruvananthapuram	Randomly placed
7	Construction of Naval training centre and cadets accommodation block for ladies & boys at 1 Kerala Naval NCC at Akkulam	Thiruvananthapuram	Randomly placed

Appendix 21 Non/Short deployment of contractor's engineering personnel at site for monitoring the work

(Referred to in Paragraph 2.3.7.3, 2nd bullet)

Sl. No.	Name of work	Division	No. of technical persons required	No. of technical persons deployed
1	Construction of new building for Govt. LPBS, Kidangoor	Kottayam	2	Nil
2	Providing lady by-standers waiting area and toilet facilities at 3 rd Floor of Cardiology & Cardiothoracic Block at Govt. Medical College, Kottayam	Kottayam	2	Nil
3	STDD - Construction of Govt. Tribal UP School, Kosady, Mundakayam	Kottayam	4	Nil
4	Renovation of the road from RCC Jn. to Principal office front and formation of road from Manjadi road to Principal office back Govt. Medical College, Thiruvananthapuram	Special Buildings Thiruvananthapuram	2	Nil
5	Resurfacing of internal road, repair work to drain providing cement concrete flooring to the vehicle shed and allied works in SAT Hospital, Thiruvananthapuram	Special Buildings Thiruvananthapuram	1	Nil
6	ITI - Chakkai - Upgradation of the Institute to International Standards - Workshop renovation, construction of main gate road <i>etc</i> .	Special Buildings Thiruvananthapuram	6	Nil
7	Improvement works of ICU in Institute of Chest Diseases - Construction of Post Operative ICU and check-up facilities for Anesthesia Department, Improvement of drainage facilities in MCH and Converting the Hydrophobia Cell near Ward 2 to TMT Room and Procedure Room for Medicine Department in Medical College, Kozhikode	Kozhikode	4	Nil
8	Construction of new building for GHS School, Kattoor, Irinjalakuda	Thrissur	2	1
9	Construction of School building for Govt. LP School, Meenchanda, Kozhikode	Kozhikode	2	1
10	UGC Scheme - Construction of Women's Hostel for CKGM College, Perambra, Koyilandy Taluk, Kozhikode	Kozhikode	2	1
11	Higher Education Department - Annual Plan 2017-18 - Construction of Academic Block for SARBTM Govt. College, Koyilandy, Kozhikode	Kozhikode	6	1
12	NABARD - Assistance RIDF XXI - Infrastructure works in Govt. Taluk Hospital, Vatakara, Kozhikode	Kozhikode	6	3

13	Construction of new building for election warehouse for storage of EVM & VVPAT machines, Chathamangalam, Kunnamangalam Constituency, Kozhikode	Kozhikode	4	1
		Total	43	8
	Joint Physical Inspection	of ongoing works		
14	Medical Education Services - Construction of additional block for Dental College, Kozhikode - Phase IV & V	Kozhikode	4	1
15	Mental Health centre, Kozhikode	Kozhikode	6	1
16	Construction of new office complex for accommodating various Commissions at Pattom, Thiruvananthapuram	Special Buildings Thiruvananthapuram	9	1
17	Construction of Naval training centre and cadets accommodation block for ladies & boys at 1 Kerala Naval NCC at Akkulam, Thiruvananthapuram	Special Buildings Thiruvananthapuram	6	1
		Total	25	4

Appendix 22
Loss due to allowance of actual conveyance for materials in case of four major items $(Referred\ to\ in\ Paragraph\ 2.5(a))$

Name of work	Number/Name of item	Executed quantity in m ³	Rate/ m³ as per sanctioned estimate with actual conveyance (₹)	Rate allowing minimum conveyance plus cost index (₹/m³)*	Excess Rate/m³ (₹)	Excess Amount (₹)
Construction of Fly over at	Appendix B-10) RCC M30	1,687.13	10,904	10,481	423	7,13,656
Thondayad	Appendix B-12) RCC M45	3,458.46	13,604	12,413	1,191	41,19,026
	Appendix C-3) Construction of embankment	651.45	540	394	146	95,112
	Appendix – E/2/ PCC M15	5,488.90	7,516	7,152	364	19,97,960
Construction of Fly over at	Appendix B-10) RCC M30	956.07	10,904	10,481	423	4,04,418
Ramanattukara	Appendix B-11) RCC M45	3,139.22	13,604	12,413	1,191	37,38,811
	Appendix C-3) Construction of embankment	27,913.26	540	394	146	40,75,336
	Appendix – E/2/ PCC M15	6,802.56	7,516	7,152	364 Total	24,76,132 1,76,20,451

^{*} Applicable rates from PRICE software as per DSoR 2014

Appendix 23 Unwarranted provisions in the estimate (Referred to in Paragraph 2.5(b))

1. Excess expenditure on work of Pile load test:

Name of work/ Agreement Number	Item Number/Quantity and Rate as per agreement	Quantity executed (m)	Rate/ m³ as per sanctioned estimate (₹)	Amount paid in ₹
Construction of Fly over at Thondayad	Appendix B- Item 8- Pile load test	3,855	300	11,56,500
Construction of Fly over at	1)Appendix II- Item 6- Pile load test	4,470	300	13,41,000
Ramanattukara	2) Appendix VIII- Construction of Neelithodu bridge- Item 6 Pile load test	300	300	90,000
	3)Appendix IX (ii)- Construction of service bridge- Item 6 Pile load test	600	300	1,80,000
		Total		27,67,500

2. Excess expenditure on work of Chipping and removing of excess of RCC pile:

Name of work	Item of work	Executed	Rate/ m ³ as	Excess
		quantity in m ³	per sanctioned estimate (₹)	Amount (₹)
Construction of Fly over at	Appendix-B 7) Chipping and removing excess	29.65	11,494	3,40,797
Thondayad Construction of Fly over at	Appendix-B 7) Chipping and removing excess	35.55	11,494	4,08,612
Ramanattukara	length of RCC pile Appendix-H 7) Chipping and removing excess	6.1	11,034	67,307
	length of RCC pile Appendix-I 7) Chipping	8.14	11,034	89,817
	and removing excess length of RCC pile			
			Total	9,06,533

3. Excess expenditure on work of Driving down MS liner already fabricated to the required depth:

Name of work	Item of work	Executed quantity in metres (m)	Rate/m as per sanctioned estimate (₹)	Amount (₹)
Construction of Fly over at Thondayad	Appendix-B 4) Driving down 1000mm dia MS liner already fabricated to the required depth	210	1,554	3,26,340
Construction of Fly over at Ramanattukara	Appendix-B 5) Driving down 1200mm dia MS liner already fabricated to the required depth	225	1,554	3,49,650
	Appendix-H 5) Driving down 1200mm dia MS liner already fabricated to the required depth	45	1,492	67,140
	Appendix-I Driving down 1200 mm dia MS liner already fabricated to the required depth	60	1,492	89,520
			Total	8,32,650

