



**PROJECT AUDIT REPORT
ON
CONSTRUCTION OF
RAWALPINDI - ISLAMABAD
METRO BUS PROJECT**

**HUD & PHE DEPARTMENT
GOVERNMENT OF THE PUNJAB
AUDIT YEAR 2015-16**

AUDITOR GENERAL OF PAKISTAN

PREFACE

Articles 169 & 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with Sections 8 and 12 of the Auditor General's (Functions, Powers, and Terms and Conditions of Service) Ordinance, 2001 require the Auditor General of Pakistan to conduct audit of the accounts of the Federation, the Provinces and any authority or body established by the Federation or a Province. The audit of project "Construction of Rawalpindi-Islamabad Metro Bus Project" executed by Rawalpindi Development Authority was carried out accordingly.

The Directorate General Audit Works (Provincial) Lahore conducted Project Audit of "Construction of Rawalpindi-Islamabad Metro Bus Project" during February-March 2016 for the period 2014-15 & 2015-16 with a view to reporting significant findings to the stakeholders. Audit examination was primarily aimed at evaluating the achievements of the intended project objectives and compliance of applicable rules and regulations. The Project Audit Report also gives specific recommendations that, if implemented, will help the management in realizing the objectives of the project.

Audit findings indicate need for adherence to the regularity framework besides instituting and strengthening of internal controls to avoid recurrence of similar violations and irregularities. All the observations included in this report have been discussed in the SDAC meetings.

The Audit Report is submitted to the Governor of the Punjab in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before the Provincial Assembly.

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Islamabad
Dated: 16th March, 2017

(Rana Assad Amin)
Auditor General of Pakistan

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ABBREVIATIONS & ACRONYMS

AA	Administrative Approval
AASHTO	American Association of State Highways & Transport Officials
ABC	Asphaltic Base Course
ACP	Aluminum composite panel
ASME	American Standards for Mechanical Engineering
A&C	Addendum and Corrigendum
B&R	Buildings & Roads
BOQ	Bill of Quantities
BRTS	Bus Rapid Transit System
BS	British Standards
CDWP	Central Development Working Party
Cft	Cubic Feet
CM	Chief Minister
cu.m	Cubic Meter
DAC	Departmental Accounts Committee
DBs	Distribution Boards
DFR	Departmental Financial Rules
DG Set	Diesel Generator Set
DNIT	Draft Notice Inviting Tender
EA	Executing Agency
ECNEC	Executive Committee of National Economic Council
EIRR	Economic Internal Rate of Return
EM&E	Electrical Mechanical & Engineering
EN	European Norms
FD	Finance Department
FOB	Free on board
GB	Great Britain
GoPb	Government of the Punjab
GST	General Sales Tax
HUD&PHE	Housing Urban Development And Public Health Engineering Department
HDPE	High Density Polyethylene
HDMI	High-Definition Multimedia Interface
HDCP	High-bandwidth Digital Content Protection
IB	Instructions to Bidders
INTOSAI	International Organization of Supreme Audit Institutions
JMF	Job Mix Formula
JV	Joint Venture

KM	Kilometer
LDA	Lahore Development Authority
LED	Light Emitting Diode
LCD	Liquid Crystal Display
MB	Measurement Book
MBS	Metro Bus Service
MRS	Market Rates System
MBTS	Metro Bus Transit System
MTDF	Medium Term Development Framework
NAC	Non-Availability Certificate
NEC	National Economic Council
NJB	New Jersey Barrier
NRL	National Refinery Limited
NESPAK	National Engineering Services of Pakistan
PAO	Principal Accounting Officer
PD	Project Director
P&D	Planning & Development
PC-I	Planning Commission-I
PDWP	Provincial Development Working Party
PFR	Punjab Financial Rules
P ft	Per Foot
PMA	Punjab Masstransit Authority
PSD	Platform Screen Doors
PSI	Per Square Inch
PO	Public Oversight
RCC	Reinforced Cement Concrete
Rft	Running Feet
RM	Running Meter
RMCS	Remote Monitoring Control System
SDAC	Special Departmental Accounts Committee
SGS	Societe Generalede Surveillance (French)
SLA	Service Level Agreement
TEPA	Traffic Engineering &Transport Planning Agency
TSE	Technically Sanctioned Estimate
TMA	Town Municipal Administration
UET	University of Engineering and Technology, Lahore
UPS	Uninterrupted Power Supply
VVVF	Variable Voltage Variable Frequency

EXECUTIVE SUMMARY

The Director General Audit Works (Provincial), Lahore conducted audit of the project “Construction of Rawalpindi - Islamabad Metro Bus Project” during March, 2016 to evaluate the financial performance, achievement of the project objectives and the desired benefits as envisaged in PC-I. The audit was conducted in accordance with the INTOSAI Auditing Standards.

Rawalpindi Development Authority (RDA), Rawalpindi launched this project during 2013-14. The project was approved in February 2014 with PC-I cost of Rs 44,840 million with completion period of eleven months. The scheme was funded by Government of the Punjab and the Federal Government equally. The Federal Government transferred its 50% share of funds to the Finance Department, Government of the Punjab, which further placed the same into the account of the RDA. The whole project, including Islamabad portion, was executed by the RDA. The overall objectives of this project were to improve the efficiency and performance of the public transport system in Rawalpindi and Islamabad by introducing environment friendly and high quality rapid mass transit system in the twin cities.

The project was completed in July, 2015 at a total cost of Rs 40,832.90 million which includes Rs 2,807.00 million for cost of land & shifting of utilities and Rs 38,025.90 million for construction. Final bills of the contractors were not processed till December 2016.

It was observed that the department got approved the estimates at higher rates without giving due consideration to economy. Therefore, the estimates could not serve as a valid bench mark for evaluation of bids. Had the TS estimates been correctly prepared, the bids evaluated as some percentages below the TS estimates (while awarding the contract), might have been higher even than the maximum acceptable limit of 4.5% (of TS estimate).

Initial Environmental Examination and Environmental Impact Assessment were not carried out as required under Section 12 of the Pakistan Environmental Protection Act, 1997, despite its provision in the PC-1. During construction, the contractors used parks at various places under Parks and Horticulture Authority, Rawalpindi for construction of girders and slabs and dumping material having adverse impact on the environment.

The project was found to be viable and sustainable only if huge amount of subsidy was provided by the Government, because only a nominal ticket fee of Rs 20 was being charged and government was paying a subsidy of Rs 54.19 per rider.

Effective implementation of the system of internal controls as laid down in the departmental codes/instructions was found lacking. Therefore, lapses in financial management, contract management, construction & works and deviation from the FIDIC clauses/ specification/templates were observed. In the audit report, Audit has pointed out a number of cases in which excess rates than admissible ones were approved due to application of higher input rates.

All the observations were discussed in the SDAC meetings and certain decisions were made. However, while preparing and signing the minutes in case of RDA's paras the Chairman of the Committee settled most of the paras without considering the Audit viewpoint and in contravention of the decisions made during the meeting/discussion. Audit did not agree to these unilateral decisions made by the Chairman of SDAC.

Impact of Audit

Following improvements/recoveries were made by the Departments on pointation and recommendations of Audit:-

- i. As a result of Audit of Rawalpindi-Islamabad Metro Bus Project, Audit pointed out recovery of Rs 3,791.27 million. The department admitted recovery to the extent of Rs 613.03 million out of which

Rs 310.45 million was effected/verified. The department further informed that out of the remaining admitted recovery an amount of Rs 295.55 million had also been recovered which is yet to be verified by Audit (Annex-I).

- ii. On pointation of Audit, International Agreement of Operation for Metro Bus System Rawalpindi-Islamabad, between M/s Inbox and Punjab Mass Transit Authority was revised in November 2016 resulting in saving of Rs 478.34 million. As per original agreement, payment of monthly charges of Back Office to manage data center component for operations was to be made which was not admissible because the equipment and human resources of Back Office, already established for MBS Lahore, were being used.
- iii. During the audit of Metro Bus System (MBS) Lahore, Audit had pointed out application of inadmissible carriage factor of 1.25 instead of actual 1.2/1.22 for sub-base course etc. Audit had also pointed out that in the International Agreement of Operation of MBS Lahore executed between Foreign Firm M/s Platform and Punjab Mass Transit Authority Lahore, 350 days a year were taken instead of actual 365 days for the purpose of payment calculation. Both the issues were addressed in the agreement for MBS Rawalpindi-Islamabad which resulted in huge savings of public funds.

Key audit findings

Audit findings, categorized into major issues, viz. Financial Management, Procurement & Contract Management and Construction & Works are as under:

1. Financial Management

Review of Financial Management revealed irregularities, overpayments and non-recoveries of Rs 5,183.50 million. The key audit findings are summarized below:

- I. Sanctioning of rate analysis of various items on higher side resulting in loss of - Rs 2,261.55 million¹.
- II. Overpayment due to non-maintenance of the accepted percentage of tenders upto last payment - Rs 1,497.69 million².
- III. Loss due to inadmissible payment to private allottees by the LAC, RDA against government owned land, compensation for business allowance and non-recovery of cost of old material - Rs 393.51 million³.
- IV. Overpayment due to non-deduction of cost of carriage on bitumen procured from APL, Rawalpindi instead of NRL Karachi - Rs 295.92 million⁴.
- V. Loss due to payment to the service provider despite non-operation of buses - Rs 278.09 million⁵.
- VI. Irregular expenditure on account of TV advertisements and inauguration ceremony without open tendering - Rs 60.95 million⁶.
- VII. Non-recovery of price de-escalation on diesel and bitumen - Rs 55.75 million⁷.
- VIII. Overpayment due to allowing incorrect rates for various non-BOQ Items - Rs 47.66 million⁸.
- IX. Loss due to non-recovery of cost of old material (steel) at estimated rates - Rs 20.13 million⁹.
- X. Loss due to non-deduction of cost of less used bitumen - Rs 17.97 million¹⁰.

¹ Para 4.2.1.2, 4.2.1.3, 4.2.1.4, 4.2.1.8, 4.2.1.10, 4.2.1.11, 4.2.1.12, 4.2.1.14, 4.2.1.15, 4.2.1.16, 4.2.1.18, 4.2.1.19, 4.2.1.20, 4.2.1.33, 4.2.1.34, 4.2.1.36, 4.2.1.37, 4.2.1.38, 4.2.1.40, 4.2.1.41, 4.4.1.4 and 4.4.1.6

²Para 4.2.1.1

³ Para 4.2.1.5, 4.2.1.24 and 4.2.1.30

⁴ Para 4.2.1.6

⁵ Para 4.2.1.7

⁶ Para 4.2.1.13

⁷ Para 4.2.1.17

⁸ Para 4.2.1.23, 4.2.1.25, 4.2.1.26, 4.2.1.27, 4.2.1.31, 4.2.1.32, 4.2.1.39

⁹ Para 4.2.1.21

¹⁰ Para 4.2.1.22

2. Procurement and Contract Management

Examination of Contract Management revealed irregularities amounting to Rs 516.52 million. Audit findings under this category, inter alia, include the following:

- I. Irregular procurement and non-reduction in rate due to supply of below specification escalators - Rs 314.31 million¹¹.
- II. Irregular award of works without open tender in the name of assignment agreement - Rs 111.89 million¹²
- III. Non-recovery due to supply of below specification LCD Video Wall - Rs 37.89 million¹³.
- IV. Non-recovery of cost of electricity bills from contractors - Rs 3.45 million¹⁴.

3. Construction & Works

Review of Construction and Works revealed overpayments and losses amounting to Rs 251.95 million, such as:

- I. Overpayment due to change in specification during execution of work - Rs 151.87 million¹⁵.
- II. Loss to government due to ill planning / incorrect estimation - Rs 46.35 million¹⁶.
- III. Non-recovery of compensation from the contractor on account of damage to fiber optic cables - Rs 25.39 million¹⁷.

¹¹ Para 4.3.1.1

¹² Para 4.3.1.2

¹³ Para 4.3.1.4

¹⁴ Para 4.3.1.5

¹⁵ Para 4.4.1.1

¹⁶ Para 4.4.1.2

¹⁷ Para 4.4.1.3

Recommendations

Audit observed that most of the irregularities were either due to weak technical, supervisory and financial controls or poor contract management. Principal Accounting Officer needs to strengthen internal controls regime in the department in the light of following recommendations:

- i. Internal controls like test check measurements/periodic inspections of works by supervisory officers need to be implemented.
- ii. Amount paid to the contractor(s) on account of taxes, not applicable or paid in excess, be recovered from contractor(s).
- iii. Disciplinary action needs to be initiated and responsibility fixed against the officers responsible for lapses and violation of rules besides effecting recoveries.
- iv. Proper vigilance is required to be exercised while sanctioning rate analysis and TS estimates for the future projects.
- v. The department also needs to streamline the working of the SDAC so that this important forum can perform its function in an objective and impartial manner in order to maintain its effectiveness and credibility.

1. INTRODUCTION

1.1 Rawalpindi Development Authority Rawalpindi launched the project “Rawalpindi-Islamabad Metro Bus from Saddar Rawalpindi to the Islamabad Secretariat” during 2013-14. The whole Project comprised construction of Metro Bus System divided in two portions i.e. (i) Rawalpindi portion and (ii) Islamabad portion. The Rawalpindi portion consisted of an elevated corridor of 9.2 meter width. The Islamabad portion has mostly been constructed on ground level; however, three stations are in trench portion. Total length of MBS corridor is 22.5 km (Rawalpindi portion 8.6 km and Islamabad portion 13.9 km). Beside this, the Bus Depot in Islamabad and Control and Command Centre in Rawalpindi is the part of MBS Project. The project was completed by the RDA with construction supervision of M/s NESPAK (Pvt.) Ltd. and it started its operations with effect from 4th June, 2015.

1.2 The Directorate General Audit Works (Provincial), Lahore conducted audit of Rawalpindi-Islamabad Metro Bus Project (22.5 km) during March 2016. The project with approved PC-I cost of Rs 44,849.00 million was funded by Government of the Punjab and Federal Government equally. The Federal Government transferred its 50% share of funds to the Finance Department, Government of the Punjab, which was transferred by FD into the accounts of the RDA. The whole project, including Islamabad portion, was executed by the RDA. It started in April 2014 with completion period of 8 months as provided in the agreement. In the light of Rule 8 of Second Schedule of Delegation of Financial Powers Rules, 2006, ECNEC is the final approving authority for any provincial project costing more than Rs 10,000 million. However, this project, which otherwise required ECNEC approval, was split into ten packages (I to X) and these packages were grouped in two portions i.e. Rawalpindi portion and Islamabad portion. Islamabad portion was approved by ECNEC, whereas Rawalpindi portion was not got approved from ECNEC. However, on pointation of Audit the department took up the case with ECNEC for revised approval. The project was completed in July, 2015 at a total cost of Rs 40,832.90 million which includes Rs 2,807.00 million for

cost of land & shifting of utilities and Rs 38,025.90 million for construction. Final bills of the contractors were not processed till December 2016.

1.3 Project objectives were as under:

- To reduce traffic load in twin cities i.e. Rawalpindi & Islamabad.
- To improve the efficiency and performance of public transport in twin cities.
- To improve the cities' environment by reduction in number of vehicles plying on the roads, and to improve quality of life.
- To provide comfort and facilitate the public in travelling.
- To improve the existing transportation mechanism.

1.4 Funds were provided by the Government of the Punjab and Federal Government on 50:50 share basis. No loan/grant was utilized.

1.5 Cash flows/releases of funds were regulated by the Finance Directorate RDA, Rawalpindi through its cash management plan depending on the cash flows.

1.6 Payments were regulated by the provision of contract agreements and Departmental Financial Rules (DFR).

1.7 Financial impact of the project, in brief, is as under:

(Rs in million)

Planned cost	Planned completion Period as per PC-I	Revised PC-I cost	Actual expenditure upto March, 2016	Percentage of expenditure
44,840	11 Months	Not provided	40,832.90	91.06%

1.8 Physical progress as compared with the PC-I is mentioned as under:

Project	Length of track	Construction time as per agreement	Actual Completion Time
Rawalpindi Saddar to Islamabad Secretariat	22.5 kilometers	8 Months	12 Months
Package-II Peshawar Morr Interchange	-	9 Months	Work in process
Command & Control Centre Rawalpindi	-	9 Months	20 Months

2. AUDIT OBJECTIVES

The major objectives of the audit were to:

- i. Analyze the overall performance vis-à-vis planned targets, achievement of objectives, cost and time over-run and timely accrual of benefits.
- ii. Assess whether the resources were utilized for the purpose for which they were provided with respect to three E's (Economy, Efficiency and Effectiveness).
- iii. Review compliance with applicable rules, regulations, procedures and instructions issued from time to time by the Finance Department.

3. AUDIT SCOPE AND METHODOLOGY

3.1 The audit scope included scrutiny of accounts of the project for the period from April 2014 to March 2016, covering an expenditure of Rs 40,832.90 million.

3.2 Audit methodology included data collection, scrutiny/analysis of record, discussions with engineering staff as well as consultants, site visits and reporting, holding SDAC meetings and follow-up.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

On examination of the record, audit observed that organization and management set-up for the project was well structured and functioning accordingly; hence, no observation on these aspects was issued. Salient features of Organization and Management set-up of the project are given below:-

4.1.1 The project/scheme was executed by the RDA Rawalpindi under the administrative control of Secretary HUD & PHE Department, Lahore. The Project was headed by Director General, RDA, supported by Chief Engineer, Director Engineering and Director Finance RDA, Rawalpindi.

4.1.2 Job descriptions of the said staff were well defined in the delegation of powers of RDA Rawalpindi.

4.1.3 The Resident Engineer of M/s NESPAK Pvt. Ltd. was supposed to be present at site round the clock throughout execution of the work. The Assistant Director RDA was to visit the site regularly and was responsible for 100% checking of work whereas the Director was to visit the site occasionally. The Chief Engineers and Director Engineering concerned were also required to carry out physical inspections of the schemes under execution.

4.1.4 The contractors submitted the bills to RDA which were first checked by M/s NESPAK as Supervisory Consultants of the project and then pre-audited by the Local Fund Audit, Government of the Punjab.

4.1.5 The accounts were maintained centrally in the Directorate of Finance RDA Rawalpindi.

4.2 Financial Management

4.2.1 The issues relating to financial management involving an amount of Rs 5,183.50 million, observed during the audit, were as under:-

4.2.1.1 Non-maintenance of the accepted percentage of tenders upto last payment – Rs 1,497.69 million

As per Para (v) of the Finance Department's Notification No. RO (Tech) FD 1-2/83-VI dated 29th March 2005, final cost of the tender/payment shall be the same percentage above/below the amount of revised sanctioned estimate as was at the time of approval of the tender, so as to check excess payment.

Project Director Metro Bus Project RDA Rawalpindi awarded various works related to "Rawalpindi-Islamabad Metro Bus" to different contractors during the year 2013-14. The Authority made payments to the contractors at percentages more than the quoted/accepted percentages upto the final/last bills. Payment at higher percentages was because of the fact that the contractors executed less quantities of work for which they had quoted rates lesser than the estimated rates and executed more quantities of items for which he had quoted higher rates. This resulted due to ill planning on the part of the department. Audit observed that works were substantially completed as the Substantial Completion Certificates were issued by the department; therefore, the department was required to maintain the accepted percentages.

Non-maintenance of the agreed percentage resulted in overpayment of Rs 1,497,694,888 to the contractors (Annex-II).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that all the items were to be paid as per quoted rates irrespective of the quantities as the

instant agreement was not awarded on the percentage above or below the estimated rates but instead the contractor quoted the rates of individual items based on his own working without having knowledge of the actual quantities to be used. The Department also contended that the maintenance of percentage was not provided in this FIDIC based agreement.

Audit argued that the overpayment pointed out by audit was the difference of rates between estimated and quoted rates of some items of work for which the contractor had quoted less rates as compared to estimated rates. And the departmental plea that the instant agreement was not awarded on percentage above or below was not correct as such question does not arise if the contract is awarded on basis of percentage above/below. The issue only crops up when the items-wise rate are quoted by the contractors. Further, the project was funded by Government of the Punjab, Finance Department, therefore as per FD's instructions, final cost of the tender/payment shall be the same percentage above/below the amount of revised sanctioned estimate as was at the time of approval of the tender. Audit also pointed out that the FIDIC based agreements do not debar observance of the FD's instructions including maintenance of same percentage at the time of award of work and till final payments.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery of the overpaid amount on account of non-maintenance of accepted percentages.

(Paras 76, 77, 144, 238, 257, 319, 360, 386, 422)

4.2.1.2 Loss due to incorrect rate analysis of Concrete class A2, A1 and D1 – Rs 513.09 million

According to General Project Specification No.401.3.4 (Hauling and Delivery of Mixed Concrete) read with 401.3.3(Plant mixing) of the Project, the organization supplying concrete shall have sufficient plant capacity and transportation vehicles to ensure continuous delivery at the rate required. The rate of the delivery of concrete during concreting

operations shall be such as to provide for the proper handling, placing, and finishing of the concrete. The rate shall be such that the interval between batches shall not exceed twenty (20) minutes. Further, when a truck/transit mixer is used for transporting concrete to the delivery point, discharge shall be completed within one hour or before two hundred fifty (250) revolutions of the drum of blades whichever is earlier. Under conditions when temperature of the concrete is thirty (30) degree C or above, a time less than one hour will be required except when retarder is used in which case it shall be one hour. The mixing time shall neither be less than fifty (50) second nor more than ninety (90) seconds.

Project Director Metro Bus Project RDA Rawalpindi adopted NHA template and got approved the rate analysis of item “Concrete class A2, A1 and D1 etc” on higher side in the estimates and released payment accordingly to the contractors. Audit observed that rate of item was sanctioned on higher side by taking extra 6 hours for front end loader, 5 hours for water tank, 4 hours for batching plant, 3 hours for transit mixers, 6 hours for pump 4 inch delivery and 2 hours for slipform paver which resulted in loss to the government.

Violation of the specifications resulted in overpayment of Rs 513,094,093 due to sanction of incorrect rate analysis (Annex-III).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by the Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors. The Department stated that the Engineer Incharge worked out the rate analysis as per actual site conditions and requirements well before the award of work and the rates were even less than the FD’s MRS rates. The Department further stated that payments were made to the contractors at their quoted rates which were within approved cost estimates.

Audit argued that as per laid down procedure (2.58 of B&R Code) BOQ along with tender cost based on TSE is to be attached with the

bidding documents. The bids are evaluated on the basis of approved TS estimates and lowest evaluated bid is accepted accordingly. Therefore, technical sanction estimate should be based on accurate rates and quantities. The Department used NHA template and allowed extra hours for the machinery/equipment which was not admissible. Audit also pointed out that as far as approval of PC-1 and AA by the higher authorities is concerned, the responsibility of preparation and sanctioning of correct rate analysis actually rests with the Superintending Engineer/Director as clarified by Chief Engineer (Para 2 of covering memo of TS estimate).

The Authority applied unusual and abnormally higher number of hours for machinery and transit mixer which resulted in inflated rates/estimates. A comparison of rates is as under:

(Rate in Rs per Cubic Meter)

Name of Items	RCC concrete class A2 for NJB (4000 psi)	RCC concrete class A2 on ground (4000 psi)	RCC concrete class A2elevated (4000 psi)	RCC concrete class AI on ground (3000 psi)	RCC concrete class DI (5000 psi)
Rate approved in MBS RWP-ISD	13,847	11,967.26	12,147.26	11,027.49	14,053.02
Rates in MRS	10,521.85	10,521.85	10,521.85	10,521.85	12,309
Rates in NHA CSR 2013	11,365	10,943	11,365	10,563	14,411

Audit also brought it on record that the composite rates would have been lesser if in NHA Template the FD input rates were applied as per PC-1 instructions. Audit recommended recovery, however, on denial by the Department to accept the overpayment, audit recommended seeking clarification from technical wing of FD for its uniform application throughout the province.

The Committee referred the case to technical wing of FD for clarification.

Audit recommends early compliance of the SDAC directives and recovery on account of allowing extra hours for transportation and machinery/equipment.

(Paras 26, 27, 28, 29, 30, 41, 42, 43, 44, 45, 58, 60, 61, 62, 63, 189, 190, 269, 318, 352, 395, 416)

4.2.1.3 Overpayment due to sanction of higher rate analysis of Elastomeric bearing pad – Rs 407.94 million

As per para No. 6 of approved PC-I, the cost estimate is based on the Government of Punjab, Finance Department, District wise website input rates 2nd Bi-annual, 2013 for District Rawalpindi for schedule items whereas non-schedule items are based on prevailing market rates for material and labour with contractor's profit. Further, according to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

The Authority got approved the rate analysis of item "*Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc*" on higher side @ Rs 15 per cubic centimeter (composite rate) in estimate sanctioned during March, 2014 by obtaining higher quotation rates and accordingly payment was released to the contractors. Audit pointed out that the Department got approved unreasonably high rate for Elastomeric bearing pad in the TS estimate as the quotation / invoice dated 18.08.2014 of M/s S.M.A Engineering and Services against which secured advance was granted to the contractor the rate for Elastomeric Bearing Pad was Rs 4.25/cub.cm. Whereas the Department had got approved TS estimates for the same on the basis of quotations of Rs 12/cub.cm (M/s SAH dated 17.12.2013). Thus a composite rate of Rs 15/cub.cm was approved against 5.70/cub.cm. This clearly indicates that the earlier quotations of December 2013 were on

unreasonably higher side. The inflated estimates resulted in excess payment to the contractors.

Approval of higher rates of Elastomeric bearing pad resulted in overpayment of Rs 407,942,500 (Annex-IV).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors. The Department stated that in the rate analysis the price was taken as Rs 12 per cubic cm based on quotation of M/s SAH services dated December, 2013. However because of decrease in oil prices, the decrease in the rate of the item in August 2014 was possible. The Department also pointed out that some other factors like advance payments, taxes and duties are also important in determining the rates of imported items.

Audit argued that although there was a decrease in oil prices but such a huge decrease of 65% was not possible. Oil prices decreased from Rs 116.34 per liter (December 2013) to Rs 109 per liter (August 2014). The reduction in oil prices was only 6% which could not have such a huge impact on decrease in prices of the item. Audit further argued that the responsibility of preparation and sanctioning of correct rate analysis/ estimates rests with the Superintending Engineer/Director, as also clarified in para No. 6 of approved PC-I by PDWP and ECNEC, that the rates were to be applied based on 2nd Bi-annual, 2013 for District Rawalpindi. Further, approval of the PC-I and TS estimate does not confer any approval of rates analysis and the responsibility of approval of correct rate analysis rests with only Director/Chief Engineer as also recorded by the Authority while approving PC-I/TS estimate (para No.2 of memo regarding TS estimate).

The representative of Finance Department during the discussion had recommended the Department to re-examine the factor involved in price determination like POL prices and taxes/duties and get the position

verified from Audit. Audit also endorsed the recommendation of Finance Department.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery besides fixing responsibility for incorrect/inflated estimates by taking higher quotations.

(Paras 98, 99, 100)

4.2.1.4 Loss due to higher rate analysis of concrete piles 1200 mm – Rs 392.74 million

According to General Specification No.401.3.4 (Hauling and Delivery of Mixed Concrete) read with 401.3.3(Plant mixing) of the Project, the organization supplying concrete shall have sufficient plant capacity and transportation vehicles to ensure continuous delivery at the rate required. The rate of the delivery of concrete during concreting operations shall be such as to provide for the proper handling, placing, and finishing of the concrete. The rate shall be such that the interval between batches shall not exceed twenty (20) minutes. Further when a truck/transit mixer is used for transporting concrete to the delivery point, discharge shall be completed within one hour or before two hundred fifty (250) revolutions of the drum of blades whichever is earlier. Under conditions when temperature of the concrete is thirty (30) degree C or above, a time less than one hour will be required except when retarder is used in which case it shall be one hour. The mixing time shall neither be less than fifty (50) second nor more than ninety (90) seconds.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of item “*Cast in place concrete piles 1200 mm(1.1 to 1.5 meter) dia boring only in normal soil including concrete Class A3, etc*” on higher side @ Rs 23,687.90 per meter in estimates and accordingly payment was released to the contractors. Audit observed that rate of item was sanctioned on higher side. The Department adopted NHA template, but added extra hours for machinery and equipment, some extra materials

and electric charges which resulted in excess rate by Rs 4,581.52 per meter.

Violation of specification resulted in overpayment of Rs 392,740,625 to the contractor (Annex-V).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors. The payments to the contractors were made on their quoted rates which were within the overall (cost) estimates. The Department further explained that rates analysis were worked out as per actual site conditions by the Engineer Incharge and approved by the competent authority and adherence to NHA templates was not binding on the Department. The Department further stated that rates approved in estimates were lesser than NHA-CSR and MRS.

Audit argued that bill of quantities along with tender cost based on TS estimates is also to be attached with the tender documents in accordance with the provision of Para 2.58 of B&R Code. The bids are evaluated on the basis of approved TS estimates and lowest evaluated bid is accepted accordingly. Therefore, technical sanction estimate should be based on accurate rates and quantities. Regarding the departmental contention that its rates were lesser than NHA-CSR and MRS, Audit did not agree as the rates for the same item of NHA-CSR and MRS work out to Rs 22,603 and Rs 20,989.45 per meter respectively. Whereas the Department got approved the rate in TS estimates for Rs 23,687.90 per meter. Similarly the composite rates would be even lesser if in NHA Template the FD input rates were applied as per PC-1 instructions.

Audit further argued that the responsibility of preparation and sanctioning of correct rate analysis/estimates rests with the Superintending Engineer/Director. The Chief Engineer also clarified that the approval of

TS estimate does not confer any approval of rates analysis and the responsibility of approval of correct rate analysis rests with only Director.

Audit recommended recovery, however, on consistent denial by the Department to accept the overpayment, Audit agreed to seek clarification from technical wing of FD for its uniform application throughout the province.

The Committee referred the case to technical wing of FD for clarification.

Audit recommends early compliance of SDAC directives and recovery on account of allowing extra hours of transportation and machinery/equipment.

(Paras 24, 25, 40, 59, 204, 205)

4.2.1.5 Loss due to inadmissible payment to private allottees against government owned land – Rs 378.99 million

As per Standing Order No.28 (1) of Land Acquisition issued on 26th June, 1909 (amendment in LAC Act I of 1894), read with letter No. R-24/437/198, Dated 30.04.2015 by Military Estate Officer, Rawalpindi Circle, when it is proposed to transfer land in the possession of Government from one Government to another, or from one Department to another proceedings under the Land Acquisition Act, 1894 are inappropriate i.e. (1) land in possession of the Government of Pakistan, (2) land in possession of the Provincial Government, (3) Proprietary rights held by Government in land occupied by tenants in Colonies and elsewhere, etc. and further, Military Estate Officer elaborated that the property No.143, Survey Number 278 (at Sr. No.4) was held on old grant and as per provision of Governor General Order (GGO) No.179 of 12.09.1836, Central/Federal Government was the “Land Lord”, therefore, compensation was required to be made to Central Government instead of allottees.

The Land Acquisition Collector, RDA, Rawalpindi made the payment of Rs 378,992,646 to the private allottees on the basis of award announced on 15.07.2014 on account of acquisition of land for “Rawalpindi-Islamabad Metro Bus Project”. The acquired land was the property of the Central/Federal Government and was leased out by Military Estate Officer, Rawalpindi to allottees on yearly rent basis. The Military Estate Officer clarified vide letter dated 30.04.2015 that the owner of the land was the Central Government and according to LAC Act 1894 no compensation was payable to Federal and Provincial Government on account of acquisition of land for the purpose of development of Government Schemes. Hence, allottees were not entitled to the compensation for land. Therefore, unjustified payment made by LAC to the allottees resulted in loss to the Government. The detail is as under:

(Amount in Rs)

Para Nos	Property/ Survey Number	Area of Land	Rate per Marla	Location	Total payment of land	15% compulsory Charges	Inadmissible payment
221	143/278/1	2 Kanal, 14 marla and 204 sft	2,200,000	Marrir Chowk Metro Bus station Rawalpindi	120,450,000	18,067,500	138,517,500
222	57/369	4 Kanal	2,000,000	Vacant plot Haider Road Saddar Rawalpindi	160,000,000	24,000,000	184,000,000
	59/368/1	5 Marla, 160 sft	4,000,000	Bank Road Saddar Rawalpindi	22,352,941	3,352,941	25,705,882
	150/370/1	12 Marlas 44 Sft	2,200,000	Hayyat Furniture Saddar Rawalpindi	26,755,882	4,013,382	30,769,264
Total							378,992,646

Violation of provisions of Act and standing orders resulted in loss of Rs 378,992,646 to the government.

The paras were discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The Department contended that relevant

ownership documents were provided by Military Estate Officer Rawalpindi and same was confirmed by him. The Department further stated that the property had been constructed by the private owners on the land being that of old grant which is a lease in perpetuity and lessee was entitled to proprietary rights and accordingly as per award register the payments to the allottees were made. However, LAC RDA Rawalpindi did not produce documents / authority by Military Estate Officer confirming / indicating the ownership of the land in the name of private persons whom the compensation for land was paid by LAC RDA under Land Acquisition Act 1894.

Audit argued that the Military Estate Officer had clearly indicated in the lease agreement that the actual land lord/owner was the Federal / Central Government. The leases were granted on yearly rent basis for residential purpose only and mere construction of building on Government land does not confer ownership rights to any occupant. Audit further pointed out that the lessees were also using the land for commercial purposes in violation of the lease agreements. The audit argued that by all legal means federal Government was the only owner of the lands and the land should have been transferred from possession of one Government to another without any cost. For the purpose of transferring ownership of the land from one government to another government only approval of concerned Secretary Board of Revenue or Chief Commissioner (as the case may be) was required. The Certificate issued by the Land Acquisition Collector, RDA Rawalpindi, that there was no land in possession of Federal/Provincial Government, was not based on facts.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends that the amount paid to the private persons on account of compensation/land acquisition be recovered besides fixing responsibility for this lapse.

(Paras 221, 222)

4.2.1.6 Overpayment due to non-deduction of cost of carriage on bitumen procured from APL, Rawalpindi – Rs 295.92 million

As per material rates available on FD's website (additional item-A), the rate of bitumen i.e. Rs 86,180 per ton was meant for at site from NRL Karachi to district Rawalpindi.

Project Director Metro Bus Project RDA, Rawalpindi got approved the item rates of "*Asphalt Wearing Course, Asphalt Base Course, Prime Coat and Tack Coats etc*" in the different works of "Rawalpindi – Islamabad Metro Bus Project". Audit observed that the Authority had taken the input rates of bitumen Grade 60/70 from NRL-Karachi to site of work (inclusive of carriage) @ Rs 86,180 per ton. As per invoices of procurement of bitumen and JMF, the source of bitumen was Attock Oil Refinery, Rawalpindi which was not on the list of approved refineries of C&W Department (letter No.SOH-II(C&W)/5-23/96 dated 18.07.1999). The rate of bitumen (as per invoices) of Attock Refinery (Pvt.) Ltd, Morgah Rawalpindi was @ Rs 60,841 per ton. Therefore, the rate of bitumen was required to be reduced by Rs 25,339 per ton, (as difference in carriage) which however, was not done. Non-reduction in the composite rate of the items of work resulted in overpayment to the contractors.

Non-deduction of cost of carriage resulted in overpayment of Rs 295,923,472 to the contractors (Annex-VI).

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors. The payments to the contractors were made on their quoted rates which were within the overall (cost) estimates. The Department further explained that the contractor was not bound to use bitumen from Karachi Refinery as the source was neither provided in BOQ nor in the specifications.

Audit argued that in rate analysis of Asphalt Wearing Course, Base Course, Prime Coat and Tack Coat, the rate of bitumen applied was Rs 86,180 per ton which was meant for at site from NRL Karachi to district Rawalpindi. The rate ex-NRL for bitumen (60/70 grade) during May 2013 was @ Rs 75,090 per ton (as per letter No. APLKHI/Bit/C&WD/1702 dated 17.02.2015). As per invoices available on record the contractor procured bitumen from Attock Refinery Ltd. Morgah, Rawalpindi @ Rs 75,090 per ton but the contractor was paid @ Rs 86,180 per ton which was the rate meant for bitumen procured from NRL Karachi and supplied in Rawalpindi at site. This clearly shows that undue financial benefit was extended to the contractor by allowing undue carriage from Karachi to Rawalpindi.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends making payment to the contractors as per actual invoices (Attock Refinery Ltd. Morgah, Rawalpindi) and effect recoveries accordingly. Audit further recommends disciplinary action for using bitumen of an unapproved refinery.

(Paras 18, 19, 20, 47, 48, 49, 50, 51, 52, 186, 187, 188, 261, 262, 263, 296, 297, 298, 344, 345, 346, 378, 379, 380, 407, 408, 409)

4.2.1.7 Loss due to payment despite non-operation of buses – Rs 278.09 million

As per rule 2.33 of Punjab Financial Rules Volume-I, every government servant should realize fully and clearly that he will be held personally responsible for any loss sustained by government due to fraud or negligence on his part.

General Manager (Finance), Punjab Masstransit Authority (PMA) Lahore made payment to Bus Service Provider M/s Platform A.S. for the period from February 17, 2015 to June 3, 2015 on account of bus services (pre-operations) for Rawalpindi-Islamabad Metrobus Project with a track length of 21.972 km. Clauses 6.1.9 and 6.1.21, were incorporated in the

agreement which provide for payment of a guaranteed minimum mileage of 70,000 Km per bus per year (191.78 km each per day for 68 buses) to the firm @ Rs 201.175 per km from a cut-off date i.e. February 1, 2015, even if the project was not functional by that date. RDA was unable to handover the project by the extended deadline of January 31 but PMA paid Rs 278,094,310 for the period during which not even a single bus plied on the track.

Weak managerial controls, mismanagement and lack of coordination among PMA and RDA Staff resulted in loss of Rs 278,094,310 to the Government.

The matter was discussed in the SDAC meeting held on 28.11.2016. The Authority explained that the civil work of Metro Bus could not be completed by the RDA Rawalpindi well in time due to Dharna for 126 days. The payments were made under contractual obligation and there was no loss to government. Audit argued that the Authority did not invoke the Force Majeure clause of Contract Agreement, wherein the cut-off date could be extended, which was not done. Non-invoking force majeure clause resulted in loss to the Government which requires detailed probe.

The Committee directed the PMA to submit a detailed report along with complete record to audit for verification. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends early compliance of SDAC directives.

(Para 436)

4.2.1.8 Overpayment due to sanction of incorrect rates analysis by allowing inadmissible crane and dumper charges for item, steel grade 60 – Rs 256.67 million

As per template of item No.404(b) of general specification of NHA adopted by RDA for Metrobus Project, charges for crane and dumper truck were not provided in the rate analysis of item "Reinforcement as per AASHTO M-31 Grade 60 etc". Further, according to para No. 6 of

approved PC-1, the Authority was required to prepare rate analysis in estimates on the basis of input rates displayed on Finance Department's website for 2nd Bi-Annual 2013 for District Rawalpindi and prevailing market rates including lead/carriages etc.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of item 404(b) "*Reinforcement as per AASHTO M-31 Grade-60 etc*" @ Rs 106,643.04 per ton in estimate of the work "Rawalpindi – Islamabad Metro Bus Project". Audit pointed out that the Department adopted NHA template and added inadmissible 3 hours each for crane and dumper costing Rs 13,707 in analysis of 5 ton, in contravention of NHA template. Admissible rate without cranes and dumper charges comes to Rs 103,353.36 per ton. Hence, excess rate of Rs 3,289.68 per ton was paid to the contractors.

Violation of PC-1 instructions resulted in overpayment of Rs 256,670,550 (Annex-VII).

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors. The Department further stated that project was completed on fast track basis and it was not possible to cut in size and fabricate the steel at the very location of the structural component. Once the steel was shifted in the steel yard, it was cut and bent as per design for installation at site. The crane was required to load the steel in dumper trucks and then it was delivered to site at respective places for fixing including pre-casting yard for pre-stressed girders. Further, the payments to the contractors were made on their quoted rates which were within the overall (cost) estimates. The Department further contended that NHA specifications were not changed and the Engineer In-charge approved the rate analysis as per actual site requirements. The Department also claimed that the estimated rates were less than the MRS composite rates. Hence, there was no loss to the government.

Audit argued that all the higher authorities involved in the process of the approval of the PC-I/AA cannot be held responsible. The responsibility of preparation and sanctioning of correct rate analysis/ estimates rests with the Superintending Engineer/Director, as also clarified in para No. 6 of approved PC-I by PDWP and ECNEC that the rates were to be applied based on 2nd Bi-annual, 2013 for District Rawalpindi. Further, approval of the PC-I and TS estimate does not confer any approval of rates analysis and the responsibility of approval of correct rate analysis rests with only Director/Chief Engineer as also recorded by the Authority while approving PC-I/TS estimate (para No.2 of memo regarding TS estimate). Audit further clarified that as per Input Rates of 2nd bi-annual 2013 Rawalpindi at serial number 06.014 for Steel Grade-60 was at site rate (Rs 82,590 per ton) and for the item “Fabrication of mild steel reinforcement for cement concrete including cutting, bending, laying in position, making joints and fastening including cost of binding wire and labour charges for binding etc” the composite rate works out to Rs 113,261 per ton which also included 10% wastage and overlaps but the departmental working was Rs 106,643.04 per ton without any allowance of wastage and overlaps. After adding 10 % allowance for wastage/overlaps as added by the design consultant (in design/ drawings of reinforcement G-60 etc) the departmental rate became Rs 117,307.344 which was Rs 4,046.344 per ton more than FD’s MRS composite rate and the same was paid to the contractors by supervisory consultants/RDA authorities. Audit went on to record that the rate of steel given on FD’s website (also applied by RDA) was ‘at site’ rate and no additional charges for any sort of transportation could be allowed. Any additional cost for loading/short carriage was to be borne by the contractor. However, the Department was of the view that the ‘site’ did not mean the actual site of work.