4. Excess expenditure on work of Bored cast in situ reinforced piles:

Name of work	Item of work	Executed quantity in metres (m)	Rate/m as per sanctioned estimate (₹)	Amount (₹)
Construction of Fly over at Thondayad	Appendix-B 6) Bored cast in situ reinforced piles of size 1000mm (rock penetration of 60 cm depth in each bore hole).	50.40	35,455	17,86,932
Construction of Fly over at Ramanattukara	Appendix-B - 3) Bored cast in situ reinforced piles of size 1200mm (rock penetration of 100 cm depth in each bore hole).	42	50,703	21,29,526
	Appendix-H - 3) Bored cast in situ reinforced piles of size 1200mm (rock penetration of 60 cm depth in each bore hole).	7.2	48,680	3,50,496
	Appendix-I 3) Bored cast in situ reinforced piles of size 1200mm (rock penetration of 60 cm depth in each bore hole).	9.6	48,680	4,67,328
			Total	47,34,282

5. Excess expenditure on work of Bored cast in situ M 35 grade RCC pile:

Name of work	Item of work	Executed quantity in metres (m)	Rate/m as per sanctioned estimate (₹)	Rate/m excluding 5 per cent (₹)	Excess cost/m (₹)	Excess paid (₹)
Construction of Fly over at Thondayad	Appendix-B 5) Bored cast in situ M 35 grade RCC pile (1000mm dia)	1,000.57	14,182	13,506	676	6,76,385
Construction of Fly over at Ramanattukara	Appendix-B 2) Bored cast in situ M 35 grade RCC pile (1200mm dia)	1,279.73	20,281	19,315	966	12,36,219
					Total	19,12,604
			Grand	l Total (1+2-	+3+4+5)	1,11,53,569

Appendix 24 Excess amount paid/ non-recovered amount in respect of Bitumen (Referred to in Paragraph 2.6)

(₹ in lakh)

Sl. No.	Name of work (Date of completion)	Estimated cost of bitumen to be recovered as per adequacy (A) mount paid	Purchase cost of bitumen reimbursed* (B)	Amount to be recovered on differential cost of bitumen (A-B)	Repayment/ adjustment made in after final bill / final bill (Date of payment)	Excess amount paid/ non recovered amount	Remarks
1	Reconstruction of Kottekanni bridge (Korathi kundu) (03/2018)	69.18	59.06	10.12	10.12 (08/2020)	10.12	The differential cost recovered from final bill was refunded through after final bill.
2	Improvements to Neeleswaram - Edathode Road (06/2017)	131.48	86.58	44.90	135.48 (06/2019)	58.56	Excess payment included differential cost of ₹44.90 lakh and tender premium calculation error of ₹13.66 lakh, after adjusting previous short payment error of ₹76.92 lakh.
3	Improvements to Anachappa – Chattamala – Kattamkavala road (02/2018)	25.48	23.66	1.82	6.83 (11/2019)	2.81	Excess payment included differential cost of ₹1.82 lakh and refund of cost of empty drums ₹0.99 lakh initially recovered.
					Sub total	71.49	
4			and/or refund				
4	Providing BM & BC to old MCC Road, Bengara - Manjeshwar-	265.22	222.22	43.00	41.63 (10/2019)	43.00	₹41.63 lakh recovered in the 2 nd and part bill was refunded in the

Sl. No.	Name of work (Date of completion)	Estimated cost of bitumen to be recovered as per adequacy (A)	Purchase cost of bitumen reimbursed* (B)	Amount to be recovered on differential cost of bitumen (A-B)	Repayment/ adjustment made in after final bill / final bill (Date of payment)	Excess amount paid/ non recovered amount	Remarks
	Kuloor road and Meeyappadavu- Chigurpade road (09/2018)						final bill. The total differential cost recoverable was ₹43.00 lakh.
5	Improvements to Hosdurg- Panathur road (SH) - Chemberi - Koolichal under Kasaragod Development Package (03/2018)	64.30	59.72	4.58	-	4.58	No recovery of cost of bitumen used was made.
6	Thekkil-Alatty road (1 st phase) (12/2017)	76.38	67.05	9.33	-	15.25	Short estimate cost recovery of ₹44.81 lakh and short invoice amount reimbursement of ₹35.48 lakh led to excess payment of ₹9.33 lakh. Adding erroneous tender rebate of ₹ 5.92 lakh led to a total excess payment of ₹15.25 lakh
				S	Sub total	62.83	
					Total	134.32	

^{*}Since the purchase cost of bitumen as per adequacy was not available, the total purchase cost as per hand receipt was taken.

Appendix 25
Details of mineral reserves in Kerala as of March 2022
(Referred to in Paragraph 2.7.1)

Sl. No.	Major minerals	Quantity (lakh MT)
1	Ilmenite	36.34
2	Rutile	2.00
3	Zircon	4.78
4	Sillimanite	6.80
5	Limestone	83.34
6	Monazite	0.10
	(a) Sub-total	133.36
Sl. No.	Minor minerals	Quantity (lakh MT)
1	Granite Building Stone	4,868.26
2	Granite Dimension Stone	1.10
3	Laterite (Cement)	4.46
4	China clay (Minor)	52.77
5	Silica sand	3.15
	(b) Sub-total	4,929.74
	(c) Total mineral reserves (a+b)	5,063.10
	Percentage of Minor minerals to total mineral reserves (b/c*100)	97.37 per cent

(Source: Data provided by DMG)

Appendix 26 Loss of revenue due to short recovery of royalty (Referred to in Paragraph 2.7.8.1)

(₹ in lakh)

Sl. No.	Period of extraction/sale	Quantity (MT)	Average sale price (₹)	Total sale price	Royalty leviable	Royalty levied	Short-levy				
1	30-04-2021 to 29-05-2021	1000	622.00	6.22	1.56	0.95	0.61				
2	24-06-2021 to 13-07-2021	2000	709.00	14.18	3.55	1.90	1.65				
3	15-07-2021 to 08-08-2021	2000	686.50	13.73	3.43	1.90	1.53				
4	16-08-2021 to 30-08-2021	1500	669.00	10.04	2.51	1.43	1.08				
5	09-08-2021 to 02-09-2021	1000	643.00	6.43	1.61	0.95	0.66				
6	27-08-2021 to 15-09-2021	2000	643.00	12.86	3.22	1.90	1.32				
7	16-10-2021 to 14-11-2021	2500	651.00	16.28	4.07	2.38	1.69				
8	19-11-2021 to 18-12-2021	2000	650.50	13.01	3.25	1.90	1.35				
9	01-12-2021 to 04-01-2022	3000	637.00	19.11	4.78	2.85	1.93				
10	29-12-2021 to 06-02-2022	3000	636.33	19.09	4.77	2.85	1.92				
11	13-01-2022 to 26-02-2022	4000	645.50	25.82	6.45	3.80	2.65				
			Total								

(Source: DMG records)

Appendix 27 Non-recovery of royalty and price for excess extraction of minerals (Referred to in Paragraph 2.7.8.4)

(Quantity in lakh MT and amount in ₹ crore)