On the difference of opinion regarding definition of ‘site’ the Finance Department representative recommended to seek clarification from technical wing of FD which was also endorsed by all participants and Chair for its uniform application throughout the province.

Audit recommends early recovery on account of allowing extra hours for machinery/equipment.

(Paras 14, 56, 57, 196, 267, 303, 348, 382 & 412)

4.2.1.9 Loss to the Authority due to calculation of incorrect reserved price – Rs 253.27 million

As per rule 2.10 of Punjab Financial Rules Volume-I, every public officer is expected to exercise the same vigilance in respect of expenditure from government funds as a person of ordinary prudence would exercise while incurring expenditure from his own money.

Punjab Mass transit Authority (PMA) approved the operational cost on higher side @ Rs 325 per Km by applying higher insurance rate of 3.25% instead of 1.43%, and by taking capital cost of each bus @ Rs 32,500,000 instead of actual cost of Rs 27,000,000. Further, consumption of fuel was provided as 1.5 kilometer/liter instead of actual 2 kilometer/liter and 5% contingencies instead of 2%. The contractor accordingly quoted his rates @ Rs 325 per kilometer and contract was awarded to him at same rates. Audit observed that the Authority made incorrect and higher provisions and contractor accordingly claimed higher rate of Rs 325 per km instead of actual/admissible rate of Rs 260 per kilometer, which resulted in loss to the Authority.

Weak financial controls resulted in loss of Rs 253,266,455. The detail is given below:

Sr. No.	Details	Kilometers travelled	Rate approved	Rate required to be approved	Excess rate	Loss (Rs)
1	Non-excess kilometers (upto 70,000 km/annum/bus)	3,586,284 km	Rs 325 per km/bus	Rs 260 per km /bus	Rs 65	232,978,460
2	Excess kilometers (beyond 70,000 km/annum/bus) 60% of Rs 325	520,205 km	Rs 195 per km/bus	Rs 156 per km /bus	Rs 39	20,287,995
Total						253,266,455

The matter was discussed in the SDAC meeting held on 28.11.2016. The Authority explained that EFU, IGI and National Insurance Companies charge insurance rates @ 3.50%, 3% and 6%, but Authority estimated @ 3.25% and cost of Rs 32.500 million per bus was shown as Rs 27 million in insurance documents to reduce the insurance premium. Audit argued that as per Insurance Documents produced by contractor/operator of Jubilee Insurance Company, the insurance rate was charged @ 1.43% and the invoice price of Bus was Rs 27 million. Similarly, as for consumption of POL, Volvo/Sunwin (joint venture) informed that for these buses POL consumption is more than 3 km per liter. However, for safer estimation it should not be taken less than 2 km per liter. Audit further pointed out that the Authority got approved 5% contingency against 2% admissible contingency in the light of Finance Department's instructions. Therefore, inclusion of above mentioned extra costs resulted in incorrect calculation of reserve price of Rs 325 per kilometer and accordingly the contractor quoted his price at par.

The Committee directed the PMA to submit a detailed report along with complete record to audit for verification. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends early compliance of Committee's directives.

(Para 441)

4.2.1.10 Overpayment due to application of higher input rates than available on FD's website – Rs 208.25 million

As per para No. 6 of approved PC-1, for Construction of Rawalpindi-Islamabad Metro Bus Project, Rawalpindi, the Authority was required to prepare rate analysis in estimates on the basis of input rates displayed on Finance Department's website for 2nd Bi-Annual 2013 for District Rawalpindi and prevailing market rates including lead/carriages etc.

Project Director Metro Bus Project RDA, Rawalpindi got approved the rate analysis of item "*Cast in place concrete piles 1200 mm(1.1 to 1.5 meter) dia boring only in normal soil including concrete Class A3, etc*" @

Rs 23,687.90 per meters in the estimate instead of Rs 21,767.90 per meter. Audit observed that rate of item was sanctioned on higher side by taking incorrect input rates of piling rig @ Rs 2,000 per hour instead of actual rate @ Rs 1,000 per hour as per item No.EQ-32 of equipment rates based on 2nd Bi-annual 2013, Rawalpindi. Therefore, excess rate of Rs 1,920 per meter was allowed to the contractor, which resulted in loss to the government.

Violation of approved PC-I/ECNEC and PDWP directions resulted in overpayment of Rs 208,253,090 on account of higher input rates. The detail is as under:

(Rate in Rs per meter)						
Para No	Package No	Rate approved	Rate admissible	Difference (Rs)	Quantity (Meter)	Amount overpaid (Rs)
92	I(RWP)	23,687.90	21,767.90	1,920	36187	69,479,040
	II(RWP)	23,687.90	21,767.90	1,920	24776.70	47,571,264
	III(RWP)	23,687.90	21,767.90	1,920	21785.30	41,827,776
275	I (ISB)	23,687.90	21,767.90	1,920	3103	5,958,722
316	II (ISB)	23,687.90	21,767.90	1,920	19301	37,063,903
392	IV (ISB)	23,687.90	21,767.90	1,920	3308	6,352,385
Total						208,253,090

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department also claimed that the estimates were confidential and were not provided to the contractors. The Department further stated that the rates available in MRS/input rates do not specify the dia of pile and the rate for all diameters are the same whereas NHA provides for different rates for dia upto 01 meter and greater than 01 meter. Further the departmental rates for the dia greater than 01 meter were lower than that of NHA-CSR. Hence, there was no loss to the government.

Audit argued that all the higher authorities like PDWP and ECNEC may not be involved in this case because the responsibility of preparation

and sanctioning of correct rate analysis/ estimates rests with the Superintending Engineer/Director. As clarified in para No. 6 of approved PC-I by PDWP and ECNEC, the rates were to be applied based on 2nd Bi-annual, 2013 for District Rawalpindi. Further, approval of the PC-I and TS estimate does not confer any approval of rates analysis and the responsibility of approval of correct rate analysis rests with only Director/Chief Engineer as also recorded by the Authority while approving PC-I / TS estimate (para No.2 of memo regarding TS estimate). As per composite MRS rate of FD for the dia ranging from 450 mm to 600 mm dia pile the rate is Rs 1,000 per hour for piling rig. The C&W and others departments of Government of Punjab are adopting the same input rate (Rs 1,000 per hour) for dia size ranging from 600 mm to 1500 mm and even 1800 mm as given on FD's website. The Department while preparing rate analysis for 1000 mm dia applied rate of Rs 1000 per hour which was correct as per input rates of FD and also in line with the practice in all the works related departments of Government of the Punjab. However, the RDA for rate analysis of 1200 mm pile applied a rate of Rs 2,000 per hour instead of Rs 1,000 per hour which cannot be justified. The Department by doing so violated the instructions of Chief Minister and provisions of PC-I which bound the Department to use input rates of Finance Department. Reference to NHA rates for comparison of cost of piles was out of context as Department could only use FD's input rates. Even if composite rate for this item is compared with that of NHA's composite rate (Rs 22,603 per meter), the departmental rate was on higher side (Rs 23,687.90 per meter).

Audit recommended adjustment/recovery of the overpayment. However, on consistent denial by the Department the Committee recommended to seek clarification from technical wing of Finance Department.

Audit recommends early compliance of SDAC directives and recovery on account of application of higher input rates.

(Paras 92, 275, 316, 392)

4.2.1.11 Overpayment due to sanction of higher rate analysis of Pre-cast box girders concrete class D1 – Rs 72.57 million

According to General Specification No.401.3.4 (Hauling and Delivery of Mixed Concrete) read with 401.3.3(Plant mixing) of the Project, the organization supplying concrete shall have sufficient plant capacity and transportation vehicles to ensure continuous delivery at the rate required. The rate of the delivery of concrete during concreting operations shall be such as to provide for the proper handling, placing, and finishing of the concrete. The rate shall be such that the interval between batches shall not exceed twenty (20) minutes. Further when a truck/transit mixer is used for transporting concrete to the delivery point, discharge shall be completed within one hour or before two hundred fifty (250) revolutions of the drum of blades whichever is earlier. Under conditions when temperature of the concrete is thirty (30) degree C or above, a time less than one hour will be required except when retarder is used in which case it shall be one hour. The mixing time shall neither be less than fifty (50) second nor more than ninety (90) seconds.

Project Director Metro Bus Project RDA, Rawalpindi got approved rate analysis of the item “Concrete class D1 (5000 psi, 1:1:2) on elevated portion for pre-cast box girders etc” on higher side @ Rs 18,000 per cubic meters in estimate instead of admissible rate of Rs 15,544.90 per cu.m and accordingly payment was released to the contractors of the different works of Rawalpindi-Islamabad Metro Bus Project. Audit observed that the Department adopted the NHA template for this item but added extra hours for machinery and equipments. Therefore, excess rate @ Rs 2,455.104 per cubic meter was allowed to the contractor, which resulted in loss to the government. Further, the Authority added cost of shuttering in lump sum for Rs 180,000 for 50 cu.m analysis without its detailed working/ measurements.

Violation of specification resulted in overpayment of Rs 72,567,320 due to sanction of incorrect rate analysis. The detail is as under:

Para No	Package No	Rate per cu.m (approved) (Rs)	Rate per cu.m (required to be approved) (Rs)	Difference of rate (per cu.m) (Rs)	Qty paid (cu.m)	Amount overpaid (Rs)
93	I (RWP)	18,000	15,544.90	2,455.104	11411.965	28,017,560
94	II RWP)	18,000	15,544.90	2,455.104	11999.24	29,459,382
95	III (RWP)	18,000	15,544.90	2,455.104	6146.533	15,090,378
Total						72,567,320

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that machinery hours had been taken as per actual site requirements and the shuttering for pre-cast girders was of special nature and cannot be used for more than two times. Hence keeping in view the specialized nature of job and being aesthetically important, rate analysis was prepared and approved by competent authority accordingly. The contractors were paid at their quoted rates.

Audit argued that the Department used/adopted NHA template and allowed extra hours for the machinery/ equipment. In the template input rates 2nd biannual 2013 for district Rawalpindi were to be applied. The Department contended that the Authority approved and paid rates even less than NHA and FD MRS rates. The contention of the Department was not correct as the rates provided in NHA-CSR and MRS was on lesser side. In NHA CSR-2013 (Rawalpindi), the rate for item No.401d Concrete class D1(5000 psi 1:1:2) was Rs 14,411 per cubic meter. Similarly, as per MRS under chapter 6 (Concrete) 2nd biannual 2013 for district Rawalpindi, the rates for MRS item No. 6(a)(i(1) with 5000 psi was Rs 12,309 per cubic meter whereas the Department approved a rate of Rs 18,000 per cubic meter for the same item. Audit also explained that if as per requirement of PC-I, in NHA Template the FD input rates were applied, the composite rates would have be much lesser. Moreover, the Department had taken lump sum provision on account of shuttering for Rs 180,000 in rate analysis of 50 cubic meters instead of its actual execution/working at site, which was not justified.

Contrary to above discussion and audit contentions, the Chair settled the paras subject to verification of relevant documents. However, the Department did not turn up for any verification.

Audit recommends early recovery on account of allowing extra hours of transportation and machinery/equipment.

(Paras 93, 94, 95)

4.2.1.12 Overpayment due to extra labour rate in item of pre-mixed carpeting – Rs 69.88 million

As per Finance Department's letter No. RO(TECH)FD.2-9/2005 dated 04.04.2006, only 10% sundry charges on 12.50% labour charges, already included in item rate, were to be included in the rate of carpeting on account of supervisory technical and non-technical staff charges.

Project Director Metro Bus Project RDA Rawalpindi, got approved the rate analysis of items "*Asphalt Base Course and Wearing Course Plant etc*" in the estimates. The Authority included extra labour charges @ 12.5% of equipment & machinery which were not admissible because labour charges were already included in the hire charges of equipment & machinery and only 10% sundry charges on the cost of labour were to be added in the rate analysis as per approved template of the Finance Department, adopted by RDA for this project.

Violation of FD's letter *ibid* and ECNEC/PDWP directions resulted in overpayment of Rs 69,882,680 due to sanction of higher rates analysis (Annex-VIII).

The paras were discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The Department contended that the equipment and machinery rent charges cater for owning and operating machines including cost of operators/divers only. The actual number of skilled/unskilled workers was based on actual site conditions and can vary from site to site. Hence, these were not included in the rental charges. The skilled and unskilled labour was required during preparation & laying of asphalt and relatively smaller number of staff was required for protection of pavement edges etc and departmental working for 12.50% of machinery

charges was fair and based on their experience. Moreover, that the rates included in the estimate are for fair estimation of the Project Cost and the contractors quoted the rates for the particular item based on their own working and not on estimated rates.

Audit argued that as per FD's template dated 04.04.2006, adopted by RDA, Rawalpindi in this project, labour charges 12.5% were already included in the item rate and same cost was only for assumption basis to calculate 10% sundry charges on labour. Audit further argued that as per para No. 6 of approved PC-I by PDWP and ECNEC, the rates of 2nd Bi-annual, 2013 for District Rawalpindi were to be applied. Further, approval of the PC-I and TS estimate does not confer any approval of rates analysis and the responsibility of approval of correct rate analysis rests with only Director/Chief Engineer as also recorded by the Authority while approving PC-I / TS estimate (para No.2 of memo regarding TS estimate). Inclusion of 12.50% labour charges in the rate analysis resulted in inflated estimates which was the only criterion against which quoted rates were evaluated.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery of the amount paid on account of 12.50% labour charges.

(Paras 5, 8, 117, 118, 123, 124, 181, 185, 251, 289, 290, 339, 340, 372, 253, 401, 402, 374)

4.2.1.13 Irregular expenditure on account of TV advertisement and inauguration ceremony without open tendering – Rs 60.95 million

As per para 9 of PPRA Rules 2009, 'a procuring agency shall announce in an appropriate manner all proposed procurements for each financial year and shall proceed accordingly without any splitting or regrouping of the procurements so planned, the procuring agency shall advertise in advance annual requirements for procurement on the website of the Authority as well as on its own website'.

On examination of accounts record of “Rawalpindi-Islamabad Metro Bus Project”, it was observed that a payment of Rs 26,934,716 was made to DGPR, Government of the Punjab, Lahore regarding advertisement in electronic/TV media. Moreover, another expenditure was incurred on account of preparation of documentary of Rawalpindi-Islamabad Metro Bus System and payment of Rs 2,985,000 was made to M/s The Protechtors. Both the expenditures were incurred without open tendering/competition in violation of PPRA Rules. And also there was no provision in PC-1/TS Estimate for this expenditure. Further, payment of Rs 31,032,449 was made to M/s Miradore Production for arrangements of inauguration ceremony of Rawalpindi Islamabad Metro Bus Project. Audit observed that codal formalities including tendering and open competition were not fulfilled.

Violation of PPRA rules resulted in irregular payment of Rs 60,952,165.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Authority stated that Chief Minister Punjab approved a summary and allocated separate funds for this inauguration & advertisement expenditure. This expenditure was not charged to project funds. The advertisement was processed by DGPR and payment was made on receipt of the bill from DGPR and there was no requirement of tendering. The Department also explained that clause 3.1 of General Condition of Contract allowed the contractor for assignment of contract or part thereof, with the consent of the employer.

Audit argued that the expenditure was neither approved in the TS estimates nor it was included in the scope of work of the contractor and the same was not covered under assignment agreement clause. Audit did not agree with the departmental stance and contended that as the expenditure exceeded the limit prescribed by PPRA, therefore, the same should have been incurred through open competitive bidding. Similarly a documentary costing Rs 2,985,000 was also got executed from M/s Protechtors Pvt. Ltd. without open tender.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early regularization from FD/PPRA Authorities as the expenditure was incurred in clear violation of the rules.

(Paras 165, 328)

4.2.1.14 Overpayment due to wrong calculations in rate analysis of pre-stressing strand wire – Rs 59.96 million

According to Standard Specification for steel strand, the conversion factor of Pre-stressing strand wire 12.50 mm or 0.50 inch dia was provided as 0.775 to calculate the weight of cable in kilogram per meter.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of item “*Pre-stressing wire strand 12.50 mm (0.50 inch) dia used in precast inverted T and I girders etc*” @ Rs 328,916.73 per ton of strands in estimates. Audit observed that the Authority had applied the wrong conversion factor of 0.785 kg/ per meter instead of 0.775 kg/per meter as provided in Table-1 of Standard specification for steel strand.

Application of wrong factor resulted in overpayment of Rs 4,999,607 to the contractor.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. During discussion Department stated that British Standards were applied instead of American Standards and further contended that in the rate analysis working was done for a length of 25 meter instead of 26 meter. Figure of 26 meter was typing error and actually (as per measurement sheet) 0.6 inch dia strand wire was used instead of 0.5 inch dia provided in BOQ/TS estimate.

Audit argued that the Department prepared rates analysis for 26 meter length (for item pre-stressing strand wire for 0.50 inch dia) whereas

the calculation was done for 25 meter. Audit brought it on record that as per measurement sheet/drawings 26 meters length pre-cast girders were executed and same was taken in rate analysis. Hence, accordingly in the rate analysis 26 meter instead of 25 meter length was correctly taken. Further, after applying the factor of 0.785 (weight of cable in kg per meter) as per British standard the rate works out to Rs 298,869 per ton instead of Rs 328,916.73 per ton approved by the department in the TS. Hence, excess rate of Rs 30,047.73 per ton was sanctioned by the department. After applying the correct conversion factor and British standard (as per departmental contention) the amount of the para was enhanced to Rs 59,956,459.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery of enhanced amount of the para.
(Para 53)

4.2.1.15 Overpayment due to allowing inadmissible short carriage – Rs 57.67 million

As per provisions of approved PC-I by ECNEC/PDWP, the Authority was required to adopt MRS, based on 2nd Bi Annual 2013, district Rawalpindi, according to which the composite rates for carriage of stone aggregate for sub-base and base course (item No. 1 under Chapter 01 (Carriage) of MRS), include loading and unloading of material from the conveyance and stacking as directed and cost of dumper/trucks were included in the composite rates.

Project Director Metro Bus Project RDA, Rawalpindi got approved the rate analysis of item “*Granular sub-base course and Water bound Macadam etc*” @ Rs 1,683.25 and Rs 2,220.99 per cu.m respectively in estimates. Audit observed that the Department applied MRS composite rate of carriage which is at site rate (includes cost of all types of transportation carted through dumpers/trucks etc) and additionally added the cost of dumper trucks and front end loaders. Therefore, the Department allowed double cost of carriage once from quarry to site of

work and then from dumping site to site of work, which resulted in loss to government in violation of criteria ibid.

Violation of ECNEC/PDWP directions and FD's instructions resulted in overpayment of Rs 57,671,018 due to allowing double cost of carriage (Annex-IX).

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that the equipment and machinery used in the laying of sub base and base course is different from that required to transport at site. The dumper trucks included in the composite rates pertain to the loading of material at quarry for delivery of material at site. The material being delivered to site is not directly laid, instead it is stockpiled at site to be readily available as and when required for available section of works. This stockpiling of material is essentially required to avoid any delay due to fast track nature of the project. The Department further argued that the rates were approved by competent authority and contractors were paid on their quoted rates.

Audit argued that the composite rates given in MRS are at site rates which include all types of carriages including short carriages. Any additional cost of transportation for dumping, stock piling and further shifting from stock yard to site of work is to be borne by the contractor.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery on account of allowing double carriage costs from the person(s) responsible.

(Paras 11, 17, 128, 129, 134, 135, 178, 179, 256, 264, 291, 292, 309, 341, 342, 350, 377, 381, 403, 404, 414)

4.2.1.16 Loss due to inclusion of 5% mega project allowance twice – Rs 57.31 million

As per Finance Department's Notification No.RO (TECH) FD.2-3/2004 dated 02.08.2004, 10% overhead charges may be added in addition

to 10% contractor's profit already allowed in rate analysis standardized by the Finance Department for the purpose of estimation. Further, 5% mega project allowance was admissible on project having cost more than Rs 200 million.

Project Director Metro Bus Project RDA, Rawalpindi got approved rates analysis for non-schedule items i.e. "*Steel structure A-36 for pedestrian bridges etc and P/L polyurethane Paint etc*" with inclusion of 29.16% on account of overheads and mega project allowance instead of admissible 25%. Audit observed that the excess rates of Rs 9.91 per kg and Rs 37.61 per sqm were sanctioned and paid due to inclusion of 5% mega project allowance two times, which resulted in loss to the government.

Violation of FD's instructions resulted in overpayment of Rs 57,314,832 (Annex-X).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that cost estimation was only for calculating the expected project cost but the contractors were paid at their quoted rates.

The explanation given by the Department was not relevant. Audit explained that only 25% (contractor's profit/overhead charges and mega project allowance) was admissible and further pointed out that due to inclusion of Mega Project Allowance twice the design consultant was also paid 2% in excess which was also required to be recovered along with overpayments to the contractors. Audit further argued that all the higher authorities like PDWP and ECNEC should not be involved in this case because the responsibility of preparation and sanctioning of correct rate analysis rests with the Superintending Engineer/Director as clarified by Chief Engineer (para No.2 of covering memo of TS estimate).