Quantity in that The amount in Colors								
Sl.	Name of lessee (with previous lease	District	Permitted	Extracted	Excess	Amour	ıt	Total
No.	number and lease period)		quantity quantity ex		extraction	recoverable		
	* ′			1 3		Royalty	Price	
1	Shri Denny Joseph;					Royalty	11100	
1	72/2015-16/2014/M3/2015 (10 years)		0.60	3.47	2.87	0.69	1.38	2.07
2	Shri T. R. Raviprasad;	Idukki	0.45	0.68	0.56	0.13	0.27	0.40
	484/2011-12/5772/M3/2011 (9 years)							
3	Shri K. C. George;		1.80	0.62	0.47	0.15	0.30	0.45
	121/2010-11/1477/M3/2010 (10 years)		1.00	0.02	0.17	0.13	0.50	0.15
4	Cochin Blue Metals Pvt. Ltd.;							
	45/2009-10/2558/M3/2009 (10 years);	Kottayam	5.15	8.90	3.90	0.94	1.87	2.81
	278/2014-15/6638/M3/2014 (5 years)							
5	Poabs Enterprises Pvt. Ltd.;							
	663/2010-2-11/9943/M3/2010 (6 years);	Kollam	4.50	6.63	2.13	0.51	1.02	1.53
	928/2011-12/685/M3/2012 (5 years)							
6	Shri K. M. Mohammed Nazeer;		1.60	4.04	2.16	0.76	1.50	2.20
	694/2005-06/1713/M3/2006 (12 years)		1.68	4.84	3.16	0.76	1.52	2.28
7	Malabar Construction Materials Pvt.	17						
	Ltd.;	Kannur	0.22	4.29	4.05	0.07	1.04	2.01
	13/2002-2003/311/M3/2002 (12 years);		0.33	4.38	4.05	0.97	1.94	2.91
	470/2006-07/7713/M3/2006 (8 years)							
					Total	4.15	8.30	12.45

(Source: Compiled from DMG records)

Appendix 28 Non-recovery of royalty, price, and fine (Referred to in Paragraph 2.7.8.9)

Sl. No.	Name of the District	Demand notice No.	Quantity	Type of	Royalty and
		and date	extracted (in MT)	Mineral	Price (₹)
1	HQ/ Idukki	DOI/1211/M/2016 dated 05/06/2017	21,650.00	GBS	15,58,800
2	HQ/ Wayanad	DOW/M-108/2016	934.00	OE	56,040
3	HQ/ Alappuzha	dated 27/12/2016 DOA/2864/MM/15	6,416.00	OE	3,84,960
4	HQ/ Wayanad	dated 05/12/2016 DOW/M-957/15 dated	832.00	OE	49,920
5	HQ/ Kozhikode	16/06/2017 DOZ/M-87/15 dated	8,092.00	OE	4,85,520
6	Idukki	19/01/2017 DOI/1333/M/14 dated	45,337.50	GBS	32,64,300
7	Idukki	25/02/2016 DOI/1211/M/2016	21,650.00	GBS	15,58,800
8	Idukki	dated 25/03/2017 DOI/178/M/13 dated 05/12/2016	24,440.00	GBS	17,59,680
9	Idukki	DOI/993/M/2020 dated 15/05/2021	6,28,223.33	GBS	4,52,32,080
10	Idukki	DOI/1274/M/2009 dated 19/02/2021	10,83,430.70	GBS	7,80,07,010
11	Idukki	DOI/404/M/16 dated 24/12/2018	2,10,490.00	GBS	1,51,55,280
12	Thiruvananthapuram	592/DOT/EM/2016 dated 31/10/2017	716 .00	OE	42,960
13	Thiruvananthapuram	1832/DOT/ML/2015 dated 11/12/2015	2,338.00	GBS	1,68,336
14	Thiruvananthapuram	2155/DOT/EM/2015 dated 02/05/2017	1,57,500.00	OE	31,50,000
15	Kollam	DOQ/S2/1485/2016 dated 30/12/2016	6,300.00	GBS	4,53,600
16	Kollam	1362/DOQ/S2/2016 dated 01/02/2019	7,617.00	OE	4,57,020
17	Kollam	1319/DOQ/S2/2017 dated 16/11/2017	500.00	LBS	36,000
18	Kollam	99/DOQ/S2/2017 dated 28/03/2017	3,120.00	OE	1,87,200
19	Kollam	DOQ/S2/1485/2016 dated 30/12/2016	1,035.00	GBS	74,520
20	Kollam	502/DOQ/S2/2018 dated 10/11/2020	2,376.00	OE	1,42,560
21	Kollam	1435/DOQ/S2/2016 dated 07/11/2017	2,210.00	OE	1,32,600

Sl. No.	Name of the District	Demand notice No. and date	Quantity extracted	Type of Mineral	Royalty and Price (₹)
			(in MT)		
22	Kollam	1435//DOQ/S2/2016	2,376.00	OE	1,42,560
		dated 07/11/2017			
23	Kollam	781/DOQ/S2/2017	24,192.00	OE	14,51,520
		dated 29/05/2017			
24	Kollam	969/DOQ/S2/2017	8,000.00	OE	4,80,000
		dated 15/02/2018			
25	Kollam	1846/DOQ/S2/2016	960.00	GBS	69,120
		dated 13/09/2017			
26	Kollam	Form – II dated	7,460.00	GBS	5,37,120
		09/04/2018			
		Total			15,50,37,506

(Source: DMG records)

OE = Ordinary Earth GBS = Granite Building Stone.

Appendix 29

Quantity of illegal extraction for which penalty of ₹25,000 each was imposed (Referred to in Paragraph 2.7.10)

Sl. No.	Name of offender (Shri/	District/ Office	Demand Notice No. (and date)	Quantity (MT)
	Smt.)			
1	Thankamony Nair		DOE/1258/E1/16 (01-11-2016)	481
2	Santhosh Paul		DOE/1042/E1/16 (22-10-2016)	1,000
3	Hajara	Ernakulam	DOE/2635/16 (date not available)	3,864
4	Abdul Rahim	Emakulam	DOE/2971/E1/16 (08-02-2017)	2,893
5	Shiju and Cicily		DOE/493/E1/17 (06-06-2017)	43,175
6	K. A. Paulose		DOE/1132/E2/16 (25-05-2017)	1,84,040
7	Thomas		528/DOY/ML/2017 (24-07-2017)	2,424
8	Vysakh R. and	Kottayam	1713/DOY/EM/2017	1,69,066
	Beena R.		(11-10-2017)	
9	Aniyan Mathew	Mineral Squad	206/KMS(CR)/2016 (30-11-2016)	3,31,451
		(Central		
		Region)		

(Source: DMG records)

Appendix 30
Non-recovery of market rate for unlawful extraction and disposal of minor minerals
(Referred to in Paragraph 2.7.10)

				1				
SI. No.	District	Name	Demand Notice No. and date	Qty. (MT)	Price recovered by DMG @ ₹48/MT	Market Rate (₹ per MT)	Price at Market Rate (₹)	Difference (₹)
1	Idukki	Shri Chacko Mathew	300/18- 19/DOI/404/M/16 dtd.24.12.2018	84,196.00	40,41,408	644.00	5,42,22,224	5,01,80,816
2	Idukki	Greenworth Infrastructures Pvt. Ltd.	DOI/993/M/2020 dtd.12.07.2021	6,28,223.33	3,01,54,720	580.79	36,48,65,827	33,47,11,108
3	Idukki	Shri A.A.Jafer, Anakettiparambil	DOI/1211/M/2016 dtd.25.03.2017	21,650.00	10,39,200	512.44	1,10,94,326	1,00,55,126
4	Idukki	Shri Riyas K Seethi,	101/18- 19/DOI/1333/M/14 dtd.21.05.2018	45,337.50	21,76,200	644.00	2,91,97,350	2,70,21,150
5	Kollam	L Saiju, Akkavila Sajinan.	3435/DOQ/S2/2017 dt.03.01.2022	7,567.50	3,63,240	580.79	43,95,128	40,31,888
9	Kollam	Krishnamoorthi	554/DOQ/S2/2017 dt.03.09.2021	1,35,515.00	65,04,720	580.79	7,87,05,756	7,22,01,037
7	Kollam	Joseph Jacob, Poabs.	2804/DOQ/S2/17 dt.17.03.2022	18,223.00	8,74,704	580.79	1,05,83,736	97,09,032
∞	Kollam	VI Kuriachan, EG Granites,	3403/DOQ/S2/2008 dt.05.07.2017	6,07,140.00	2,91,42,720	512.44	31,11,22,821	28,19,80,102
6	Kollam	Tesna Mines	2879/DOQ/S2/2018 dt.16.08.2021	23,810.00	11,42,880	580.79	1,38,28,609	1,26,85,730

SI. No.	District	Name	Demand Notice No. and date	Qty. (MT)	Price recovered by DMG @ ₹48/MT	Market Rate (₹ per MT)	Price at Market Rate (₹)	Difference (₹)
10	Kollam	Tesna Mines	2879/DOQ/S2/2018 Dt.15.11.2021	17,357.50	8,33,160	580.79	1,00,81,062	92,47,902
11	Thiruvananthapuram	S Biju,	791/DOT/ML/2017 dtd.29.11.2019	1,06,600.00	51,16,800	638.17	6,80,28,922	6,29,12,122
12	Thiruvananthapuram	Ushadevi P,	4033/DOT/ML/2015 dtd.15.09.2020	4,53,900.00	2,17,87,200	625.52	28,39,23,528	26,21,36,328
13	Thiruvananthapuram	Binu Thomas	4033/DOT/ML/2015 dtd.15.09.2020	73,500.00	35,28,000	625.52	4,59,75,720	4,24,47,720
14	Thiruvananthapuram	Krishnamoorthy	4033/DOT/ML/2015 dtd.15.09.2020	67,950.00	32,61,600	625.52	4,25,04,084	3,92,42,484
15	Thiruvananthapuram	Krishnamurthi, Ushadevi & Binu Thomas	4033/DOT/ML/2015 dtd.15.09.2020	3,60,825.00	1,73,19,600	625.52	22,57,03,254	20,83,83,654
16	Thiruvananthapuram	Krishnamurthi,	4033/DOT/ML/2015 dtd.06.05.2020	30,100.00	14,44,800	625.52	1,88,28,152	1,73,83,352
17	Thiruvananthapuram	Somasekharan Nair,	1063/DOT/ML/2021 dtd.25.03.2021	45,231.53	21,71,113	625.52	2,82,93,227	2,61,22,114
18	Thiruvananthapuram	Vijayamohanan,	1433/DOT/ML/2019 dtd.16.02.2022	1,29,367.25	62,09,628	580.79	7,51,35,205	6,89,25,577

SI. No.	District	Name	Demand Notice No. and date	Qty. (MT)	Price recovered by DMG @ ₹48/MT	Market Price Rate (₹ Market per MT) (₹)	Price at Market Rate (₹)	Difference (₹)
19	19 Thiruvananthapuram	Lijo Mathew, Delta M Sand Pvt Ltd.	350/DOT/ML/2020 dtd.14.02.2020	2,39,721.30	2,39,721.30 1,15,06,622	638.17	15,29,82,942	15,29,82,942 14,14,76,320
20	20 Thiruvananthapuram	Delta MSand Pvt. Ltd.	173/DOT/ML/2021 dtd.21.06.2021	81,700.00	39,21,600	580.79	4,74,50,543	4,35,28,943
		Total			15,25,39,914		187,69,22,416	187,69,22,416 172,43,82,505

(Source: DMG records)

Appendix 31 Location co-ordinates of sites where suspected illegal quarrying in adjacent lands was noticed

(Referred to in Paragraph 2.7.13.2)

G1	Latitude and	Remarks	District
Sl.	longitude co-		
No.	ordinates		
4	9°45'27.40"N and	Close proximity to quarry with	Kottayam
1	76°36'52.81"E	KOMPAS ID KOT/Q/2022/150	·
2	9°45'26.02"N and		
2	76°36'56.53"E		
2	9°45'23.54"N and		
3	76°36'54.31"E		
4	9°42'08.64"N and	Close proximity to quarry with	
4	76°34'00.45"E	KOMPAS ID KOT/Q/2015/36	
_	9°42'00.13"N and		
5	76°33'54.16"E		
	9°41'55.25"N and		
6	76°33'50.02"E		
_	9.36.50.10"N and	No proximity to an existing quarry	
7	76.49.18.59"E	1	
_	9.44.59.00"N and		
8	76.44.56.25"E		
	8°48'07.74"N and	No proximity to an existing quarry	Kollam
9	76°56'13.15"E	The proximity to an existing quarry	Tronum
	8°48'03.82"N and		
10	76°56'20.30"E		
	8°48'04.53"N and		
11	76°56'34.22"E		
	8°48'06.86"N and		
12	76°56'44.63"E		
	8°47'49.40"N and		
13	76°57'05.18"E		
	8°47'43.28"N and		
14	76°56'49.38"E		
	8°47'36.41"N and		
15	76°57'06.58"E		
	8°47'24.33"N and		
16	76°57'02.46''E		
	8°48'21.49"N and		
17	76°55'53.06"E		
	8°46'41.28"N and		
18	76°59'36.49"E		
	8°58'02.77"N and		
19	76°58'33.91"E		
	8°58'01.70"N and		
20	76°58'52.47"E		
	8°57'40.93"N and		
21	76°59'05.01"E		
	8°58'08.28"N and		
22	76°58'11.62"E		
	9°02'09.72"N and		
23	76°54'54.82"E		
	70 34 34.82 E		