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery from contractors and design consultants on account of mega project allowance approved twice.

(Paras 166, 167, 168, 169, 170, 171, 172, 173, 174, 279, 330, 365, 387, 425)

4.2.1.17 Non-recovery of price de-escalation on diesel and bitumen from the contractors – Rs 55.75 million

As per Clause 70.1(vi) of Contract Agreement, the increase or decrease in the contract price subsequent to any increase or decrease in the cost of petroleum/bitumen, oil and lubricant products shall be calculated from the increase or decrease in the base prices.

Project Director Metro Bus Project RDA, Rawalpindi made payments to the contractors according to the work done. Audit observed that price of diesel and bitumen decreased during execution of work but in violation of criteria ibid the recoveries on account of de-escalation were not made/adjusted in last bills.

Violation of contractual obligation resulted in non-recovery of Rs 55,746,112. The detail is as under:

Para No	Name of Item	Base price	Current price	Difference	Percentage Below	Amount (Rs)
220	Diesel	Rs 116.75 per litre	Rs 85.05 per litre	Rs 31.70	27.15%	12,735,753
	Bitumen	Rs 83.96 per kg	Rs 61.376 per kg	Rs 22.584	26.90%	
270	Bitumen	Detail attached with para				779,480
259	Bitumen	Detail attached with para				10,209,640
*260	Diesel	Detail attached with para				32,021,239
Total						55,746,112

*The Department admitted recovery of Rs 69.00 million up to the last bill

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Authority admitted the recovery and claimed that the recovery had been verified by Audit. Audit, however, apprised the Committee that record relating to recovery was not got verified.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery and its verification.

(Paras 220, 259, 260, 270)

4.2.1.18 Overpayment due to extra labour in rate analysis of item Steel A-36 – Rs 52.15 million

As per para No. 6 of approved PC-I, the cost estimate is based on the Government of Punjab, Finance Department, District wise website input rates 2nd Bi-annual, 2013 for District Rawalpindi for schedule items whereas non-schedule items are based on prevailing market rates for material and labour with contractor's profit. Further, according to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

Project Director Metro Bus Project RDA, Rawalpindi got approved rates for item "*Steel structure A-36 for pedestrian bridge etc*" @ Rs 208.20 per kg instead of admissible rate @ Rs 193.50 per kg. Audit observed that in the rate analysis Department applied labour on excess weight of Steel A-36 than the actual weight used by the Department, which resulted in loss to the government.

This weak technical and managerial control resulted in overpayment of Rs 52,148,047 due to sanction of incorrect rate analysis (Annex-XI).

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. During the discussion the Department contended that observation regarding ACP sheet was not correct as in

calculation sheet the cost was not added in the total price. Audit agreed to that extent.

Audit pointed out that the rate analysis for steel structure A-36 was wrongly calculated. The Department applied incorrect labour. The labour was applied for 141,087 kg material whereas weight of material (steel) used was 100,527 kg. Hence extra labour was paid on 40,560 kg material (steel) which was not used in the item of work.

The Committee directed the Department to re-examine the rate analysis and present the para on the next day along with re-verified working. However, the Department did not present the fresh working again.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends correction of the wrong calculation (labour vis-a-vis weight of material) and effect recovery accordingly.

(Para 32, 39, 101, 103)

4.2.1.19 Overpayment due to inadmissible pre-heating charges of bitumen – Rs 47.24 million

As per Finance Department's clarification issued vide letter No. RO (Tech)FD 11-8/22013 dated 30th July, 2013 'no pre-heating charges for bitumen shall be paid separately as the same were already included in the material/input rates available on its website'.

Project Director Metro Bus Project RDA Rawalpindi, got approved the rate analysis of items “*Asphalt Base Course Plant etc and Asphalt wearing course etc*” in estimates of the work “Rawalpindi – Islamabad Metro Bus Project”. Audit observed that the Agency included additional pre-heating charges in the rate analysis, whereas, the same was already included in item rate of bitumen available on Finance Department’s website in violation of criteria *ibid*.

Violation of FD rules resulted in overpayment of Rs 47,239,224 (Annex-XII).

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that the estimates were approved by PDWP, CDWP and ECNEC after detailed scrutiny of PC-I and TSE by Chief Engineer. The Department claimed that the estimates were confidential and were not provided to the contractors and that the Engineer Incharge worked out the rate analysis as per actual site conditions and requirements before the award of work. The Department further stated that payments were made to the contractors at their quoted rates which were within approved cost estimates. The Department further argued that pre-heating was done in two stages before feeding it to the asphaltic mix. Firstly, the bitumen is heated to transport it from refinery to the plant and then to inject it into the aggregate. Therefore, pre-heating was justified.

Audit argued that as per laid down procedure and Para 2.58 of B&R Code, BOQ along with put to tender cost based on TSE is to be attached with the bidding documents. The bids are evaluated on the basis of approved TS estimates. The Department used FD’s template and allowed extra pre-heating charges which were inadmissible. Audit also pointed out that incorrect rates analysis / estimates were presented to the higher authorities for approval. As per para 6 of approved PC-I by PDWP and ECNEC, the responsibility of preparation and sanctioning of correct rate analysis/ estimates rests with the Superintending Engineer/Director as

also clarified by the Chief Engineer in para 2 of memo regarding TS estimates of MBS Rawalpindi-Islamabad Project. Audit also referred clarification of Finance Department dated 30.07.2013 that no pre-heating charges for bitumen shall be paid separately as the same was already included in the material/input rates available on its website. Therefore, allowing 2nd stage pre-heating charges was not admissible.

The Chair directed the Department to compare the rate by applying Finance Department input rates and using NHA template and place the working before SDAC the next day. However, the Department did not present the same before SDAC.

Contrary to the above discussion and decision, the chair settled the paras while signing the minutes.

Audit recommends early recovery on account of allowing extra pre-heating charges besides fixing responsibility against person(s) responsible.

(Paras 4, 7, 115, 116, 121, 122, 180, 184, 250, 252, 287, 288, 337, 338, 371, 373, 399, 400)

4.2.1.20 Overpayment due to allowing contractors profit / overheads on GST – Rs 38.43 million

According to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of different items on higher side by allowing 25% contractor profit and overhead charges on 17% GST, which resulted in loss to government.

Payment of profit / overheads on GST resulted in overpayment of Rs 38,426,932 (Annex-XIII).

The paras were discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The Department presented data regarding prices of cables / generators to which audit agreed. However, audit pointed out that contractors profit / overheads paid on GST were recoverable from the contractors. The Department did not agree with the contention of the audit as to the recovery of overheads paid on GST. After thorough discussion the Committee decided to seek clarification from FD.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends to seek early clarification from FD and effect recovery accordingly.

(Paras 1, 2, 21, 22, 23, 112, 113, 114, 237, 254, 281, 286, 304, 331, 356, 366, 375, 393, 398, 426)

4.2.1.21 Loss due to non-recovery of cost of old material of steel at estimated rates – Rs 20.13 million

As per specification No.513.1 of Particular Specifications/Special Provisions (Part of Agreement), the recovery on account of cost of dismantled material i.e. bricks, concrete steel reinforcement out of dismantled work will be as approved by the Engineer In-charge. Moreover, as per approved estimate, the Chief Engineer approved rate of old steel/scrap as Rs 35,000 per ton.

Audit observed that in the various contracts of “Rawalpindi – Islamabad Metro Bus Project”, the Authority got dismantled RCC and recovered the cost of old/scrape steel at the rates ranging from Rs 5,000 to Rs 25,000 per ton whereas the rate of old/scrape steel was approved/sanctioned @ Rs 35,000 per ton in PC-I/estimates. Therefore, less recovery of cost of old material resulted in loss to government.

Violation of the provisions of TSE/PC-1 resulted in loss of Rs 20,133,180. The detail is as under:

Para No.	Rate in TS (Rs per ton)	Rate applied (Rs per ton)	Difference (Rs per ton)	Quantity (ton)	Loss (Rs)
*136	35,000	1,000	34,000	101.91	3,566,850
79	35,000	10,000	25,000	72	1,800,000
35	35,000	10,000	25,000	36	900,000
336	35,000	5,000	30,000	425.081	12,752,430
*355	35,000	5,000	30,000	27.54	963,900
420	35,000	25,000	10,000	15	150,000
Total					20,133,180

*In para 136&355 Department did not effect recovery even at quoted rate of Rs 1000 & 5000 per ton

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that recovery of old steel was made as per rates quoted by the contractors.

Audit argued that in order to fetch maximum benefit the Department should have auctioned old material in the light of para-11 of Delegation of Financial Powers Rules or make recovery as per estimated rates as practiced in other government departments. Further, Audit also recommended that while making recovery on account of old material/scrape the Department should deduct Income Tax on gross value of work done before deducting/adjusting the cost of old material.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery from contractors at estimated rates.

(Paras 35, 79, 136, 355, 420)

4.2.1.22 Loss due to non-deduction of cost of less used bitumen – Rs 17.97 million

As per Finance Department's Notification No. RO (Tech) FD-2-3/2004, dated 02.08.2004, the payment of carpeting was to be made to the contractor as per Job Mix Formula (JMF) or actual bitumen used in the work.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of items "*Asphalt Base Course and Asphalt Wearing Course etc*" in estimates by using 3.40% and 4.2% bitumen respectively in the work "Rawalpindi – Islamabad Metro Bus Project". Audit observed that the Authority made payment at full rates i.e 3.4% and 4.2% bitumen to the contractors instead of actual rates on account of less use of bitumen in accordance with the Job Mix Formula and Bitumen Extraction Test Reports i.e. 3.2% and 4.1%.

Violation of FD's instructions and approved JMF resulted in overpayment of Rs 17,971,204 (Annex-XIV).

The paras were discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The Department contended that as the payments were made to the contractors on their quoted rates and not on estimated rates and further referred the specification No. 203.4.1 of contract agreement, according to which "the quantity of asphalt material used is included in the asphalt concrete mixture and will not be measured separately".

Audit argued that the contractor was paid with full rates (as per TSE) by taking bitumen as 4.2% and 3.4% whereas the contractor had actually used 4.1%, and 3.2% bitumen in item "P/L Asphalt Wearing Course" and "P/L Asphalt Base Course" respectively as per JMF and lab test reports. Audit further pointed out that $\pm 2\%$ tolerance limit was for the acceptability of quality of work and was not at all linked with payment which as per Finance Department's notification dated 02.08.2004 was required to be made as per actual bitumen used in the work.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends recovery of the overpaid amount of excess than actual bitumen used in the work.

(Paras 3, 6, 13, 97, 201, 280, 294, 322, 384, 406)

4.2.1.23 Overpayment due to allowing short carriage for non-BOQ Items RCC Pipes – Rs 12.66 million

As per para No. 6 of approved PC-I, the cost estimate is based on the Government of Punjab, Finance Department, District wise website input rates 2nd Bi-annual, 2013 for District Rawalpindi for schedule items whereas non-schedule items are based on prevailing market rates for material and labour with contractor's profit. Further, according to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

Project Director Metro Bus Project RDA, Rawalpindi got approved the rate analysis of non-BOQ item "*P/L RCC Sewer Pipe with different dia ranging from 36" to 72" dia etc*" on higher side. Audit observed that the Authority applied FD's 2nd Bi-annual 2013 input rates for items which were 'at site' rates and allowed inadmissible short carriage for shifting of RCC pipe from Yard to Site which resulted in loss to the government.

Weak technical and managerial control resulted in overpayment of Rs 12,662,281 due to sanction of incorrect rate analysis (Annex-XV).

The paras were discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The Department contended that correct input rates were applied in the rate analysis and short carriage for shifting of R.C.C pipe from yard to site was allowed because the work was executed

in the red zone of Islamabad. Therefore, the R.C.C pipes were stacked first in yard of company and then shifted to the place of laying, after completing the activity of excavation, as and when required.

As for contention of the Department that correct input rates were applied, Audit agreed with the Department. Regarding payment of short carriage, Audit argued that the input rates of FD were 'at site' rates and recovery to the extent of short carriage paid was to be effected.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends recovery to the extent of amount paid on account of short carriage.

(Paras 140, 141, 142, 143, 150, 151, 152, 153)

4.2.1.24 Loss due to inadmissible payment on account of loss of business allowance – Rs 9.69 million

As per Decision provided in Punjab Law Department 1991 Lahore in consequence of Section 23 of LAC Act 1894, the market value of land is normally to be taken as existing on the date of publication of the notification under Section 4(1) of the Land Acquisition Act 1894 and potential value of the property with the reference to price on which similar land was sold, could be taken into consideration. Where on account of losses claimed to be suffered by the land-owner on account of acquisition he was allowed additional compensation under Section 23(3)(b) of the Act, there was held, no justification to award any further special damages claimed by him in circumstances. Further, as per Military Estate Officer, Rawalpindi Cantt letter dated 29.01.2014 of property/survey no.143/278, land measuring 0.63 acres was being used for residential purposes.

The Land Acquisition Collector, RDA, Rawalpindi made the payment of Rs 9,687,440 to various affectees on account of loss of business allowance on acquisition of land against Property/Survey No.143/278 situated at Marrir Chowk for the Project "Rawalpindi –

Islamabad Metro Bus Project Rawalpindi” on the basis of award announced on 15.07.2014. The acquired land was the property of the Central/Federal Government and was leased out by Military Estate Officer, Rawalpindi to allottees on yearly rent basis. The Military Estate Officer confirmed in his letter and Extract from the General Land Register dated 29.01.2014 also showed that the land was being used for residential purposes. Hence, allottees were not entitled for compensation of site of business. Further, as per Survey of Ownership and Tenancy details of Land Acquired by the Committee, the land was being used as open areas. Therefore, on acquired land the business was not disturbed as only open space was acquired and original business must have been kept running at sites. Hence, due to non-shifting of business, the loss of business compensation was not admissible to affectees.

Violation of criteria resulted in loss of Rs 9,687,440 due to allowing payment not covered in loss of business.

The para was discussed in the SDAC meeting held on 29.08.2016 to 31.08.2016. The LAC RDA, explained that property was situated on Murree Road Rawalpindi and was being used for commercial purposes since long and accordingly payment was made on account of disturbance of business.

Audit argued that the properties (Survey No.143/278) were actually in the name of Central/Federal Government and were leased out by Military Estate Officer, Rawalpindi Cantt on yearly rent basis to the allottees for residential purposes but the LAC RDA Rawalpindi made payment on account of loss of business to private persons. Audit argued that lessees were using properties for Commercial purposes without any permission (illegally) in violation of agreement clause.

The Committee directed the Department to take up the matter with Military Estate Officer, Rawalpindi Cantt for confirmation of the actual status in the lease agreement and collection of commercialization fee. However, while signing the minutes, decision of the chair to settle the para is not understandable.

Audit recommends early compliance of the Committee’s directive as agreed upon during discussion.

(Para 223)

4.2.1.25 Overpayment due to sanction of higher rates of non-BOQ item, Granite tile – Rs 9.24 million

As per clause no.52.1 of Contract Agreement, all variations in addition to the contract price, shall be valued at the rates and prices set out in the contract if, in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable.

Project Director Metro Bus Project RDA Rawalpindi got executed an additional Non-BOQ item “Providing and laying 18 to 20 mm thick Cherry granite tile, local etc” and made payment to the contractor on higher side @ Rs 7,512.23 per square meter instead of actual rate of Rs 7,010.60 per square meter. Audit observed that the Authority increased the rates of granite tile from Rs 434 per sft to Rs 471 per sft by overwriting. Further, the rate approved and paid by the Authority in Package No.II of Rawalpindi portion to the Contractor M/s NLC was Rs 7010.60 per square meter. Hence, allowing excess rate @ Rs 501.63 per square meter resulted in overpayment to the contractor, which resulted in loss to the government.

Weak technical and managerial control resulted in overpayment for Rs 92,411,673. The detail is given below:

Para No	Package No	Rate approved	Rate to be approved	Diff	Qty paid	Overpayment
84	I (RWP)	Rs 7512.23	Rs 7010.60	Rs 501.63	3056.036 Sqm	1,532,999
21385	III (RWP)	Rs 10000	Rs 7010.60	Rs 2989.40	2466.11 Sqm	7,372,189
209	Control & Command	Rs 7512.23	Rs 7010.60	Rs 501.63	670.784 Sqm	336,485
Total:						9,241,673

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the PC-I was approved by ECNEC, PDWP and further stated that rate was approved by the Chief Engineer RDA @ Rs 7,512.23 per sqm and provisionally payment was made to the contractor @ Rs 7,010.60 per sqm.

Audit argued that the departmental plea that the PC-I was approved by ECNEC & PDWP, was not relevant, because it was a non-BOQ item. Audit also pointed that the Authority increased the rates of granite tile from Rs 434 per sft to Rs 471 per sft by overwriting. Further, the rate approved and paid by the Authority in other Package No.II of Rawalpindi portion to the Contractor M/s NLC was Rs 7,010.60 per square meter. Therefore, recovery needs to be effected from the contractor.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery on account of allowing extra rates by overwriting.

(Paras 84, 85, 209)

4.2.1.26 Overpayment due to application of incorrect input rates for non-BOQ item, bed run gravel – Rs 8.95 million

As per para No. 6 of approved PC-I, the cost estimate is based on the Government of Punjab, Finance Department, District wise website input rates 2nd Bi-annual, 2013 for District Rawalpindi for schedule items whereas non-schedule items are based on prevailing market rates for material and labour with contractor's profit. Further, according to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

Project Director Metro Bus Project RDA Rawalpindi, approved the rate analysis of item “*Nullah run bed material etc*” @ Rs 2,500 per cu.m in estimate of the work “Rawalpindi–Islamabad Metro Bus Project Rawalpindi part Package–1(Flashman hotel to Committee Chowk), Rawalpindi”. In the rate analysis, the Department took higher input rates than available on Finance Department’s website and also, the Authority allowed from longer distance quarry Khanpur Dam (Ternawa Nullah) which was 55 kilometer from the site instead of shorter distance Sowan quarry at 10 kilomter. In addition to that 1 dumper truck was allowed for 6 hours, for which rate was already included in composite rate of carriage as per MRS item no.1 of Chapter-1(Carriage), which resulted in loss to the Government.

Violation of PC-1/ECNEC instructions resulted in overpayment of Rs 8,954,842 as detailed below:

Sr. #	Rate Approved	Rate Admissible	Diff.	Quantity paid	Overpayment (Rs)
1	Rs 2500	Rs 777.64	Rs 972.36*	9209.39 Cu.m	8,954,842

*The difference of Rs 972.36 was due to reduction of approved rate to Rs 1750.

The para was discussed in the SDAC meeting held on 31.10.2016 and on 01 to 03.11.2016. The Department contended that the PC-I was approved by ECNEC, PDWP and further stated that Sowan quarry was not suitable for pit-run material. Regarding allowing of 1 dumper, the Department stated that material was shifted from quarry to stockpile and then carted from stockpile to site of work through dumper trucks, which was justified.

Audit argued that the departmental plea that the PC-I was approved by ECNEC, PDWP was not relevant as the matter pertained to a non-BOQ item. Audit further contended that the Authority had taken material (pit run/bed run gravel etc) from longer distance of 55 kilometers (from Khanpur Dam quarry) instead of shortest distance of 10 kilometers (from Sowan quarry). Audit also pointed out that Khanpur Dam (Ternawa

Nullah) was neither notified/approved by FD nor was it included in the approved quarries list of NHA. Audit further pointed out that the Department adopted composite rate/MRS rate but also allowed 1 dumper truck for 6 hours, for which rate was already included in composite rate of carriage as per MRS item no.1 of Chapter-1(Carriage) @ Rs 159 per cubic meter based on 2nd Bi-annual 2013 for District Rawalpindi. Audit clarified that as per NHA CSR (list of quarries) vide NHA Code 125 and 126 read with Finance Department Letter No.3588-3593, dated 22.08.2005, the Sowam quarry was fit for sub-base course/bed run gravel etc. Audit explained that allowing of dumper was not justified as all types of carriage related cost was included in the composite rate which was at site rate. Allowing the dumper cost in addition to composite rate resulted in double payment of carriage which cannot be justified. The item (pit run/bed run gravel) was a non-BOQ item meaning thereby that the same was not approved in original PC-I/TS estimate/agreement.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery on account of allowing extra lead and short carriage.

(Para 12)

4.2.1.27 Overpayment due to allowing higher quoted rate of non-BOQ item, Tuff tiles 80mm – Rs 7.69 million

As per Clause 52.1 of Contract Agreement, all variations in addition to the contract price, shall be valued at the rates and prices set out in the contract if, in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable.