GI.	Latitude and	Remarks	District
Sl.	longitude co-		
No.	ordinates		
24	9°02'29.07"N and		
24	76°47'38.52"E		
25	8°47'55.44"N and		
23	76°57'49.18"E		
26	9°02'36.66"N and		
20	76°47'37.12"E		
27	9°02'38.74"N and		
21	76°47'32.69"E		
28	9°02'35.09"N and		
	76°47'30.31"E		
29	9°02'40.04"N and		
	76°47'08.60"E		
30	9°02'34.64"N and		
	76°47'04.45"E		
31	9°04'07.79"N and		
	76°46'54.01"E		
32	9°05'53.25"N and		
	76°46'01.99"E		
33	9°05'41.39"N and		
	76°46'00.72"E		
34	8°53'21.40"N and	Close proximity to quarry with	
	76°46'46.75"E	KOMPAS ID KOL/Q/2018/258	
35	8°53'13.13"N and		
	76°46'52.62"E 8°53'44.58"N and		
36			
	76°46'33.97"E 8°47'28.56"N and	Close proximity to quarry with	
37	76°59'25.10"E	KOMPAS ID KOL/Q/2019/278	
	8°36'03.02"N and	No proximity to an existing quarry	Thiruvananthapuram
38	76°54'06.03"E	140 proximity to an existing quarry	
		Close proximity to quarries with	
39	8°27'39.79"N and	KOMPAS IDTHI/Q/2015/80,	
37	77°01'27.22"E	THI/C/2017/44, THI/D/2017/46	
		Close proximity to quarries with	
40	8°28'06.71"N and	KOMPAS ID THI/Q/2015/83,	
	77°01'25.41"E	THI/C/2017/23, THI/D/2017/45	
4.4	8°27'59.74"N and	Close proximity to quarry with	
41	77°01'16.88"E	KOMPAS ID THI/Q/2015/84	
40	8°28'18.35"N and	Close proximity to quarry with	
42	77°01'19.28"E	KOMPAS ID THI/Q/2015/83	
12	8°28'19.51"N and		
43	77°01'13.86"E		
44	8°28'23.77"N and		
44	77°01'18.22"E		
45	8°28'27.50"N and		
43	77°01'09.69"E		
46	8°30'30.36"N and	Close proximity to quarry with	
+0	77°02'53.17"E	KOMPAS ID THI/Q/2018/213	
47	8°37'56.93"N and	Close proximity to quarry with	
7/	76°51'06.37"E	KOMPAS ID THI/Q/2021/292	
48	11°37'58.46"N and	In close proximity to quarry of	Wayanad
10	76°02'08.02"E	MMT Construction	

Sl.	Latitude and	Remarks	District
No.	longitude co-		
	ordinates		
49	11°37'57.62"N and		
	76°02'09.81"E 11°37'59.67"N and	-	
50	76°02'05.70"E		
	11°37'51.00"N and	1	
51	76°02'09.64"E		
50	11°35'25.36" N and	Proximity to quarry measuring	
52	76°02'18.18" E	4069 square metre	
53	11°35'52.43"N and	Proximity to an existing quarry	
- 55	76°02'32.50"E		
54	11°37'05.94"N and	Proximity to an existing quarry	
	76°02'21.03"E	NT	
55	11°37'13.89"N and 76°02'26.91"E	No proximity to an existing quarry	
	11°38'11.76"N and	Proximity to an existing quarry	
56	76°12'31.64"E	Troximity to an existing quarry	
	11°38'20.18"N and	No proximity to an existing quarry	
57	76°11'56.22"E		
58	11°37'12.04"N and	No proximity to an existing quarry	
36	76°02'13.52"E		
		Proximity to quarries with	Idukki
59	9°53'03.32"N and	KOMPAS ID IDU/D/2017/8,	
	76°44'59.92"E	IDU/C/2018/65, IDU/C/2017/35 and IDU/D/2018/39	
	9°54'19.52"N and	No proximity to an existing quarry	
60	76°38'30.54"E	Two proximity to an existing quarry	
<i>c</i> 1	9°55'04.94"N and	No proximity to an existing quarry	
61	76°37'50.11"E		
62	9°54'02.03"N and	Proximity to an existing quarry	
	76°35'50.20"E		
63	9°51'03.96"N and	Proximity to an existing quarry	
	76°39'14.83"E	Proximity to quarries with	
64	9°56'47.71"N and	KOMPAS ID IDU/D/2017/3 and	
01	76°56'12.63"E	IDU/C/2017/32	
<i>CE</i>	9°56'41.67"N and	No proximity to an existing quarry	
65	76°56'23.13"E	,	
	9°53'18.06"N and	Proximity to quarries with	
66	77°12'58.17"E	KOMPAS ID IDU/C/2016/25 and	
		IDU/D/2018/61	V
67	11°46'48.02"N and 75°37'27.76"E	Proximity to quarry with KOMPAS ID KAN/Q/2017/164	Kannur
	11°46'57.79"N and	ID KAN Q 2017/104	
68	75°37'25.27"E		
60	11°47'04.11"N and		
69	75°37'35.68"E		
70	11°47'14.01"N and	Proximity to KAN/Q/2016/86	
- 7 3	75°37'50.22"E		
71	11°47'23.67"N and		
	75°38'03.12"E 11°47'19.35"N and	-	
72	75°38'06.92"E		
	75 50 00.92 E		

Sl.	Latitude and	Remarks	District
No.	longitude co-		
110.	ordinates		
73	11°47'49.23"N and	Proximity to quarries with	
	75°38'19.34"E 11°47'56.78"N and	KOMPAS ID KAN/C/2017/113, KAN/D/2015/4, KAN/C/2018/125,	
74	75°38'08.41"E	KAN/D/2013/4, KAN/C/2016/123, KAN/D/2017/97,	
7.5	11°47'58.87"N and	KAN/D/2015/27and KAN/D	
75	75°38'18.24"E	/2015/19,	
76	11°48'18.04"N and		
70	75°38'07.91"E		
77	11°50'01.05"N and	Proximity to quarry	
	75°37'52.91"E	KAN/Q/2016/61	
78	11°51'29.50"N and	Proximity to quarries with KOMPAS ID KAN/Q /2016/111	
/8	75°36'55.91"E	and KAN/Q/2016/111	
	11°52'43.38"N and	No proximity to an existing quarry	
79	75°35'26.35"E	Two prominity to an emissing quarry	
80	11°56'03.05"N and	Proximity to quarry	
80	75°31'23.56"E	KAN/D/2019/237	
81	11°56'15.30"N and	Proximity to quarry	
	75°31'31.74"E	KAN/C/2018/126	
0.2	11°56'20.76"N and	Proximity to quarries	
82	75°31'35.46"E	KAN/C/2018/126 and KAN/C/2018/123	
	11°56'30.76"N and	Proximity to quarry	
83	75°31'12.28"E	KAN/Q/2018/205	
0.4	12°04'29.39"N and	No proximity to an existing quarry	
84	75°28'56.69"E		
85	12°03'31.71"N and	Proximity to quarry	
6.5	75°28'33.46"E	KAN/Q/2018/177	
86	12°03'56.55"N and	Proximity to quarry	
	75°26'26.76"E	KAN/Q/2018/209	
87	12°06'25.31"N and 75°26'11.90"E	Proximity to quarry KAN/Q/2018/195	
		Proximity to quarries	
88	12°03'20.84"N and	KAN/Q/2016/63, KAN/Q/2016/37	
00	75°37'46.25"E	and KAN/Q/2016/66.	
90	12°03'24.95"N and	Proximity to quarry	
89	75°28'31.76"E	KAN/Q/2018/177	