Project Director Metro Bus Project RDA Rawalpindi got executed an additional non-BOQ item “*Providing and fixing of Tuff tile 80 mm thick etc*” and made payment to the contractor on higher side. Audit observed

that Department got executed non-BOQ item P/F tuff tile 80mm thick and made payment @ 1,850/sqm quoted by the contractor against 50 mm tuff tile. The rate quoted by the contractor for 50 mm tuff tile was disproportionately higher. The item rate 80 mm tuff tile was not provided in original BOQ/estimate/agreement and it was required to be approved being non-BOQ item and rate analysis were required to be prepared and sanctioned accordingly by Chief Engineer, RDA, Rawalpindi which comes to Rs 895.11/sqm. The detail is tabulated below:

(Amount in Rs)

S. No	Rate paid (Per sqm)	Admissible rate (Per sqm)	Difference (Per sqm)	Qty paid (sqm)	Overpayment
1	1850	895.11	954.89	8055.185	7,691,815

Weak technical and managerial controls resulted in overpayment of Rs 7,691,815.

The para was also discussed in SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that item “*Paving of tuff tile 50 mm etc*” was available in BOQ and contractor quoted the rate of Rs 1,850 per sqm and non-BOQ item P/Fixing of tuff tile 80 mm etc was not provided in BOQ/Estimate. Audit argued that Department got executed non-BOQ item P/F tuff tile 80 mm thick and made payment @ Rs 1,850 P.sqm quoted by the contractor against 50 mm tuff tile. The item 80 mm tuff tile was required to be prepared and sanctioned accordingly by Chief Engineer, RDA, Rawalpindi which comes to Rs 895.11/sqm. The Committee agreed with the viewpoint of audit and directed the Department to effect the recovery. The Department/Chief Engineer RDA also admitted to effect recovery as pointed out by Audit. While signing the minutes the Chair settled the para, which is not understandable.

Audit recommends early recovery as agreed upon during the meeting and admitted by the department.

(Para 162)

4.2.1.28 Less recovery of price de-escalation on diesel due to application of wrong base price – Rs 7.16 million

As per rule 2.33 of Punjab Financial Rules Volume-I, every government servant should realize fully and clearly that he will be held personally responsible for any loss sustained by government due to fraud or negligence on his part.

General Manager (Finance) Punjab Mass transit Authority Lahore made payment to Bus Service Provider M/s Platform A.S. on 31.07.2015 against invoice voucher no.1507-03-JVE0031 for Rs 143,436,601 for the period June 2015 on account of bus services rendered for Rawalpindi-Islamabad Metrobus Project. A clause regarding price adjustment, had been incorporated in Annexure-B of the agreement, according to which base price of fuel shall be of the day of start of operations. Whereas according to the other FIDIC agreements, the base price was always taken as on ‘the date 28 days prior to the last date of submission of tenders’ and in Punjab ‘the last day of submission of tenders’ is considered for base price. In this case the applicable date was 09.07.2014 and on this date the rate of diesel was Rs 109.34 per liter. On the contrary the Authority had taken the base price of Rs 87.12 per liter (as on the date of operation).

Faulty agreement resulted in less recovery of Rs 7,154,778 due to non-adjustment of price de-escalation. The detail is as under:

Sr. No.	Kilometers claimed	Rate applied (Rs/km)	Price adjustment Formula	Rate to be applied	Diff. (Rs/km)	Less Recovery (Rs)
1	404272	324.991	$\frac{109.34 - 87.12}{109.34} \times 100 \times 23.26 \times \frac{325}{10000} = \text{Rs } 15.360$	(Rs 325-15.360) Rs 309.640	15.351	6,205,979
2	61807	194.991	$\frac{109.34 - 87.12}{109.34} \times 100 \times 23.26 \times \frac{325}{10000} = \text{Rs } 15.360$	(Rs 195-15.360) Rs 179.64	15.351	948,799
Total						7,154,778

The matter was discussed in the SDAC meeting held on 28.11.2016. The Authority explained that in Rawalpindi-Islamabad Metrobus Project the same Agreement was followed which was adopted in Lahore Metrobus Project and due to variations in prices of POL a saving of Rs 73,853,733 was occurred by taking base price from the date of operation instead of rate pointed out by audit i.e. 28 days prior to tender opening dates.

Audit argued that the Authority did not recover even the price de-escalation in Lahore Metrobus Project in the light of Annexure-C of the Contract Agreement, which resulted in huge loss to the Government. Moreover, in the light of International FIDIC Agreement clauses and Government of the Punjab agreement, impact of both increase and decrease in rates of POL were applied for the purpose of price escalations during running payments.

The Committee directed the PMA to probe the matter in the light of international and national agreements along with provisions of Agreement clauses and submit report within 90 days, and also redress the issue in Lahore Metrobus Project as pointed out by audit and get the position verified from Audit. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends early recovery on account of price de-escalation from the contractor.

(Para 444)

4.2.1.29 Inadmissible payment of price escalation on steel – Rs 6.12 million

As per clause 70.1 (C) (IV) of contract agreement, “the increase or decrease in the Contract Price subsequent to any increase or decrease in the Basic Price for reinforcing and all other types of steel including high tensile wires shall be calculated from the difference between the Current Price and the Basic Price”. Further, Part-1 B(1) of Standard Procedure and Formula for price adjustment of March 2009 (Pakistan Engineering

Council) provides that each of the cost element, having cost impact of 5% or higher can be selected for adjustment.

Project Director Metro Bus Project RDA Rawalpindi awarded the work “Rawalpindi – Islamabad Metro Bus Project Rawalpindi portion Package – III (6th road to IJP Road), Rawalpindi” to the contractor during March 2014. Audit observed that the Authority calculated and paid price escalation of Rs 21,721,143 for steel. Escalation on steel was paid by taking cost elements having cost impact less than 5% (five percent). The base price of steel was Rs 82,290 per tons, which increased to Rs 82,790 per ton which was within the limit of 5%, but the Authority allowed escalation.

Violation of PEC instructions resulted in overpayment of Rs 21,721,143 due to allowing inadmissible price escalation.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that price escalation was only calculated on more than 5% increase in the steel price. After verification audit pointed out that actual recoverable amount works out to Rs 6,115,924. The Committee reduced the para to Rs 6,115,924 and directed the Department to effect the actual recovery.

However, contrary to the decision agreed upon in the meeting, the Chair settled the para unilaterally.

Audit recommends early recovery on account of allowing inadmissible price escalation.

(Para 37)

4.2.1.30 Non-recovery on account of cost of old material/malba from the affectees – Rs 4.83 million

As per as per para 29-1.9 of Section-29 (Dismantling) of Standards Specifications for execution of building works (Draft) Up-dated March 2006, all demolished materials shall be considered the property of

Government and shall be disposed of as directed by the Engineer-in-charge. The rate of an item shall always include the sorting out of any demolished material, its stacking anywhere within 300 feet of the place of demolition and its safe custody till it is handed over to the department in accordance with the directions of the Engineer Incharge.

The Land Acquisition Collector, RDA, Rawalpindi made payment to various affectees on account of compensation of old structures amounting to Rs 48,281,733 for the acquisition of Land for the Project. As per assessment report of District Officer, Buildings Division, Rawalpindi the cost of old structure/malba @ 10% of original cost of building structure was added in the formula but payment was made to the affectees by the LAC RDA Rawalpindi without recovery of cost of old material. Neither the recovery @ 10% was effected nor any old material was taken on stock register.

Weak administrative and managerial controls resulted in non-recovery of Rs 4,828,173 on account of cost of old material.

The para was discussed in the SDAC meeting held on 28.08.2016 to 31.08.2016. The Department contended that dismantled of buildings was done by the affectees and not by Engineering Directorate of RDA and no instructions regarding cost of old/dismantling building material was provided by Punjab Building (C&W) Department, Rawalpindi.

Audit argued that C&W Department made assessment of the cost of buildings structure by including 10% for malba but the same was not adjusted / recovered which was taken away by the affectees.

The Committee during discussion directed the Department to seek clarification regarding assessed cost of malba and its adjustment from District Officer, Buildings Division Rawalpindi and get it verified from Audit. However, while signing the minutes the chair settled the para unilaterally.

Audit recommends early recovery on account of cost of old material.

(Para 432)

4.2.1.31 Overpayment due to sanction of higher rate of non-BOQ item on the pretext of quoted rate provided in package-I (Rawalpindi portion) – Rs 4.23 million

As per clause 52.1 of contract agreement all variations and any additions to the contract price shall be valued at the rate and prices set out in the contract if, in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the contract shall be used as the basis for valuation so far as may be reasonable .

Project Director RDA Rawalpindi in the project “Rawalpindi Islamabad Metro Bus Project Package-I Islamabad (Faizabad to Peshawar More) approved the rate analysis of a non-BOQ item “*Supply and Installation of MS/steel louver Grill etc.*” on higher side. The Department approved a rate of Rs 315.75 per kg after deducting the rebate (9.78%) from a quoted rate (350 per kg) of another contractor (M/s ZKB) for another package-I Rawalpindi Portion. Audit pointed out that the Authority should have adopted a rate of Rs 245.70 per kg quoted by another contractor M/s Limak-Reliable (JV) in Package-III Rawalpindi portion (260 per kg – 5% rebate). The Department allowed extra rate of Rs 104.3 (350 – 245.7) per kg which resulted in loss to Government.

Weak managerial and financial controls resulted in overpayment of Rs 4,225,715 to the contractor.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that rate quoted at one package could not be compared or be taken as baseline for another package. It was further replied that Audit had calculated the rate of the item by taking wrong rebates of two different contractors and payment to contractors had been made as per approved rates by the Chief Engineer.

Audit argued that this was a Non-BOQ item which was not included in the scope of work for this package (Islamabad portion Package-I Faizabad to Peshawar Morr). However, the Department approved a rate of Rs 315.75 per kg after deducting the rebate (9.78%) from the quoted rate of Rs 350 per kg quoted by another contractor (M/s ZKB) for the Package-I Rawalpindi Portion. Audit pointed out that the Authority was required to approve the rate of Rs 245.70 per kg quoted by contractor M/s Limak-Reliable (JV) in Package-III Rawalpindi portion (260 per kg – 5% rebate). The Department allowed extra rate of Rs 104.3 (350 – 245.7) per kg.

During the meeting the Committee directed the Department to produce rate analysis for these packages indicated by audit for verification so that the actual position regarding higher sanctioning of the rate could be ascertained. However, while signing the minutes the chair settled the para unilaterally.

Audit recommends early recovery of overpaid amount from the contractor.

(Para 278)

4.2.1.32 Overpayment due to allowing higher than approved rates of Non-BOQ item, HDPE pipe 110 mm dia – Rs 3.66 million

As per clause No.52.1 of Contract Agreement, all variations in addition to the contract price, shall be valued at the rates and prices set out in the contract if, in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable.

Project Director Metro Bus Project RDA, Rawalpindi awarded the work “Rawalpindi – Islamabad Metro Bus Project Rawalpindi part Package – III (6th road to IJP Road), Rawalpindi” to a contractor during March 2014 for an agreement amount of Rs 3,500.879 Million. The

Authority got executed an additional non-BOQ item “*HDPE pipe PE-100 PN 12.50 (110 mm dia) without clamp etc*” and made payment to the contractor on higher side @ Rs 1,135.32 per meter instead of admissible rate @ Rs 818.29 per meter as approved by the Chief Engineer RDA, Rawalpindi. Hence, excess rate of Rs 317.03 per meter resulted in overpayment to the contractor.

Violation of contractual obligations resulted in overpayment of Rs 3,663,598.

The para was discussed in the SDAC meeting held on 29 to 31.08.2016. The Authority admitted the recovery and claimed that the recovery had been effected and has been verified by Audit. Audit, however, apprised the Committee that record relating to recovery was not got verified.

The Chair settled the para subject to verification of recovery. However, the Department did not turn up for verification till finalization of the report.

Audit recommends early recovery and its verification.

(Para 110)

4.2.1.33 Overpayment due to sanction of higher rate analysis of tuff tiles and kerb stone in horticulture work – Rs 3.07 million

According to the instructions issued by the Finance Department, vide No. RO(Tech)FD-18-23/2004 and RO(Tech)FD-2-3/2004, dated 21.09.2004 and 02.08.2004 respectively, rate analysis for the non-standardized items shall be prepared by the Executive Engineer/Deputy Director, clearly giving the specifications of the material used and approved by the competent authority not below the rank of Superintending Engineer/Director on the basis of input rate/MRS of relevant quarter. The

same will be placed on the departmental website and will also send a copy to Finance Department for scrutiny/standardization.

Director Engineering PHA, Rawalpindi got approved the rate analysis of item “*Providing and fixing precast PCC Tuff tile 60 mm coloured etc and kerb stone*” on higher side @ Rs 138 per sft and Rs 180 per rft respectively in estimate by allowing inadmissible loading/unloading charges and applying incorrect input rates of tuff tiles. Audit argued that for both tuff tiles and kerb stone, input rates are available in FD’s websites which are at site rates including loading / unloading charges. Further, in the light of FDs templates only 5% wastages was admissible but the Department applied 10% wastage in its rate analysis.

Weak technical and managerial controls resulted in overpayment of Rs 3,065,735 (Annex-XVI).

The para was discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that Input rates for construction of horticulture planters by using tuff tiles did not exist in the bi-annual 2014 hence, rates were obtained from the approved manufacturers available in the market. The Department also argued that the input rates comprised ex-factory rates only. Therefore, loading and unloading were also included in the rate analysis.

Audit argued that for both of the tuff tiles and kerb stone input rates were available in FD’s websites which are at site rates including loading / unloading charges. Further, in the light of FDs templates only 5% wastage was admissible rather than 10% applied by the Department in its rate analysis.

Contrary to above the Chair settled the para subject to verification of record by Audit. However, the Department did not turn up for any verification.

Audit recommends early recovery on account of allowing extra wastage and loading/un-loading.

(Para 233,234)

4.2.1.34 Overpayment due to sanction of higher rates than approved in the main mega project of Metro Bus Islamabad – Rs 2.77 million

According to the instructions issued by the Finance Department, vide No. RO(Tech)FD-18-23/2004 and RO(Tech)FD-2-3/2004, dated 21.09.2004 and 02.08.2004 respectively, rate analysis for the non-standardized items shall be prepared by the Executive Engineer/Deputy Director, clearly giving the specifications of the material used and approved by the competent authority not below the rank of Superintending Engineer/Director on the basis of input rate/MRS of relevant quarter. The same will be placed on the departmental website and will also send a copy to Finance Department for scrutiny/standardization.

Director (Water supply) WASA RDA Rawalpindi got approved an item "*Providing and laying of water supply MS pipe 24 inch dia etc* " @ Rs 14,000 per rft by taking incorrect rates in the work "Repair/replacement of old water supply line 24" dia at Murree road Rawalpindi". Audit observed that rate analysis for same specification was approved in Rawalpindi-Islamabad Metrobus project Package IV Islamabad @ Rs 12,764.15 per rft. Hence excess rate of Rs 1,235.85 per rft was allowed to contractor which resulted in a loss to the govt.

Weak managerial and technical controls resulted in overpayment of Rs 2,768,304.

The para was discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that specifications of MS pipe used by WASA RDA Rawalpindi were better than those used in Mega Project of MBS Islamabad and that the rate was approved by the Competent Authority.

Audit argued that in the rate analysis, the Authority rounded off the rates from Rs 13,924 to Rs 14,000 per rft which resulted in higher rates. Further the Department allowed 20% overhead charges on 17% GST. Regarding contentions of the Department that the specifications of MS

pipe were better than those used in Metrobus Mega Project Islamabad, no documentary evidence was produced to Audit for verification. The Committee had directed the Department to effect recovery on account of rounding off. As regards the payment of 20% overheads paid on GST the Committee directed to seek clarification from Finance Department as directed in other paras.

The Committee had further directed to produce/reconcile the record of specifications with Audit. However, while signing the minutes, the Chair settled the para unilaterally.

Audit recommends early recovery on account of allowing higher rates.

(Para 431)

4.2.1.35 Non-deduction of income tax on cost of old material – Rs 1.99 million

According to section 15 (i) (a) of Income Tax ordinance 2001 read with FBR letter No. WHT-Zone/9021504 dated 16.07.2014, income tax @ 7.50% was to be deducted from the payments made to contractor for work executed.

Project Director Metro Bus Project RDA Rawalpindi made payment to contractors without deduction of 7.50% Income Tax on cost of dismantled material recovered in the running bills in contravention of rules *ibid*. The detail is as under:

Sr. No.	Para Nos.	Name of Works	Amount of Recovery (Rs)
1	36	Package – III (6 th road to IJP Road), Rawalpindi	1,509,831
2	244	Construction of Bus Depot near Pashawar More at Islamabad	487,800
Total			1,997,631

Violation of Income Tax Ordinance resulted in non-recovery of income tax amounting to Rs 1,997,631.

The matter was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department admitted the recovery. The Committee settled the para based on admission of recovery by the department and its verification.

Audit recommends early recovery and its verification from Audit in compliance of Committee's directives.

(Paras 36, 244)

4.2.1.36 Overpayment due to sanction of higher rate of LED lights than approved in Metro Bus Project – Rs 1.98 million

According to the instructions issued by the Finance Department, vide No. RO(Tech)FD-18-23/2004 and RO(Tech)FD-2-3/2004, dated 21.09.2004 and 02.08.2004, rate analysis for the non-standardized items shall be prepared by the Executive Engineer/Deputy Director, clearly giving the specifications of the material used and approved by the competent authority not below the rank of Superintending Engineer/Director on the basis of input rate/MRS of relevant quarter and placed on their website and send a copy to Finance Department for scrutiny/standardization.

Director General RDA Rawalpindi got executed deposit work through Town Officer (I&S), TMA, Rawal Town, Rawalpindi and expenditure was charged to Metro Bus Project. The TMA got approved and allowed payment for item "Providing of LED light 90 Watt etc" for Rs 52,850 per number by taking higher quotation from market in the work "Removing of 236 electric poles and street lights on different roads of TMA Rawal Town". Audit observed that rate analysis for same specification was approved in mega project Rawalpindi-Islamabad Metrobus project for Rs 41,850 per number. Hence excess rate of

Rs 11,000 per number was allowed to the contractor, which resulted in huge loss to the govt. Further, the contractor removed 236 electric poles and replaced 180 Nos. bulbs with new ones. The Department neither took 180 old LED bulbs on stock nor made recovery from the contractor.

Weak managerial and technical controls resulted in overpayment of Rs 1,980,000.

The para was discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that the specification of LED lights 90 watt used by TMA Rawal Town Rawalpindi was different from those used in Mega Project of MBS Rawalpindi-Islamabad and rate was approved by the Competent Authority. Audit argued that the specification used in Mega Project of MBS Rawalpindi-Islamabad (M/s Philips) were richer and of higher standards than those (M/s HKB Co.) used by TMA. Further the Department allowed inadmissible 20% overhead charges on 17% GST.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery on account of allowing higher rates and allowing contractor profit on GST.

(Para 435)

4.2.1.37 Overpayment due to allowing 5% mega project allowance disallowed by ECNEC/CDWP – Rs 1.74 million

As per PC-1 approved by ECNEC in post CDWP meeting held on 31.10.2014 related to Construction of Bus Depot for Rawalpindi – Islamabad Metro Bus Project, at Islamabad, the mega project allowance 4.16% was not allowed on all items.

Project Director Metro Bus Project RDA, Rawalpindi awarded the work “Construction of Bus Depot near Peshawar More at Islamabad” to

the contractor on 06.11.2014 for agreement value of Rs 1,125.51 million. The Authority got approved the rate analysis by allowing 5% mega project allowance on items “P/L Polyurethane paint etc and Steel structure A-36 etc” in violation of approved PC-I instructions. Thus due to allowing inadmissible mega project allowance, the contractor was allowed excess payment, which was a loss to the Government.

Violation of ECNEC/CDWP directions resulted in overpayment of Rs 1,737,958 by allowing inadmissible mega project allowance. The detail is as under:

Para No	Item Name and specification	Rate approved with 25% overheads (Rs/sqm)	Rate admissible with 20% (Rs/sqm)	Excess Rate (Rs/sqm)	Qty paid (sqm)	Overpayment (in Rs)
216	P/L Polyurethane paint etc	800.64	780.34	20.30	26271.307 sqm	533,308
217	Steel structure A-36 for Bus Depot etc (Item No.413(a))	186.90	184.21	2.69	447825.471 kg	1,204,650
Total						1,737,958

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that cost estimation was only for calculating the expected project cost but the contractors were paid at their quoted rates.

The explanation given by the Department was not relevant. Audit pointed out that in approved PC-I by ECNEC in post CDWP meeting held on 31.10.2014 related to work construction of Bus Depot at Islamabad, 5% Mega Project Allowance was disallowed but Department allowed 5% Mega Project Allowance in TS estimates and accordingly payment was made to the contractor.

The Committee upheld the viewpoint of audit during the meeting and directed the Department to effect the recovery at the earliest. However, while signing the minutes the Chair settled the paras unilaterally.

Audit recommends recovery as directed/decided by the Committee during the meeting besides fixing responsibility for violation of ECNEC instructions.

(Paras 216, 217)

4.2.1.38 Overpayment due to sanction of higher rate analysis of tuff tiles on drain slab – Rs 1.60 million

As per para No. 6 of approved PC-I, the cost estimate is based on the Government of Punjab, Finance Department, District wise website input rates 2nd Bi-annual, 2013 for District Rawalpindi for schedule items whereas non-schedule items are based on prevailing market rates for material and labour with contractor's profit. Further, according to para No.2 of covering memo regarding TS estimate, the Chief Engineer clarified that (approval of) the TS estimate does not confer any approval to the payment of rates provided in the estimate and the same were subject to observance of strict financial regulations and codal formalities by the competent authority (Director/Superintending Engineer) for making the payment for different items of works included in it.

Project Director Metro Bus Project RDA Rawalpindi, got approved the rate analysis of item "*SP-614(i) Paving/tuff tiles over drain slab and compacted soil etc*" on higher side @ Rs 808.89 and Rs 817.93 per square meter in estimates. Audit observed that excess rate of item was sanctioned by taking incorrect input rates of tuff tile @ Rs 441.15 instead of admissible rate @ Rs 419.79 per square meter as per item No. OD-1 of

material rates based on 2nd Bi-annual 2013, Rawalpindi, which resulted in loss to the government. The detail is as under:

Para No	Package No	Name of Items	Rate approved (Rs/sqm)	Rate admissible (Rs/sqm)	Diff. (Rs/sqm)	Qty paid (sqm)	Amount (Rs)
65	III (RWP)	SP-614(i) Paving/tuff tiles over drain slab etc	808.89	783.23	25.66	17025.832	436,883
66	III (RWP)	SP-614(ii) Paving/tuff tiles over compacted soil etc	817.93	792.23	25.70	8055.185	207,018
69	I (RWP)	SP-614(i) Paving/tuff tiles over drain slab etc	808.89	783.23	25.66	11508.421	295,306
70	I (RWP)	SP-614(ii) Paving/tuff tiles over compacted soil etc	817.93	792.23	25.70	11890.60	305,588
73	II (RWP)	SP-614(i) Paving/tuff tiles over drain slab etc	808.89	783.23	25.66	9991.179	256,374
74	II (RWP)	SP-614(ii) Paving/tuff tiles over compacted soil etc	817.93	792.23	25.70	3921.672	100,787
Total							1,601,956

Violation of ECNEC/PDWP directions resulted in overpayment of Rs 1,601,956 due to sanction of incorrect rate analysis.

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that only red tuff tiles were used on drain slab and compacted soil, therefore, question of recovery doesn't arise. However, audit did not agree with the contention of the Department and stated that mostly grey color tuff tiles were used at sites. The Committee decided to carry out joint verification by a Committee comprising one representative each from Audit, RDA and C&W Department.

However, contrary to the decision agreed upon in the meeting, the Chair settled the paras subject to site verification. Audit contended that without findings of the site verification by Committee, the fate of the paras cannot be ascertained.

Audit recommends early site verifications and recoveries, if due.

(Paras 65, 66, 69, 70, 73, 74)

4.2.1.39 Overpayment due to sanction of higher rates of non-BOQ item, excavation in foundation 10 to 15 feet depth – Rs 1.23 million

As per provision of PC-I, the Authority was required to sanction and pay the rate of cost of disposal of earthwork from foundation as per item No. 17 under Chapter 03 (Earthwork) of MRS, based on 1st Bi Annual 2014, district Rawalpindi, as adopted by the Authority, the rates include loading and unloading of material from the conveyance and stacking as directed and cost of dumper/trucks were included in the composite rates.

Project Director Metro Bus Project RDA Rawalpindi awarded the work “Construction of Multi-Storey Building for PMA Control and Command Center near Flashman Hotel, Rawalpindi” to the contractor. The Authority got approved rate analysis of non-BOQ item of work “*Earthwork excavation in foundation and other structure and refilling around structure in 10 to 15 feet depth etc*” on higher side by including inadmissible excess cost of Rs 244.80 per cu.m. Higher rate was sanctioned as the Department adopted composite rate/MRS rate with 100 ft lead and allowed additional 7 km lead as non-BOQ item. The Department also allowed 6 dumper truck for 6.25 hours, for which rate was already included in composite rate of MRS based on 1st Bi-annual 2014 for District Rawalpindi. This resulted in loss to Government, the detail of which is as under:

Para No	Name of items	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (cu.m)	Overpayment (Rs)
212	Earthwork excavation in foundation and other structure and refilling around structure in 10 to 15 feet depth etc	581.77	336.97	244.80	2311.051	565,745
213	Earthwork excavation in foundation and other structure and refilling around structure in 5 to 10 feet depth etc	575.07	330.25	244.80	2719.460	665,724
	Total					1,231,469

Violation of FD's instructions resulted in overpayment of Rs 1,231,469 due to sanction of incorrect rates analysis.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that PC-1 was approved by ECNEC/PDWP and further stated that induction of dumpers was due to complex nature of the project and sensitive geographical location.

Audit argued that the departmental plea that the PC-I was approved by ECNEC, PDWP was not relevant. The item (excavation in foundation) was a non-BOQ item meaning thereby the same was not approved in the original PC-I/TS estimate/agreement. The Department adopted composite rate/MRS rate with 100 ft lead and allowed additional 7 km lead as non-BOQ item. The Department allowed 6 dumper trucks for 6.25 hours, for which rate was already included in composite rate of MRS. Therefore, allowing of dumper was not justified as all types of carriage related cost were included in the composite rates which are at site rates. By allowing the dumper cost in addition to composite rate resulted in double payment of carriage.

The chair referred the case to FD for clarification despite there was no ambiguity that MRS rates are at sites rates (inclusive of all types of transportation/carriage).

Audit recommends early recovery on account of allowing higher rates.

(Paras 212, 213)

4.2.1.40 Overpayment due to application of higher equipment rates than available on FD's website and inadmissible short carriage – Rs 1.23 million

As per para No. 6 of approved PC-1, for Construction of Rawalpindi – Islamabad Metro Bus Project, Rawalpindi, the Authority was required to prepare rate analysis in the estimates on the basis of input

rates displayed on Finance Department’s website for 2nd Bi-Annual 2013 for District Rawalpindi and prevailing market rates including lead/carriages etc.

Project Director Metro Bus Project RDA Rawalpindi got approved the rate analysis of non-BOQ items “Replacement of old MS pipe of water supply line with different dia ranging 16 to 32 inch etc” on higher side in the estimates by taking incorrect equipment rates of Tractor Trolley @ Rs 1,085.92 per hour instead of actual rate @ Rs 728 per hour as per item No.EQ-19 of Equipment rates based on 2nd Bi-annual 2013, Rawalpindi. Further, inadmissible cost (on account of shifting of MS pipes) of Trailer Low Bed @ Rs 3,805 per hours in addition to cost of Tractor Trolley was allowed to the contractor. Therefore, excess rate was allowed to the contractor, which resulted in loss to the government.

Violation of ECNEC/PDWP directions resulted in overpayment of Rs 1,228,816 due to sanction of incorrect rate analysis. The detail is as under:

Para No	Package No	Name of Items	Rate approved (Rs/)	Rate admissible (Rs)	Diff.	Qty paid (RM)	Amount overpaid (Rs)
145	V (ISB)	“Replacement of old MS pipe of water supply line 32 inch dia etc”	58,557.30	57,714.30	843	280	236,040
146	V (ISB)	“Replacement of old MS pipe of water supply line 30 inch dia etc”	52,343.56	51,500.56	843	514.480	433,707
147	V (ISB)	“Replacement of old MS pipe of water supply line 24 inch dia etc”	41,879.17	41,036.17	843	97.530	82,218
148	V (ISB)	“Replacement of old MS pipe of water supply line 18 inch dia etc”	36,686.87	35,843.87	843	492.520	415,194
149	V (ISB)	“Replacement of old MS pipe of water supply line 16 inch dia etc”	28,933.52	28,090.52	843	73.140	61,657
Total							1,228,816

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. The Department contended that Red Zone in Islamabad was most restricted area of Capital and the D-Chowk was the busiest point of Red Zone. The activity “Replacement of old MS pipe of water supply

line” was executed at D-Chowk. For security reasons the skilled/unskilled labour including tools/plants were shifted at the place of work by means of Pickup. Accordingly rate of Pickup was taken from NHA input rate @ Rs 1,085.92 per hours (Code No.3044) as it was not available in input rates of Machinery of MRS. The Department contended that due to clerical mistake tractor trolley was written instead of Pickup. Further, cost on account of shifting of MS pipes by Trailer low bed @ Rs 3,805 per hours was also allowed as existing old water supply line was first removed from site to yard of company by means of tractor trolley and then shifted to store of CDA by means of Trailer Low Bed, therefore, no excess payment was made to the Contractors.

Audit argued that the Department applied incorrect equipment rates of Tractor Trolley @ Rs 1,085.92 instead of actual rates of Rs 728 per hours as per Finance Department’s equipment rates (at Sr. No. EQ-19 based on 2nd Bi-annual 2013 Rawalpindi). And further inadmissible short carriage for shifting of MS pipes from yard to site of works was allowed to the contractors. Audit clarified that the Authority applied market rates of MS pipes which are always at site rates. Therefore, additional short carriage was not admissible.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends recovery on account of allowing short carriage from the person(s) at fault.

(Paras 145, 146, 147, 148, 149)

4.2.1.41 Overpayment due to sanction of higher rate analysis of RCC Concrete-in-situ in columns/beams – Rs 1.00 million

As per clause No. 52.1 of Contract Agreement, all variations in addition to the contract price shall be valued at the rates and prices set out in the contract if, in the opinion of the Engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to

the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable.

Project Director Metro Bus Project RDA Rawalpindi awarded the work “Construction of Multi-Storey Building for PMA Control and Command Center near Flashman Hotel, Rawalpindi” to the contractor. The Authority got approved a non-BOQ item “*Providing and laying reinforced cement concrete class A2 (4000 psi, 1:1.50:3) in situ for columns, beams slabs etc*” on higher side @ Rs 12,315 per cubic meter in estimate. Audit observed that the Authority applied unusual and abnormally higher number of hours for machinery and also for transit mixer which resulted in inflated rates/estimates that causes a loss to government.

Weak technical and managerial controls resulted in overpayment of Rs 1,000,519 due to sanction of incorrect rate analysis.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that item with these specifications was not available on MRS and was separately approved on Engineer based Estimate by the Chief Engineer RDA as non-BOQ.

Audit argued that the contention of the Department was not correct. The same item was available on MRS (item No. 6(a)(i)(2) RCC 4000 psi (1:1.5:3). Audit further pointed out that the Department used the same MRS item in other RCC works for Slab and Raft/foundation. In this case the Department used NHA template and allowed extra hours for the machinery/ equipment. The project was approved on the basis of MRS instead of Engineer base rate analysis and in MRS the rate for the same item was available for Rs 10,661.35 per cubic meter but Department got approved non-BOQ @ Rs 12,315 per cubic meter and payment was accordingly released to the contractor.

Contrary to above discussion, the Chair settled the paras unilaterally without considering the facts that the same item was available on MRS.

Audit recommends early recovery on account of allowing higher rates of non-BOQ item instead of MRS rates.

(Para 211)

4.3 Procurement and Contract Management

4.3.1 The issues relating to the procurement and contract management involving an amount of Rs 516.52 million, observed during the audit, were as under:

4.3.1.1 Irregular procurement and non-reduction in rate due to supply of below specification escalators – Rs 314.31 million

As per agreement/ bidding documents the contractor was required to supply escalators as per specifications/provisions for escalator works (Para 3 of Section-II of Special Provisions for Escalator Works read with para 7 of Section-II of Technical Provisions for Escalator Works “*Heavy duty VVVF inclined moving escalators with 30 years life with fully outdoor/exposed type escalator*” shall be furnished in conformity with latest standards/code editions with British Standards/European Norms-BS/EN-13015:2008 version) along with “*Automatic control i.e. Automatic (stand alone) with LCD display of all parameters for Control/Monitoring – individual control, station control, remote monitoring and control of all stations at one location etc on escalators*” as per American Public Transport Association (APTA) in compliance with ASME and EN115 by using steel made of SS 316 in balustrades and cladding work of escalators.

The Project Director RDA UD-Wing, Rawalpindi got installed Escalators at MTS stations from M/s Merin Pvt. Ltd. at a cost of Rs 829.200 million. The escalators were of lower specification but rates were paid for the escalator with rich specification indicated in the contract document. Audit pointed out that in the contract document weather exposed/out-door heavy duty public transport escalators were to be installed. The contractor installed Model 9300AE which is semi outdoor/covered-outdoor with F-type handrail profiles (which are used in indoor escalators) design-F balustrade/cladding made of SS304. As per

contract agreement the compatible model was 9700AE Schindler with design-I balustrade, cladding made of SS316 which is fully outdoor/weather exposed. Audit further pointed out that the Department made payment for installation of DBs and RMCS but the same were not installed at the time of Audit.

Violation of contractual obligations resulted in non-reduction of Rs 314,311,998 from the price of escalators on account of their below-specification.

The paras were discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department explained that the product was as per EN115 standards and ASME/APTA standards were not applicable in this project. The Department contented that the model 9300AE (Schindler), and F-type handrail profiles meets the requirements of heavy duty public transportation escalators and cladding made of SS304 used was up to the required specification given in the agreement. And model 9300AE with Design-F balustrade was customized with stainless steel to meet with the requirements of outdoor/weather exposed escalators. As for non-installation of DB's and RMCS the Department stated that the work was still under process.

Audit argued that the model 9300AE does not fulfill the requirements of heavy duty escalators as site commissioning report duly verified/endorsed by M/s NESPAK clearly indicated that model 9300AE was covered outdoor/semi outdoor rather than fully weather exposed/fully outdoor. The same model was installed by the same contractor (M/s Merin Pvt. Ltd) in Lahore Metrobus Project during the year 2013 which was also brought under observation by audit in its project audit report on Metro Bus Project.

Audit explained that the claim of the Department regarding EN115 standards which define safety requirements was not challenged. However, as regards the departmental claim of non-applicability of ASME/APTA standards in this project, Audit referred to para No.2 and 5.7 for special/technical provisions/ contract documents, which bound the

contractor to install the escalators as per requirement of American Public Transport Association which are in line with ASME. American Public Transport Association (Sr. No.2.2.3 and 2.3.1) explains the requirements of safety devices for escalators works. According to these standards the panels/ backing panels required to be non-combustible and of minimum 3 mm solid type SS316 stainless steel. But in the escalators installed stainless steel SS304 was used. Audit pointed out that the strength and resistance to corrosion, fire and heat of SS316 was far more than SS304. Further, the cost of SS316 was also higher than SS304 but the cost was not reduced by the Department accordingly. Audit pointed out that this was clear violation of Rule 31 of PPRA Rules 2009 which prohibits the bidder to alter or modify his bid after the bids have been opened. As for installation of DB's and RMCS (i.e. Automatic control i.e. Automatic (standalone) with LCD display of all parameters for control/ monitoring-individual control + station control+ Remote monitoring and control of all stations at one location etc on escalators) Audit brought it on record that the contractor could not complete his scope of work within timeline provided in the letter of acceptance. At the time of Audit the contractor had not installed Distribution Boards and RMCS although the given timelines had elapsed. During the meeting the Department stated that installation of DBs and RMCS was under process. The contractor was liable to be penalized as per agreement but the Department did not invoke the penalty clause of the agreement.

The Chair settled the paras unilaterally although during the discussion all the parties including the Chair agreed upon third party evaluation regarding specification of installed escalators vis-a-vis contract agreement.

Audit recommends third party evaluation to certify that the model installed i.e. 9300AE was a Heavy Duty Outdoor Public Transport Escalator as per EN standards otherwise recovery be effected accordingly.

(Paras 227, 228, 229)

4.3.1.2 Irregular award of works without open tender under the umbrella of assignment agreement – Rs 111.89 million

As per para 9 of PPRA Rules 2009, with the prior approval of the Government of the Punjab, a procuring agency shall announce in an appropriate manner all proposed procurements for each financial year and shall proceed accordingly without any splitting or regrouping of the procurements so planned. The annual requirements thus determined would be advertised in advance on the PPRA's website as well as on the website of the procuring agency in case the procuring agency has its own website.

On examination of accounts record of "Rawalpindi-Islamabad Metro Bus Project", it was observed that a huge payment was made to different contractors in the name of assignment agreement of Package-III Rawalpindi portion without open advertisements. Further, for this expenditure there was no provision either in PC-1/TS Estimate or in the agreement of original contractor.

Violation of PPRA Rules and contractual obligations resulted in irregular expenditure of Rs 111,885,049.

The para was discussed in SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the Clause 3.1 of General Condition of Contract, allowed the contractor for assignment of contract or part thereof, with the consent of the employer. The contractor executed various assignment agreements with the approval of the Chief Engineer for the works which he thought could hinder his scheduled progress of original work or specialized work for which he had no such experience. The assignment agreements were executed on the same rates (including rebate) as per agreement with the original contractor and there was no loss to Government.

Audit argued that awarding of these works in the name of assignment agreement to other contractors was not covered under the clause related to assignment agreement as these works were not included in this scope of work/agreement. These works were non-BOQ items which

were not provided in the original agreement/PC-I/estimates. The contracts were awarded by the Chief Engineer without any tendering process required under PPRA Rules 2009. The Department even could not produce PEC registration/enlistment categories of the contractors who were awarded these contracts without tendering in the name of assignment agreements.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends condonation from Competent Authority besides fixing responsibility against person(s) responsible for violation of PPRA rules.

(Para 236)

4.3.1.3 Loss to the Authority due to provision of higher rates of income tax – Rs 46.18 million

As per rule 2.10 of Punjab Financial Rules Volume-I, every public officer is expected to exercise the same vigilance in respect of expenditure from government funds as a person of ordinary prudence would exercise while incurring expenditure from his own money.

The Authority made provision of 35% income tax in the approved reserve price calculation for operational cost of Rs 325 per kilometer for each bus for Metrobus Operations in Rawalpindi-Islamabad. Audit observed that the Authority made provision of income tax i.e. 35% but while making payment to the contractor M/s Platform only 2% income tax was deducted from the contractor's bills, which resulted in loss to the Authority.

Weak financial controls resulted in loss of Rs 46,179,915.

The matter was also discussed in the SDAC meeting held on 28.11.2016. The Authority explained that Tax Consultant of the bus service provider, M/s Platform has been paying tax at the prevailing

corporate tax rate i.e. 34% at the time of its Annual Income Tax Assessment. The Authority has also verified the same from the bus service provider's tax returns. Audit argued that no return was produced to Audit during verification process.

The Committee directed the Authority to produce Tax Return and Certificate from FBR that the Contractor is paying 34% taxes and get it verified from Audit within 60 days. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends early provision of certificate from FBR regarding deposit of 34% taxes and its verification from Audit.

(Para 440)

4.3.1.4 Non-recovery due to supply of sub-standard equipment of LCD Video Wall – Rs 37.89 million

At Sr. No.1 at Page 101 of Request for Proposal (Part of Contract Agreement) the technical description of Video Wall is provided against which the contractor quoted his rates in Financial Proposal at Sr.No.12 with investment/rate of Rs 171,893,424, the LCD/Video wall (48 numbers) should be of DID technology with back LED light with display colors/color capability of 10 bits-1.07 billion colors, VGA spate synch DSUB-15P in/out, DVI single link VI-D in/out with HDCP, HDMI Type A with HDCP (out via DVI) etc.

The General Manager, Punjab Metrobus Authority, Lahore made payment with full rates of Rs 12,630,691 per month with effect from June, 2015 to March 2016 to the contractor M/s Interactive Convergence Pvt Ltd. The technical description of the LCD/Video wall supplied by the contractor revealed that Model LW-5588 SR IA/LW-5588 SR CA / SB-55L with color capability of 8 bits – 16.77 million true colors were installed at PMA Command and Control Center Rawalpindi-Islamabad Metro Bus Project. The contractor was required to supply the LCD/Video Wall in the light of Contract Agreement DID technology with back LED light with display colors/color capability of 10 bits-1.07 billion colors etc.

As per DELTA Brochure available on website revealed that Model No. LW-5588 SR IA/LW-5588 SR CA / SB-55L had the color capability of 8 bits – 16.77 million true colors. This was not what was specified. As per Contract Agreement/RFP 10-bits-1.07 billion colors capability LCD was required. Since payment was made for top quality product, the best possible product complying to the requirement laid out in the RFP/Agreement should have been provided. During evaluation of Bid the other competitor M/s Inbox Technologies Pvt Ltd was disqualified in technical bid, because he offered 8 bits-16.77 million colors display LCD. The Authority purchased the LCD of same lower specification from M/s Interactive Convergence Pvt Ltd. However, the Authority did not reduce the price of LCD/Video Wall while making payment to the supplier/contractor due to supply of below-specification equipment.

Violation of contractual obligations resulted in non-reduction in rate at least by 30% i.e. Rs 37,892,070, in view of the difference in rate in the market, on account of their below-specification equipment. The detail is given below:

Sr. No.	Name of contractor	Contract Agreement amount	No. of LCDs	Cost of recovery (30%) per month (Payment period 6/15 to 3/2016)
1	M/s Interactive Convergence Pvt. Ltd.	Rs 12,630,691x72 months= Rs 909,409,752	48	Rs 12,630,691x30%= Rs 3,789,207x10 months= Rs 37,892,070

The matter was discussed in the SDAC meeting held on 28.11.2016. The Authority explained that after pointing out by Audit the investigation of the matter is under process and detailed response would be given soon.