(Source: KOMPAS data and Google Earth Pro imagery)

Appendix 32 Illegal mining outside permitted quarrying area (Referred to in Paragraph 2.7.13.3)

Sl.			Permitted area of mining as		utside permitted rea
No.	KOMPAS ID	District	per KOMPAS (square metre)	(square metre)	(percentage in excess of permitted area)
1	KOT/Q/2015/2		34780	31708	91.17
2	KOT/Q/2022/150		9151	1721.23	18.81
3	KOT/Q/2015/1	Kottayam	55665	137164	246.41
4	KOT/Q/2017/99	Kottayani	16931	147859	873.30
5	KOT/Q/2015/36; KOT/Q/2018/120		4024	4486.88	111.50
6	PAT/Q/2018/138	Pathanamthitta	14957	5420	36.24
7	KOL/Q/2018/255		40860	8929	21.85
8	KOL/Q/2018/258	77 11	38298	75202	196.36
9	KOL/Q/2020/284	Kollam	158997	39178	24.64
10	KOL/Q/2019/278	Idukki	22652	47283.96	208.74
11	IDU/Q/2015/2		85614.06	107620.54	125.70
12	IDU/Q/2019/67	7.1.11.	46418.10	18514.82	39.89
13	IDU/Q/2021/70; IDU/Q/2018/59	Idukki	33691.87	77190.70	229.11
14	IDU/Q/2015/36		6252.10	26720.78	427.39
15	THI/Q/2015/80		22627.61	57630.62	254.69
16	THI/Q/2015/26		8813.49	73712.57	836.36
17	THI/Q/2018/213	Thiruvananthapuram	10630.18	33324.58	313.49
18	THI/Q/2018/189		61602	7219	11.72
19	KAN/Q/2017/164		31870.43	41680.23	130.78
20	KAN/Q/2015/10		7600.60	38609.66	507.98
21	KAN/Q/2015/9; KAN/Q/2020/309	***	21535.8	1234057.06	5730.26
22	KAN/Q/2019/273	Kannur	7764	39456	508.19
23	KAN/Q/2017/170		13636	33694	247.10
24	KAN/Q/2018/248; KAN/Q/2017/168		44389	145641	328.10
25	KAN/Q/2017/174		14915	68612	460.02
26	WAY/Q/2015/9		9109	35042	384.70
27	WAY/Q/2016/52	W/ 1	2915	18359	629.81
28	WAY/Q/2015/3	Wayanad	4069.91	8764.61	215.35
29	WAY/Q/2018/72		26984	4722	17.50

(Source: KOMPAS data and Google Earth Pro imagery)

Appendix 33 Suspected cases of mining in buffer zone (Referred to in Paragraph 2.7.13.4)

Sl. No.	KOMPAS ID	District	Remarks
1	KOT/Q/2015/2		Extraction in area between boundary pillars 4 to 7, 9 to 14, 15 to 16, and 17
	7		to 18. Quantity extracted was assessed at 50575 MT.
2	KOT/Q/2022/150	_	Illegal mining noticed outside boundary pillars 11 to 13
3	KOT/Q/2015/1	Kottayam	Illegal mining noticed outside boundary pillars 1 to 3, 9 to 13, and 13 to 15.
		-	Revenue Department reported extraction of 1.56 lakh MT outside lease area.
4	KOT/Q/20177/99	_	Illegal mining noticed outside boundary pillars 1 to 4, 4 to 6, and 6 to 9.
5	KOT/Q/2015/36; KOT/Q/2018/120		Illegal mining noticed outside boundary pillars 1 to 4
6	PAT/Q/2018/138	Pathanamthitta	Illegal mining noticed in area outside boundary pillars 5, 6, 7, 8 and 9.
7	WAY/Q/2018/72		Illegal mining between boundary pillars 1 to 6, and 9 to 14
8	WAY/Q/2017/65		Safety zone not maintained at boundary pillars numbered 2 to 3, 4 to 5, and 5 to 1.
9	WAY/Q/2015/3	Wayanad	Safety zone not maintained around any boundary pillar (1 to 4).
10	WAY/Q/2016/52	w ayanau	Boundary pillars not marked in KOMPAS. Extraction from excess area than that allotted.
11	WAY/Q/2015/9	1	Boundary pillars not marked in KOMPAS. Extraction from excess area than that allotted.
12	KOL/Q/2018/255		Illegal mining noticed outside boundary pillars 7 to 9
13	KOL/Q/2018/258	1	Illegal mining noticed outside boundary pillars 24 to 26, 26 to 4, 16 to 18, and 8 to 16
14	KOL/Q/2020/284	Kollam	Illegal mining noticed outside boundary pillars 22 to 2, and 3 to 5
15	KOL/Q/2019/278	This	Illegal mining noticed outside boundary pillars 1 to 11, 11 to 18, and east side
16	KOL/Q/2019/261		Illegal mining noticed outside boundary pillars 3 to 6, 39 to 60, and 31 to 36
17	THI/Q/2018/189		Illegal mining noticed outside boundary pillars 15 to 17, and 27 to 30.
18	THI/Q/2015/58		Illegal mining noticed outside boundary pillars 22 to 27, 4 to 13, 13 to 11, 19 to 22, and 33 to 34.
19	THI/Q/2015/80	Thiruvananthapuram	Safety zone not maintained around boundary pillars 1 to 17, 21 to 23, and 23 to 1.
20	THI/Q/2015/26		Safety zone not maintained around any boundary pillar (1 to 6).
21	THI/Q/2018/213		Safety zone not maintained around any boundary pillar (numbered 1 to 9).
22	IDU/Q/2015/2		Safety zone not maintained around any boundary pillar (1 to 24).
23	IDU/Q/2019/67		Safety zone not maintained at boundary pillars 5 to 11, 15 to 18, and 21 to 1, and 1 to 5.
24	IDU/Q/2018/59; IDU/Q/2021/70	Idukki	Safety zone not maintained at boundary pillars 1 to 3, 5 to 6, and 6 to 1 of IDU/Q/2018/59. Also, safety zone not maintained around adjacent quarry number IDU/Q/2021/70.
25	IDU/Q/2015/36	1	Safety zone not maintained around any boundary pillar (1 to 7).
26	KAN/Q/2017/164		Safety zone not maintained around boundary pillars 1 to 6, 9 to 13, and 13 to 1.
27	KAN/Q/2015/10		Safety zone not maintained around any boundary pillar (1 to 7).
28	KAN/Q/2019/273		Safety zone not maintained around all boundary pillars (1 to 5, and 7 to 8).
29	KAN/Q/2017/170	Kannur	Safety zone not maintained around boundary pillars 2 to 4, 7 to 8, and 8 to 1.
	VAN/0/2019/249.		Safety zone not maintained around boundary pillars 1 to 14, 27 to 32, and
30	KAN/Q/2018/248; KAN/Q/2017/168		32 to 1 of KAN/Q/2018/248. Also, buffer zone not maintained around
	-		boundary pillars 6 to 18, and 24 to 25 of KAN/Q/2017/168.
31	KAN/Q/2017/174		Buffer zone not maintained around any boundary pillar (1 to 14).