The Committee directed the Authority to expedite the matter and submit investigation report to Audit within 60 days. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends recovery from the person (s) responsible besides fixing responsibility against concerned officers/officials.

(Para 438)

4.3.1.5 Non-recovery of cost of electricity bills from contractors – Rs 3.45 million

As per clause 19.40 of the Contract Agreement, the contractor shall at his own cost, provide and maintain such good and sufficient light as will enable the work to proceed satisfactorily and without danger. The approaches to the site and the works where the night-work is being carried out shall be sufficiently lighted.

During the execution of work “Rawalpindi Islamabad Metro Bus Project Package I, II & III Rawalpindi Portion and Packages I, II, III, IV & V of Islamabad portion electricity was being used by the contractors before the start of operation and amount of electricity bill for 24 stations was worked out Rs 3,453,323. The Authority did not recover the cost of electricity bills from the contractors, instead, deposited the amount from Authority’s Account, which resulted in a loss to the Government.

Weak managerial and financial controls resulted in non-recovery of Rs 3,453,323 from the contractors.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the electricity bills pertained to the period between handing over of the stations to RDA and start of operations and electricity for the period was not consumed by the contractors. Audit did not agree with the contention of the Department and referred to PMA letter No.PMA-PMDS-OPS-RDA/087 dated 15.02.2016 wherein PMA authorities acknowledged receipt of Rs 541,625 from the RDA against Islamabad Package-IV & V on account of the electricity used by the contractors before the start of operations and requested RDA to recover the outstanding amount of Rs 2,911,698 from the contractors. The PMA also had referred a number of its letter starting from July 2015 onwards requesting the same to the RDA.

Audit argued that in the wake of above referred letter of PMA there was no ambiguity that an amount of Rs 2,911,698 was still recoverable from the contractors. As regard recovery of Rs 541,625 as

acknowledged by PMA the same was also not got verified from Audit. Audit further argued that instead of denying the viewpoint of audit without any documentary evidence the same should have been sorted out with the PMA authorities.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends recovery/settlement of outstanding bills against the contractors.

(Para 164)

4.3.1.6 Non-recovery of occupancy cost of office from Bus Services Provider – Rs 2.80 million

As per clause 6.2.40 of the contract agreement made with M/s Platform, the Punjab Metrobus Authority, Lahore was required to provide only corridor for washing of buses and minor repair shed to the contractor.

Examination of PC-I of Metro Bus Depot Rawalpindi-Islamabad Project revealed that Authority paid cost of Rs 1,125.509 million (agreement cost) on the construction of Metro Bus Depot Rawalpindi-Islamabad in which offices for Punjab Masstransit Authority (PMA) were constructed under head “Admn/Office Block”. The PMA handed over these offices to the contractor M/s Platform, free of cost. Whereas the Authority had accommodated its offices in PMA Command & Control Center, Rawalpindi instead of shifting offices to the building at Bus Depot, meant for the purpose.

Violation of contractual obligations resulted in non-recovery of rent of Rs 2,800,000. The detail is tabulated below:

Sr. No	Period of Rent	Nos of Months	Amount per Month	Recovery
1	March 2015 to April 2016	14 Months	Rs 200,000 Approx	Rs 2,800,000

The matter was discussed in the SDAC meeting held on 28.11.2016. The Authority explained that the area was meant to be used by the bus service provider to control bus operations, a task that is specifically meant for the service provider. PMA who must give bus schedules, monitor them and make payments according to SLA was not the end-user of this covered area. It was further clarified that the administration building constructed inside the bus depot under a separate PC-1 was a limited structure meant to be used by the bus operator for managing Metrobus operations, i.e. Bus Schedules, Trips, Repair & Maintenance activities etc. The bus depot was provided to M/s Platform A.S. under the Clause 6.1.7 of the Contract being a contractual obligation on the part of PMA.

Audit argued that as per clause 6.1.7 read with 6.2.4.0 of contract agreement the Authority was to provide only depot/space for parking of vehicle with washing area and minor repairs shed and for any additional facility, the Authority was to execute a supplementary agreement with the contractor. Hence, rent was required to be recovered from the contractor.

The Committee directed the Authority to produce the supplementary agreement along with PC-1 and Drawings of Bus Depot for verification from Audit within 90 days. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends recovery from the person (s) responsible besides fixing responsibility against concerned officers/officials.

(Para 437)

4.3.1.7 Incorrect financial analysis

According to the feasibility study of Rawalpindi-Islamabad Metro Bus Project and the PC-I, benefit/cost ratio of the project was calculated as

2.74:1. Further, the Economic Internal Rate of Return (EIRR) was calculated as 26.15% and 21.07% for Rawalpindi and Islamabad portion respectively meaning thereby that the project would recover its capital cost in approximately 4 years.

As per Trial Balance on 30.04.2016 since inception/operation of metro bus (i.e. 04.06.2015), the total expenditure on account of hiring of 65 buses, cleaning charges of platform and track, security, diesel for generators and other costs paid to various Contractors/Service Providers was Rs 2,397,151,014. On the other hand, the actual receipt on account of sale of tickets etc. came to Rs 646,615,090. Resultantly, during the period, the Government paid a subsidy of Rs 1,750.535 million (Rs 54.19 per rider). The detail is as under:

Sr. No.	Details/descriptions	Loss/Subsidy amount (Rs)
1	Operating expenses	2,392,376,608
	General & Admn expenses	4,774,406
	Total Expenses	2,397,151,014
2	Bus fare revenue	646,052,420
	Other income/receipts	562,670
	Total Revenue	646,615,090
Subsidy		1,750,535,924

Incorrect calculation of EIRR and benefit/cost analysis resulted in non-achievement of financial targets envisaged in the PC-I.

The para was discussed in the SDAC meeting held on 28.11.2016. The Authority contended that all over the world public transport /mass transit project were based on economic viability rather than financial. The Economic Analysis of the Pakistan Metrobus Project showed that Economic Internal Rate of Return (EIRR) of the project was 26.15 % and 21.07 % for Rawalpindi and Islamabad part respectively. This means the project will recover its capital costs in approximately 4 years. Flat fare of Rs 20 per passenger was fixed by Government of the Punjab keeping in view ridership of the system which mainly belong to poor segment of the society.

The Committee directed the PMA authorities to evaluate the data of riderships of last three months with financial analysis to review that objectives/targets were achieved as per provision of PC-1 and get it verified from Audit within 30 days. The compliance of the Committee's directive was not made till the finalization of the report.

Audit recommends early compliance of SDAC directives.

(Para 442)

4.3.1.8 Irregular calling of tender for procurement of Escalators, Elevators and PSDs before approval of PC-1 and technical sanction

As per para 11 of PPRA Rules 2009, all procuring agencies shall provide clear authorization and delegation of powers for different categories of procurement and shall only initiate procurements once approval of the competent authorities concerned has been accorded. According to para 2.61 of Buildings and Roads Department Code and Finance Department letter No.FD(FR)11-2/89 dated 27.03.1990, tender for the work can be called for after the technically sanctioned estimate by the competent authority.

The Project Director RDA UD-Wing, Rawalpindi advertised for procurement of Escalators, Elevators and PSD in Daily Ausaf on 29th and 30th April, 2014 in Daily Nawa-e-Waqat and in Express News with tender opening date as 14.05.2014, whereas the PC-1/Administrative Approval for Rawalpindi part was sanctioned on 10.06.2014 and technical sanctioned estimate on 17.7.2014 for Rs 2,775.773 million. Thus tenders were called before sanction of PC-1 and TSE in violation of ibid criteria.

Violation of PPRA Rules, B&R Code and FD instructions resulted in irregular procurement.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Authority explained that the project had been executed on fast track basis and completed in record time of 14 months. Pre-

qualification of contractors was invited in various newspapers in anticipation of the approval of PC-I to save the time which at that time was submitted to competent forum for approval. Financial bids were opened after in principle approval by PDWP in meeting held on 10.06.2014. Works were awarded to the lowest evaluated bidders on 18.07.2014 after the approval of PC-I and issuance of administrative approval and the procurement process was in line with PPRA rules and there is no loss to Government.

Audit argued that according to PPRA rules and para 2.61 of B&R Code no tender can be called before technical sanction of estimate.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends condonation from Finance Department as the department admitted the irregularity.

(Para 232)

4.4 Construction and Works

4.4.1 The issues relating to the construction and work amounting to Rs 251.95 million, observed during the audit, were as under:-

4.4.1.1 Overpayment due to change in specification during execution of work – Rs 151.87 million

As per item No.401d-ii of the Agreement/quoted rate of the item concrete class D-1 (6000 PSI) pre stressed box girder was to be paid for Rs 12,127 per cubic meter.

During audit of the accounts record of the work Rawalpindi – Islamabad Metro Bus Project Package II Islamabad (Construction of Peshawar More Interchange) Islamabad Part, it was revealed that the item

“Concrete class D-1 (6000 PSI) Pre-stressed Box Girder etc” was sanctioned @ Rs 22,000 per cu.m in the estimate/PC-I against which the contractor quoted a rate of Rs 12,127 per cu.m. But during execution of work the BOQ item was changed and approved by Chief Engineer RDA as non-BOQ item “Cast in Situ etc” @ Rs 30,480.95 per cu.m and payment was accordingly made to the contractor at provisional rates of Rs 30,000 per cu.m.

Violation of agreement resulted in overpayment of Rs 151,871,350. The detail is as under:

Sr. No	Item	Rate paid (Rs per cu.m)	Rate payable (Rs per cu.m)	Difference (Rs per cu.m)	Quantity paid (cu.m)	Amount overpaid (Rs)
1	Concrete class D-1 (6000 PSI)	30000	12127	17873	8497.25	151,871,350

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that the rate quoted by the contractor was for pre-cast box girders and not for pre-stressed in situ box girders (D-I 6000 PSI) and this item being unique and complex had not been executed anywhere in the country. The non-BOQ item was approved by the competent authority (Chief Engineer RDA), therefore there was no loss to government.

Audit argued that the Department awarded the item/work to the contractor as BOQ item (concrete class D-I 6000 PSI pre-stressed Box Girder) for which TS estimates were approved @ Rs 22,000 per cu.m and contractor had quoted the rate Rs 12,127 per cu.m (Rs 13,500 – 10.17% rebate). The contractor started the work and as per measurement recorded in MB/sheets, he was paid accordingly (Rs 12,127 per cu.m) upto a quantity of 8497.25 cu.m. However, later on the Department approved it as non-BOQ item (concrete class D-I 6000 PSI Cast In-Situ Pre-stressed Box Girder) @ Rs 30,480 per cu.m and payments were made to the contractor at the enhanced rate for whole of the quantity. Audit brought it in the notice of the SDAC that the subsequent changes in the scope/type of

works speak of ill planning. The contractor was extended undue financial benefit by changing the bid item/rate. He was paid a rate of Rs 18,353 per cu.m (Rs 30,480 – Rs 12,127) over and above the agreement rate. The contractor had won the bid by quoting a rate of Rs 12,127 per cu.m whereas he was paid a rate of Rs 30,480 per cu.m. This was against the spirit of competitive bidding. Audit also referred to the Rule 31 (PPRA Rules 2009) which prohibits the change of substance of the bid.

The SDAC directed the Department to produce rate analysis to audit for verification and settled the para subject to satisfaction of audit. After scrutiny of the rate analysis, Audit was of the considered opinion that the contractor was extended undue financial benefit by changing the bid item/rate as the item rate was increased from Rs 12,127 to Rs 30,480 per cu.m but the department did not apply the clause 52.2 of contract agreement regarding re-rating. It was further observed that the contractor was also paid for the use of admixture and temporary works which were not admissible in the agreement.

Audit recommends recovery and condonation from FD besides fixing responsibility for violation of PPRA rules.

(Para 306)

4.4.1.2 Loss to government due to ill planning / change of design during execution – Rs 46.35 million

According to rule 2.10 (a) (1) of Punjab Financial Rules Volume-I, same vigilance should be exercised in respect of expenditure incurred from government revenue as a person of ordinary prudence would exercise in respect of expenditure of his own money.

An examination of accounts record of MBS Rawalpindi-Islamabad Project revealed that 16340 meters BRTS fencing valuing Rs 224,450,000 was provided in the estimates/PC-I. While an expenditure of Rs 48,740,966 had been incurred, BRTS fencing was changed to high fencing which resulted in wastage of government money amounting to Rs 46,347,996.

Poor planning and change of design during execution resulted in loss of Rs 46,347,996.

The para was discussed in SDAC meeting held on 31.10.2016 to 03.11.2016. The Department explained that summary regarding abortive work was approved by the Chief Minister on 28.08.2015.

Audit contended that during execution stage, rope fencing was replaced with Victorian style fencing resulting in wastage of public money amounting to Rs 46,347,996. Audit further pointed out that the stock register regarding old material retrieved from aborted work was not produced for verification.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends fixing the responsibility besides production of stock register for verification.

(Paras 367, 368)

4.4.1.3 Non-recovery of compensation from the contractor on account of damage to cables – Rs 25.39 million

As per clause 20.2 of the Contract agreement, if any loss/ damage happen to the works, or any part thereof, or materials or plant for incorporation therein, during the period for which the Contractor was responsible for the care thereof, from any cause whatsoever, the contractor shall, at his own cost, rectify such loss or damage.

During the execution of work “Rawalpindi Islamabad Metro Bus Project Package I, II & III Rawalpindi Portion and Packages I,II, III, IV & V of Islamabad portion, the contractors damaged the Optical Fiber cable network at Murree Road laid by PTCL/PTA, DG ISI, Islamabad and Ministry of Defense Services etc. The contractor was responsible for care of works and their rectification under Agreement clause *ibid*, but the Contractors did not rectify the same. The Director General RDA approved

the payment/claim and executed an agreement with another contractor M/s NAYA Tel for repairs amounting to Rs 25,393,239, without its recovery from the original contractors. Further, the Authority made payment of Rs 372,900 directly to DG ISI as compensation, in addition to the claim of M/s NAYA Tel, which resulted in loss to Government.

Non-compliance of contract clauses resulted in non-recovery of Rs 25,393,239 from the contractors.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that it was the responsibility of the RDA to clear the site before execution of work by contractor and separate agreement was signed with the contractor M/s NAYA Tel.

Audit argued that payment was made to the contractor M/s NAYA Tel and Director General, ISI, Rawalpindi on account of “Restoration of optical fiber cable” damaged by the original contractors in violation of contract agreement. It was the responsibility of the contractor to secure the government assets during execution of work and in case of any damage, the same was to be restored by the contractor at his own risk and cost. Audit further explained that if the clear site was to be handed over to the contractor before start of work then shifting of these cables should have been included in the original PC-I/TS estimates. Audit brought it in the notice of the Committee that this was a case of damage of cables as M/s NAYA TEL was made payment for the item “restoration/damages of optical fiber cable”. The letter from D.G ISI is also indicative of the fact that the damage was done by the contractor during execution of work.

The Chair settled the para unilaterally without considering the facts that FIDIC agreement clauses were violated.

Audit recommends early recovery of the amount paid to the contractor in violation of contract on account of inadmissible restoration charges.

(Para 160)

**4.4.1.4 Overpayment to the contractor due to adoption of extra lead
– Rs 10.39 million**

As per condition No. 5 of the Finance Department letter No. RO (Tech) F.D 2-3/2004, dated. 02.08.2004, the material of base and sub-base shall be carried from nearest quarry and shortest route shall be used / adopted for carriage.

Project Director, Metro Bus Project RDA Rawalpindi got approved the rate analysis of item “Granular sub-base course and water bound macadam etc” in estimates of the work “Rawalpindi–Islamabad Metro Bus Project”. The Department had taken lead of 50 km from Margalla Quarry to site of work instead of actual distance of 43 km (as per lead chart of Highway Department), which resulted in loss to Government.

Payment of excess lead resulted in overpayment of Rs 10,393,805.

The paras were discussed in the SDAC meeting held on 29 to 31.08.2016. During discussion the Authority produced Google lead chart by taking starting point from Kot Najeeb Ullah to Sadar Chowk which was 59.3 km.

Audit argued that the lead was required to be taken from starting point of the quarry i.e. Margallah Crushing Plant (as per NHA Code 102 of CSR 2014 and also given in lead chart of C&W Department). Audit further explained that by adopting route from quarry to site of work (main GT road-Tarnol-Pirwadhai more-IJP road-Faizabad Chowk) lead comes to 43 km. In view of this discussion, the Committee decided that lead chart would be prepared again after site verification by representatives each from C&W Department, Audit and RDA, Rawalpindi within 15 days.

The Chair settled the paras unilaterally without joint verification.

Audit recommends early compliance of SDAC directives and recovery of the overpaid amount.

(Paras 10, 16,127,132,133,176,177,271, 272,325)

4.4.1.5 Non-recovery on account of rent and compensation for restoration of parks from the Contractors – Rs 10.00 million

As per clause 20.2 read with 19.1 of Contract agreement, if any loss damage / happens to the works, or any part thereof, or materials or plant for incorporation therein, during the period for which the contractor was responsible for the care thereof, from any cause whatsoever, the contractor shall, at his own cost, rectify such loss or damage and further the contractor was required to take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisances to persons or to property of the Public.

During construction “Rawalpindi Islamabad Metro Bus Project”, the contractors used parks/places of PHA, Rawalpindi/CDA for construction of girders & slabs and for dumping material etc. which resulted in damage to the parks/places. Further, the Authority did not calculate the rent on account of use of parks/places by the contractors. Neither the rent was recovered from the contractor nor repair & maintenance of the parks was carried out at the risk and cost of the contractor(s), under Agreement clause *ibid*.

Non-recovery on account of rent and compensation for restoration of damaged parks resulted in loss of Rs 10,000,000.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that contractor had used open available spaces (CDA Parade ground) not the parks. After completing the project, the space was cleared and parks were restored by the original contractor not by the PHA.

Audit contended that PHA incurred an expenditure of Rs 10,000,000 on restoration of parks which, as per agreement, was responsibility of the contractor. Audit showed request of DG PHA Rawalpindi demanding Rs 10 million incurred on restoration of parks and for removing debris/dumping material. The contractor neither restored the parks at his cost nor paid any rent for utilizing parks/area. If the contractor

had used CDA parade ground, rent of the same was also required to be recovered.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery on account of rent of parks/parade ground and its restoration cost.

(Para 175)

4.4.1.6 Loss due to adoption of the higher MRS rates – Rs 3.87 million

As per para No. 6 of approved PC-1, for Construction of PMA Command & Control Center for Rawalpindi – Islamabad Metro Bus Project, Rawalpindi, the Authority was required to prepare rate analysis in estimates on the basis of input rates displayed on Finance Department's website for 1st Bi-Annual 2014 (District Rawalpindi) and prevailing market rates including lead/carriages for road works etc. For buildings and allied civil works, MRS (Market Rates System) rates were to be applied.

Project Director Metro Bus Project RDA, Rawalpindi awarded the work "*Construction of Multi-Storey Building for PMA Control and Command Center near Flashman Hotel, Rawalpindi*" to the contractor on 30.08.2014 for Rs 403,187,714. The Authority got approved MRS item "*Reinforced cement concrete ratio 1:1:2 Type A (4000 PSI) in raft/strip foundation not requiring form work i.e. Horizontal shuttering etc*" @ Rs 12,501.50 per cubic meter instead of admissible rate of Rs 10,152.75 per cu.m as per MRS item No.6-5(a)(i)(1) under Chapter-6(Concrete), based on 1st Bi-Annual 2014 (District Rawalpindi). Audit observed that the Authority had taken schedule item meant for RCC in roof slab requiring both type of shuttering which was of higher rates. Hence, excess rate of Rs 2,348.75 per cubic meter was sanctioned, which resulted in loss to the Government.

Violation of PC-I instruction resulted in loss of Rs 3,871,325 due to adoption of higher MRS item.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that out of total RCC work only a minor share was of RCC raft foundation (requiring only horizontal shuttering) and major share was of RCC used in columns, lintels, slabs etc (requiring both type i.e. horizontal and vertical shuttering). Therefore, on all items the same MRS rate was applied. And in this case the quoted rate of the contractor was less than the estimated rate.

Audit argued that the Department got approved rate analysis for RCC in raft/foundation by incorporating vertical and horizontal shuttering. In the raft /foundation horizontal shuttering was not involved. Therefore, recovery on account of shuttering was to be effected. Similarly the overpayment to the design consultant because of inflated estimates was also required to be effected.

The Chair settled the paras unilaterally without considering the viewpoint of Audit.

Audit recommends early recovery from the contractor and the design consultant.

(Para 202)

4.4.1.7 Loss due to less use of dismantled road pavement and non-credit of cost of old material – Rs 3.33 million

The Chief Engineer, RDA Rawalpindi approved in technical sanction estimate that 45% of the quantity available from “Dismantling of existing road pavement etc” was to be re-used.