(Source: DMG records and satellite imagery)

Appendix 34 Quarrying without bench cutting (Referred to in Paragraph 2.7.13.5)

Sl. No.	KOMPAS ID	District					
1	KOT/Q/2015/2						
2	KOT/Q/2022/150						
3	KOT/Q/2015/1	- Kottayam					
4	KOT/Q/20177/99	Kottayani					
	KOT/Q/2015/36;	-					
5	KOT/Q/2018/120						
6	THI/Q/2018/189						
7	THI/Q/2015/58						
8	THI/Q/2015/80	Thiruvananthapuram					
9	THI/Q/2015/26						
10	THI/Q/2018/213						
11	PAT/Q/2018/138	Pathanamthitta					
12	WAY/Q/2018/72						
13	WAY/Q/2015/3						
14	WAY/Q/2015/9	Wayanad					
15	WAY/Q/2016/52						
16	WAY/Q/2017/65						
17	KOL/Q/2018/255	_					
18	KOL/Q/2018/258	Kollam					
19	KOL/Q/2020/284	Kollam					
20	KOL/Q/2019/278	Kollam					
21	KOL/Q/2019/261						
22	IDU/Q/2015/2						
23	IDU/Q/2019/67						
24	IDU/Q/2018/59; IDU/Q/2021/70	Idukki					
25	IDU/Q/2015/36						
26	KAN/Q/2015/10						
27	KAN/Q/2015/9; KAN/Q/2020/309						
28	KAN/Q/2019/273	W.					
29	KAN/Q/2017/170	Kannur					
30	KAN/Q/2018/248; KAN/Q/2017/168						
31	KAN/Q/2017/174						
32	KAN/Q/2017/164						

(Source: KOMPAS data and Google Earth Pro imagery)

Appendix 35

Extra Expenditure due to arbitrary purchase of raw material (Referred to in Paragraph 3.1.13)

		()	(critic admission rain or mainfair)	Les contracts				
Year	Supplier	Quantity (Kg)	Total value of purchase	Quantity discount received	Net Value	Cost per Kg (₹)	Cost in excess of the least rate during the	Extra Cost (₹ in crore)
				(₹ in crore)			year (₹)	
(1)	(2)	(3)	(4)	(5)	(6) = (4) - (5)	(7)	(8)	(9) = (3) x (8)
2017-18	Bharat Aluminium Company Ltd – Raipur	8,36,354	14.34	0.45	13.89	166.06	15.26	1.28
2017-18	Hindalco Industries Ltd. (Kochi)	80,128	1.25	0	1.25	156.18	5.38	0.04
2017-18	National Aluminium Company Ltd.	20,39,446	32.08	1.13	30.95	151.74	0.95	0.19
2017-18	Vedanta Aluminium Ltd.	5,76,804	9.00	0.30	8.70	150.79	0	
2018-19	Bharat Aluminium Company Ltd – Raipur	41,91,741	70.28	1.61	68.67	163.82	3.58	1.50
2018-19	National Aluminium Company Ltd.	9,20,533	15.43	0.46	14.97	162.61	2.37	0.22
2018-19	Vedanta Aluminium Ltd.	61,431	66.0	0.01	0.98	160.24	0	
2019-20	Bharat Aluminium Company Ltd - Raipur	4,23,207	6.53	0.18	6.35	150.10	8.65	0.37
2019-20	Hindalco Industries Ltd. Bangalore	22,94,062	34.87	0.87	34.00	148.21	92.9	1.55
2019-20	National Aluminium Company Ltd.	15,06,351	22.15	0.84	21.31	141.45	0	
2019-20	Vedanta Aluminium Ltd.	11,43,317	17.21	0.87	16.34	142.93	1.48	0.17
2020-21	Hindalco Industries Ltd. Bangalore	25,40,272	42.49	1.52	40.97	161.27	3.51	0.89
2020-21	National Aluminium Company Ltd.	21,97,527	35.81	0.91	34.90	158.80	1.04	0.23
2020-21	Vedanta Aluminium Ltd.	21,77,163	35.04	0.69	34.35	157.76	0	
	Total	2,09,88,336						6.44

Appendix 36 Unproductive wages due to shortage of working capital (Referred to in Paragraph 3.1.14.1)

			Iru	mpanam Unit	·		
Year	Availa ble labour days per annum	No. of Factory employees	Total labour hours paid @ 8 Hrs per day	Actual Productive labour hours utilized	Un-utilised labour hours paid	Labour cost per hour (₹)	Value of un- utilised labour (₹)
(1)	(2)	(3)	(4)	(5)	(6) = (4) - (5)	(7)	$(8) = (6) \times (7)$
2017-18	293	124	2,90,656	1,84,780	1,05,876	126.60	1,34,04,335
2018-19	293	124	2,90,656	2,47,712	42,944	159.48	68,48,543
2019-20	293	113	2,64,872	2,22,968	41,904	193.18	80,95,123
2020-21	293	111	2,60,184	2,15,224	44,960	157.88	70,98,233
2021-22	293	101	2,36,744	95,168	1,41,576	202.33	2,86,44,497
Total			13,43,112	9,65,852	3,77,260		6,40,90,731
			Th	iruvalla Unit			
2017-18	293	141	3,30,504	1,64,952	1,65,552	157.18	2,60,21,463
2018-19	293	137	3,21,128	1,91,104	1,30,024	169.56	2,20,46,390
2019-20	293	125	2,93,000	1,58,896	1,34,104	161.59	2,16,69,238
2020-21	293	114	2,67,216	1,42,560	1,24,656	212.94	2,65,44,070
2021-22	293	106	2,48,464	1,04,080	1,44,384	210.60	3,04,07,862
Total			14,60,312	7,61,592	6,98,720		12,66,89,023
	Grand To	tal	28,03,424	17,27,444	10,75,980		19,07,79,754

Appendix 37 Loss due to labour inefficiency (Referred to in Paragraph 3.1.14.2)

Year	Productive labour hours	Other	ACSR	Total producti on	Production per labour hour	Best output per hour	Hours required for production as per best output	Unproduct ive labour hours	Average labour rate per hour	Value of unproductive / idle labour hours (₹)	Percentage of unproduct ive hours on total productive
				(Km)							hours
(1)	(2)	(3)	(4)	(5) = (3)+(4)	(9)	(7)	(8) = (5) / (7)	(9)=(2)-(8)	(10)	$(11) = (9) \times (10)$	(12)
Irumpanam unit	n unit										
2017-18	1,84,780	35,979	15,011	50,990	0.275949	0.2759	1,84,813	0	126.60	0	0
2018-19	2,47,712	29,995	23,207	53,202	0.214774	0.2759	1,92,831	54,881	159.48	87,52,422	22.16
2019-20	2,22,968	9,291	20,186	29,477	0.132204	0.2759	1,06,841	1,16,128	193.18	2,24,33,414	52.08
2020-21	2,15,224	8,113	29,338	37,451	0.174009	0.2759	1,35,741	79,483	157.88	1,25,48,776	36.93
2021-22	95,168			7,961	0.083652	0.2759	28,855	66,313	202.33	1,34,17,109	89.68
Thiruvalla unit	unit										
2017-18	1,64,952	123	7,943	8,066	0.048900	0.2759	29,236	1,35,717	157.18	2,13,31,841	82.28
2018-19	1,91,104	585	12,647	13,232	0.069243	0.2759	47,961	1,43,143	169.56	2,42,71,327	74.90
2019-20	1,58,896	159	13,182	13,341	0.083961	0.2759	48,354	1,10,542	161.59	1,78,62,482	69.57
2020-21	1,42,560	336	17,133	17,469	0.122535	0.2759	63,315	79,245	212.94	1,68,74,430	55.59
2021-22	1,04,080			6,584	0.063259	0.2759	23,864	80,216	210.60	1,68,93,490	77.07
TOTAL	17,27,444			2,37,773			8,61,811	8,65,668		15,43,85,291	

Appendix 38 Loss due to sale without upward price revision clause (Referred to in Paragraph 3.1.15.2)

Month	Supplied Qty (km)	Rate claimed after applying price variation formula	Agreed Rate (₹)	Loss per km (₹)	Total Loss (₹)
March 2021	2,723.04	36,116.40	35,772	344.40	9,37,817
April 2021	1,389.14	37,348.24	35,772	1,576.24	21,89,621
May 2021	1,448.05	38,288.94	35,772	2,516.94	36,44,666
June 2021	1,100.87	38,900.14	35,772	3,128.14	34,43,667
Total	6,661.10				1,02,15,771

Appendix 39 Chronology of important events relating to Master Trust (Referred to in Paragraph 3.5)

Period	Event	Particulars
June 2003	Electricity Act, 2003	Section 131 - Reorganisation of Board
September 2008	Kerala Electricity First Transfer Scheme, 2008	All the functions, properties and all interests, rights in properties, all rights and liabilities of the erstwhile Kerala State Electricity Board (KSEB) were vested in the State Government
October 2013/ January 2015	Kerala Electricity Second Transfer Scheme (Re-vesting)	All the functions, properties and all interests, rights in properties, all rights and liabilities of the KSEB vested in the State Government were re-vested to the Company Kerala State Electricity Board Limited (KSEBL)
31 October 2013	Actuarial Valuation	Value of unfunded liability of KSEB against terminal benefits: ₹12,419 crore
February 2015	Formation of Kerala State Electricity Board Limited Employees Master Pension cum Gratuity Trust	To manage the funds and to disburse the terminal benefits, pension <i>etc.</i> , thus protecting the interest of the existing pensioners and the personnel transferred to the Company
February 2015	Contribution of State Government through KSEBL	₹1,522.53 crore by way of retention of Electricity Duty from 01/04/2008 to 31/03/2012 by KSEBL
2012-13 to 2017-18	Contribution of State Government through KSEBL	₹4,373.14 crore Out of this, only ₹1,522.53 crore was transferred to the Master Trust by KSEBL and ₹2,850.61 crore was not transferred to Master Trust.
	Contribution of KSEBL	₹3,782.62 crore
01April 2017	Two Bonds were issued by KSEBL	1) 20 year Bond with coupon rate of 10 per cent per annum : ₹8,144 crore 2) 10 year Bond with coupon rate of 9 per cent per annum : ₹3,751 crore
2018-19 to 2021-22	Contribution of State Government through KSEBL	₹2,554.00 crore
	Contribution of KSEBL	₹4,496.66 crore
March 2022	Actuarial Valuation	Liability of KSEBL towards terminal benefits - ₹35,824.13 crore

Appendix 40(a) Funding pattern of unfunded liability by Government of Kerala and KSEBL (Referred to in Paragraph 3.5)

Funded by	Particulars	Amount (₹ in crore)
Company (Bonds issued	Twenty-year bond with a coupon rate of 10 <i>per cent</i> per annum	8,144
to the Master Trust)	Ten-year bond with a coupon rate of 9 <i>per cent</i> per annum	3,751
GoK	Through budgetary provision over a period of ten years	524
	Total	12,419

Appendix 40(b) Contribution of Government of Kerala towards Master Trust through KSEBL (Referred to in Paragraph 3.5)

Sl.	Period	Particulars Particulars	Amount
No.			(₹ in crore)
1	2012-13	Budgetary support towards terminal liability	52.40
2	2013-14	Budgetary support towards terminal liability and	296.61
		Instalment of principal and interest on bond	
3	2014-15	Budgetary support towards terminal liability and	638.50
		Instalment of principal and interest on bond	
4	2015-16	Budgetary support towards terminal liability and	638.50
		Instalment of principal and interest on bond	
5	2016-17	Budgetary support towards terminal liability and	638.50
		Instalment of principal and interest on bond	
6	2017-18	Instalment of principal and interest on bond	586.10
		Total	2,850.61

Appendix 41 Liability for payment of additional interest due to belated transfer of funds for redemption of Bonds (Referred to in Paragraph 3.5)

(₹ in crore)

Year	Instalment amount payable on 1 st April of the year	Total amount actually paid on various dates in the year	Penal interest at the rate of 24 per cent per annum from the due dates to the actual date of payment
2018-19	1,807.70	1,378.04	256.46
2019-20	1,766.98	1,558.88	332.14
2020-21	1,726.26	1,737.05	354.82
2021-22	1,685.54	2,376.69	267.00
		Total	1,210.42

Appendix 42 Avoidable extra expenditure (Referred to in Paragraph 3.7)

SI. No.	Name of party	Quantity (in KM)	Month of supply	Price fixed in the PO (₹)	GST @ 18 per cent	Variable price calculated based on IEEMA circular (₹)	GST @ 18 per cent on updated variable price (₹)	Difference (₹)	Loss (₹)
1	2	3	4	5	6 =(18 per cent of 5)	7	8 =(18 per cent of 7)	9 =(5+6) - (7+8)	10 = (3*9)
1	Havells India LTD	84.139	April 2019	6,46,000	1,16,280	6,29,520.40	1,13,313.67	19,445.93	16,36,160.74
2	Paramount Communications	0.485	April 2019	6,46,000	1,16,280	6,29,520.40	1,13,313.67	19,445.93	9,431.27
3	Havells India LTD	48.186	May 2019	6,46,000	1,16,280	6,22,996.81	1,12,139.43	27,143.77	13,07,949.54
4	Paramount Communications	102.04	June 2019	6,46,000	1,16,280	6,11,673.01	1,10,101.14	40,505.84	41,33,215.91
5	Paramount Communications	207.87	July 2019	6,46,000	1,16,280	6,05,009.49	1,08,901.71	48,368.80	1,00,54,421.85
6	Paramount Communications	4.693	August 2019	6,46,000	1,16,280	6,05,669.30	1,09,020.47	47,590.22	2,23,340.91
	Total	447.417							1,73,64,520.22