Project Director Metro Bus Project RDA Rawalpindi, awarded the work “Rawalpindi – Islamabad Metro Bus Project Rawalpindi Package – 1(Flashman hotel to Committee Chowk), Rawalpindi”. The Authority got dismantled 17,112 cubic meter of “*Breaking of existing road pavement structure etc*”. The available quantity for re-use was 7,229 cubic meter (17,112 cu.m x 45%=7,700 cu.m - 470.077 cu.m), out of which only 470.077 cubic meter was re-used as sub-base. The Authority got executed

the item of “Granular sub-base etc” at full rate @ Rs 1,900 per cu.m for quantity of 2,841.189 cu.m instead of rate for Rs 800 per cu.m (item No. 201a “Reuse of salvaged granular pavement material from existing road as sub-base”), which resulted in excess payment to the contractor @ Rs 1,100 per cu.m. Further, the cost for balance available quantity of 3917.811 cu.m was required to be recovered from contractor.

Violation of contractual obligations resulted in loss of Rs 4,093,784 due to less use of available material.

The para was also discussed in the SDAC meeting held on 29 to 31.08.2016. During verification, the Department admitted the recovery and adjusted the material for Rs 765,886 which was verified by Audit. As for balance amount of Rs 3,327,897 the Department claimed to have recovered / adjusted. However, proof of the recovery / adjustment was not produced to audit. SDAC reduced the para to Rs 3,327,897 and directed to get the recovery / adjustment verified from Audit. The para was deferred for verification of recovery. However, while signing the minutes the chair settled the para even without verification of recovery.

Audit recommends early verification of recovered amount.

(Para 34)

4.4.1.8 Overpayment due to allowing inadmissible lead for earthwork not provided in agreement – Rs 0.75 million

As per Serial No. 4 of Appendix-5 of Punjab Financial Rules (PFR) Volume-II read with PAC directives dated 16-04-2007 terms of contract once entered into should not be materially changed and as per directives of Public Accounts Committee (PAC) lead once approved cannot be changed.

Project Director Metro Bus Project RDA Rawalpindi awarded the work “Construction of Multi-Storey Building for PMA Control and Command Center near Flashman Hotel, Rawalpindi” to the contractor. The Authority made payment of BOQ item “*Earthwork excavation in*

foundation/building structure etc with all leads and lifts etc” in 13th running bill but in addition 7 kilometer lead was allowed to the contractor in violation of criteria *ibid*.

Violation of contractual obligations and PAC directives resulted in overpayment for Rs 748,350.

The para was discussed in the SDAC meeting held on 31.10.2016 to 03.11.2016. The Department contended that during the formulation of rate analysis only 100 ft lead was included in the Engineer Estimate. The project was geographically located in densely populated and built-up cantonment area and there was no space available for dumping of excavated material within the lead (just 100 feet) as admissible under BOQ Item. Hence, keeping in view the aforementioned scenario, the lead upto 7 kilometer was approved which was justified and was also within the routine lead taken for other ongoing projects of RDA.

Audit argued that the Department got approved rate analysis for earth work excavation with 100 ft lead but paid 07 kilometer lead to the contractor which was not justified. Audit also pointed that as per PAC directive dated 16.04.2007, lead once approved in the bid cannot be changed. Moreover, the contractor quoted the rates after surveying and site visits, hence, under ‘Sufficiency of Bid clause’, extra lead (7 km) was inadmissible.

Audit recommended recovery but the Chair decided to settle the para even though the audit had referred to PAC directive and Contract clause, which is not justified.

Audit recommends early recovery on account of allowing additional lead.

(Para 208)

4.5 Asset Management

4.5.1 Road-wise and location-wise data of road network under the

jurisdiction of RDA Rawalpindi was being maintained as prescribed in the Department's code and Manuals.

4.6 Monitoring and Evaluation

4.6.1 Subject to the irregularities, losses and overpayments pointed out in project audit report, internal checks such as inspections, regular monitoring and supervision by field engineers, material testing and laboratory test reports of the executed works were being carried out to ensure qualitative execution of work in line with the specifications and approved design. Two levels of monitoring/supervision were in place; firstly it is carried out by the consultant M/s NESPAK and secondly by the supervisory engineers. The progress of the schemes under execution was reviewed on monthly basis and quarterly basis by the Chief Engineers and Director General RDA, Rawalpindi.

4.7 Environment

4.7.1 In violation of Section 12 of Pakistan Environmental Protection Act, 1997, Initial Environmental Examination and Environmental Impact Assessment (EIA) was not carried out.

4.7.2 Despite the fact that it had been indicated in the PC-I that the project may be having an environmental impact, the environmental data was not compiled by the project authorities. Hence, environmental impact of the project could not be assessed.

4.7.3 During construction, the contractors used parks at various places under Parks and Horticulture Authority, Rawalpindi for construction of girders & slabs and for dumping material etc. causing damage to these

parks leading to adverse impact on the environment. The evaluation of loss and calculation of rent on account of use of parks was the responsibility of RDA Management. However, neither the loss was calculated nor repair & maintenance of the parks was carried out at the cost of the contractor(s), The rehabilitation cost and the rent are required to be calculated and recovered from the responsible(s), besides fixing responsibility for slackness of RDA Management.

4.8 Sustainability

4.8.1 Sustainability of a project depends mainly upon the sufficient flow of financial resources both during implementation and operation phases. As per data collected for the period w.e.f 04.06.2015 to 30.04.2016, total revenue of Rs 646.62 million was generated against operational expenditure of Rs 2,397.15 million. Hence, the Authority had to bear an expenditure of Rs 1,750.54 million for this period from its own resources in the shape of subsidy. Thus, sustainability of this project is subject to provision of huge amount of annual subsidy by the Provincial Government during operation phase.

4.9 Overall Assessment

4.9.1 Relevance: RDA, Rawalpindi aims to provide smooth and efficient traffic flow to the public.

4.9.2 Efficiency: The project was completed with a time overrun of 4 months. The authority attributed this delay to external factors beyond control. Against the original PC-I cost of Rs 44,840 million, an expenditure of Rs 40,832.90 million was incurred upto 2nd last running bills which was 9.81% below the estimated cost. Final bills are yet to be finalized.

4.9.3 Economy: Contracts were awarded after competitive bidding. However, it was observed that the department got approved estimates at exorbitantly high rates in contravention of para 6 of PC-I, FD's composite MRS rates, project specifications and CDWP instructions. Therefore, the

estimates could not serve a valid bench mark for evaluation of bids. Had the TS estimates been correctly prepared, the bids evaluated as some percentages below the TS estimate might have been higher even than the maximum acceptable limit of 4.5% (of TS estimate).

4.9.4 Effectiveness: Although the scheme was completed and bus service was operational and providing transportation facility to the general public but in the absence of the relevant data Audit was not in a position to comment on achievement of the envisaged targets.

4.9.5 Compliance with Rules: Issues of poor financial management, procurement & contract management and construction & works depicting losses, overpayments and irregularities of Rs 5,951.97 million were noticed. Non-adherence to financial management rules/practices, as highlighted by audit, is the critical area which needs to be considered seriously by the Principal Accounting Officers.

4.9.6 Performance Rating: Satisfactory.

4.9.7 Risk Rating: High risk; as its operation and maintenance depends upon provision of subsidy by the Government of the Punjab.

5 CONCLUSION

5.1 Key Issues for the Future: Increase in operational cost, repair and maintenance cost and subsidy coupled with inadequate funding may limit project's/scheme's performance and achievement of objectives.

5.2 Lessons Learnt: Non-compliance of contractual obligations and violation of rules are critical areas to be improved.

- i. Proper vigilance is required to be exercised while sanctioning rate analysis and TS estimates for the future projects.

- ii. Internal controls like test check measurements/periodic inspections of works by supervisory officers need to be implemented/strengthened.
- iii. The department also needs to streamline the working of the SDAC so that this important forum can perform its function in an objective and impartial manner in order to maintain its effectiveness and credibility.

ACKNOWLEDGEMENT

We wish to express our appreciation and gratitude to the Management & staff of Chief Engineer, Director Finance of RDA, Rawalpindi and the Management of Punjab Masstransit Authority, Lahore for the assistance and cooperation extended to the auditors during this assignment.

ANNEX-I

(LIST OF PARAS IN WHICH DEPARTMENT ADMITTED THE RECOVERY BUT NOT GOT VERIFIED FROM AUDIT)

S. No.	Para No	Subject	SDAC Minutes	Further Remarks	Amount (Rs)
1	78	Non-recovery of price de-escalation on diesel from the contractor	SVD (verification of paid bill by audit)	Actual recovery Rs 79,401,496 adjusted verified by audit but bill was not pre audit	34,287,435
2	81	Overpayment due to sanction of higher rates of non-BOQ item Steel A-36/gantry work for transom	SVD (verification of paid bill by audit)	Rs 5,126,784 effected and verified by audit but bill was not pre audit	5,126,784
3	83	Overpayment due to allowing extra overhead in the rates analysis of non-BOQ item Shifting and fixing of Barrier	SVD (verification of paid bill by audit)	Actual recovery Rs 836,928 effected and verified by audit but bill was not pre audit	1,088,539
4	87	Overpayment due to allowing extra overhead in the rates analysis of non-BOQ item Toilet blocks	SVD (paid bill)	Actual recovery Rs 65,405 effected and verified by audit but bill was not pre audit	245,190
5	88	Overpayment due to allowing extra overhead in the rates analysis of non-BOQ item Toilet blocks	SVD (verification of paid bill by audit)	Actual recovery Rs 196,215 effected and verified by audit but bill was not pre audit	163,460
6	89	Overpayment due to allowing extra overhead in the rates analysis of non-BOQ item Toilet blocks	SVD (Security Deposit of contractor)	Actual recovery Rs 196,215 effected and verified by audit but bill was not pre audit	557,442
7	154	Overpayment due to allowing higher rates than approval of non-BOQ item Cable tray	SVD (verification of paid bill by audit)	Rs 4,830,406 effected and verified by audit but bill was not pre audit	4,830,406
8	156	Overpayment due to allowing higher rates than approval of non-BOQ item Cable tray	SVD (verification of paid bill by audit)	Rs 899,062 effected and verified by audit but bill was not pre audit	899,062

S. No.	Para No	Subject	SDAC Minutes	Further Remarks	Amount (Rs)
9	157	Overpayment due to application of higher rates than available on website and allowing higher rates than approval of non-BOQ item Steel access door	SVD (verification of paid bill by audit)	Rs 294,255 effected and verified by audit but bill was not pre audit	294,255
10	159	Overpayment due to sanction of higher rate of non-BOQ item steel louver grill	SVD (verification of paid bill by audit)	Rs 242,154 effected and verified by audit but bill was not pre audit	242,154
11	194	Overpayment due to sanction of higher rate analysis of non-BOQ item Pre-cast roof slab	SVD (verification of paid bill by audit)	Rs 633,405 admitted but not verified.	633,405
12	195	Overpayment due to allowing higher rates than approval of non-BOQ item Stone facing	SVD (verification of paid bill by audit)	Rs 1,028,254 admitted but not verified.	1,028,254
13	198	Overpayment due to allowing higher rates than approval of non-BOQ item Preparation of surface after dismantling	SVD (verification of paid bill by audit)	Rs 205,884 admitted but not verified.	205,884
14	200	Overpayment due to allowing higher rates than approval of non-BOQ items Cement plaster and fence grill	SVD (verification of paid bill by audit)	Rs 233,968 admitted but not verified.	233,968
15	203	Non-deduction of rate of dressing and ramming in earthwork excavation of foundation	SVD (Till final bill of contractor)	Actual recovery Rs 127,725 admitted but not verified.	266,147
16	207	Overpayment due to allowing in-admissible shuttering/formwork for concrete work	SVD (Till final bill of contractor)	Rs 2,003,342 admitted but not verified.	2,003,342
17	214	Non-deduction of rate of dressing and ramming in earthwork excavation of foundation	SVD (recovery of reduced amount)	Actual recovery Rs 127,725 admitted but not verified.	566,252

S. No.	Para No	Subject	SDAC Minutes	Further Remarks	Amount (Rs)
18	282	Unjustified payment of horticulture work without approval	actual recovery of Rs 8,788,354 to the recovery in next running bill and got verified by audit	Actual recovery of Rs 8,788,354 to the recovered in next running bill and got verified by audit	35,479,799
19	312	Loss to Govt due to less use of retrieved material as sub base and overpayment	SVD (recovery and verification of income tax)	Actual recovery of Rs 414,702 be effected and got verified by Audit.	2,629,874
20	353	Non recovery of de-escalation of diesel	SVD (Till final bill of contractor)	Actual recovery of Rs 55,828,524 admitted and required verification	55,828,524
21	354	Non-recovery of de-escalation of bitumen	SVD (Till final bill of contractor)	Actual recovery of Rs 4,949,762 admitted and required verification	4,949,762
22	361	Overpayment due to incorrect higher rate of non-BOQ	SVD (Till final bill of contractor)	Recovery of Rs 6,596,590 effected, verification required	6,596,590
23	362	Overpayment due to incorrect higher rate of non-BOQ	SVD (Till final bill of contractor)	Recovery of Rs 4,137,171 effected, verification required	4,137,171
24	363	Overpayment due to incorrect higher rate of non-BOQ	SVD (Till final bill of contractor)	Recovery of Rs 1,916,208 effected, verification required	1,916,208
25	364	Loss due to incorrect higher rate of non-BOQ item	SVD (Till final bill of contractor)	Recovery of Rs 3,941,062 effected, verification required	3,941,062
26	369	Overpayment due to incorrect inadmissible rate	The committee directed to affect recovery of Rs 1,881,900	Recovery of Rs 1,881,900 not effected required verification	1,881,900
27	391	Non-recovery of de-escalation of bitumen	The committee directed to affect actual recovery of Rs 9,574,170	Actual recovery of Rs 9,574,170 not effected required verification	25,675,658
28	394	Unjustified payment of horticulture work without approval	Department admitted to recover amount of Rs 2906393 in next running bill	Department admitted to recover amount of Rs 2,906,393 in next running bill	11,818,081

S. No.	Para No	Subject	SDAC Minutes	Further Remarks	Amount (Rs)
29	417	Non-recovery of de-escalation of bitumen	SVD (Till final bill of contractor)	Recovery admitted, verification required of recovery	8,412,568
30	418	Non-recovery of de-escalation of diesel	SVD (Till final bill of contractor)	Recovery admitted, verification required of recovery	78,756,277
31	423	Overpayment due to incorrect higher rate of non-BOQ	SVD (Till final bill of contractor)	Recovery admitted, verification required of recovery	856,216
Total					295,551,669

ANNEX-II
(Para No. 4.2.1.1)

Overpayment due to non-maintenance of the accepted percentage of tenders upto last payment – Rs 1,497.69 million

Para No	Package No	Name of contractor	Payment made upto Last/final bill (in Rs)	Payment was required to be made (in Rs)	Excess payment (in Rs)
76	I (RWP)	M/s ZKB	4,798,588,404	4,406,871,745	391,716,659
77	II (RWP)	M/s NLC	3,715,376,742	3,581,365,647	134,011,095
144	III (RWP)	M/s LIMAK	4,004,087,389	3,537,889,382	466,198,007
238	Command & Control	M/s Din Sons Constructors & Engineers	370,285,368	360,755,290	9,530,078
257	I (ISB)	M/s Habib Construction Services	2,976,939,451	2,898,680,912	78,258,539
319	II (ISB)	M/s NLC	4,121,443,161	3,925,128,565	196,314,596
360	III (ISB)	M/s MAL-CALSON (JV)	3,446,117,905	3,264,635,265	181,482,640
386	IV (ISB)	M/s Zahir Khan & Brothers	2,682,885,233	2,646,791,331	36,093,902
422	V (ISB)	M/s Limak Reliable (JV)	1,952,139,274	1,948,049,902	4,089,372
Total					1,497,694,888

ANNEX-III
(Para No. 4.2.1.2)

Overpayment due to sanction of higher rate analysis of Concrete class A2, A1 and D1 – Rs 513.09 million

Para No	Package No	Name and detail of specification used in the work	Rate approved (in Rs/cu.m)	Rate admissible (in Rs/cu.m)	Diff. (in Rs/cu.m)	Qty paid (in cu.m)	Amount (in Rs)
26	I (RWP)	“Concrete class A2 (4000 psi, 1:1.25:2.25) for NJB with Slipform paver etc”	13,847	12,433.52	1,413.48	1863.765	2,634,394
27	I (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on ground etc” for Pile caps, Approach slabs, base slabs and in foundation	11,967.26	10,550.55	1,416.76	22803.744	32,307,432
28	I (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on elevated portion etc” for execution of work Piers, transoms, Pad & Shears, Deck slabs& diaphragm, in situ box girders inner diaphragm, in NJB barriers, column concourse slab, in bus stations shed and in depressed drain slabs etc	12,147.26	10,730.50	1,416.76	21872.077	30,978,735
41	II (RWP)	“Concrete class A2 (4000 psi, 1:1.25:2.25) for NJB with Slipform paver etc”	13,847	12,433.52	1,413.48	1624.86	2,296,707
42	II (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on ground etc” for Pile caps, Approach slabs, base slabs and in foundation	11,967.26	10,550.55	1,416.76	11329.42	16,051,069

Para No	Package No	Name and detail of specification used in the work	Rate approved (in Rs/cu.m)	Rate admissible (in Rs/cu.m)	Diff. (in Rs/cu.m)	Qty paid (in cu.m)	Amount (in Rs)
43	II (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on elevated portion etc” for execution of work Piers, transoms, Pad & Shears, Deck slabs& diaphragm, in situ box girders inner diaphragm, in NJB barriers, column concourse slab, in bus stations shed and in depressed drain slabs etc	12,147.26	10,730.50	1,416.76	10616.26	15,040,693
60	III (RWP)	“Concrete class A2 (4000 psi, 1:1.25:2.25) for NJB with Slipform paver etc”	13,847	12,433.52	1,413.48	1129.378	1,596,353
61	III (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on ground etc” for Pile caps, Approach slabs, base slabs and in foundation	11,967.26	10,550.55	1,416.76	10377.374	14,702,248
62	III (RWP)	“Concrete class A2 (4000 psi, 1:1.50:3) on elevated portion etc” for execution of work Piers, transoms, Pad & Shears, Deck slabs& diaphragm, in situ box girders inner diaphragm, in NJB barriers, column concourse slab, in bus stations shed and in depressed drain slabs etc	12,147.26	10,730.50	1,416.76	13467.158	19,079,730
189	Bus depot	Concrete class A2 (4000 psi, 1:1.25:2.25) with concrete paver etc	12,966.47	9,460.07	3,506.40	13852.89	48,573,773
190	Bus depot	“Concrete class A2 (4000 psi, 1:1.50:3) on ground etc”	12,320.16	9,813.36	2,506.80	1137.107	2,850,499

Para No	Package No	Name and detail of specification used in the work	Rate approved (in Rs/cu.m)	Rate admissible (in Rs/cu.m)	Diff. (in Rs/cu.m)	Qty paid (in cu.m)	Amount (in Rs)
29	I (RWP)	“Concrete class D1 (5000 psi, 1:1:2) on elevated portion etc” for execution of work precast I girders, inverted T girders etc	14,053.02	12,757.31	1,295.71	5894.10	7,637,044
44	II (RWP)	“Concrete class D1 (5000 psi, 1:1:2) on elevated portion etc” for execution of work precast I girders, inverted T girders etc	14,053.02	12,757.31	1,295.71	3663.37	4,746,665
63	II (RWP)	“Concrete class D1 (5000 psi, 1:1:2) on elevated portion etc” for execution of work precast I girders, inverted T girders etc	14,053.02	12,757.31	1,295.71	8547.905	11,075,605
30	I (RWP)	“Concrete class A1 (3000 psi, 1:2:4) on ground portion etc” for execution of work drain work etc	11,027.49	9,731.78	1,295.71	4523.101	5,860,627
45	II (RWP)	“Concrete class A1 (3000 psi, 1:2:4) on ground portion etc” for execution of work drain work etc	11,027.49	9,731.78	1,295.71	2833.62	3,671,549
58	III (RWP)	“Concrete class A1 (3000 psi, 1:2:4) on ground portion etc” for execution of work drain work etc	11,027.49	9,731.78	1,295.71	10081.872	13,063,182
269	I (ISB)	Concrete class A2 & D1	-	-	2,123.33	7369.438	15,647,749
318	II (ISB)	Concrete class A2 & D1	-	-	2,123.33	35735.884	75,879,074
352	III (ISB)	Concrete class A2 & D1	-	-	2,123.33	52590	111,667,623
395	IV (ISB)	Concrete class A2 & D1	-	-	2,123.33	7633.487	16,208,412
416	V (ISB)	Concrete class A2 & D1	-	-	2,123.33	28975.68	61,524,930
Total							513,094,093

ANNEX-IV
(Para No 4.2.1.3)

Overpayment due to sanction of higher rate analysis of Elastomeric bearing pad – Rs 407.94 million

Para No	Package No	Name and detail of specification used in the work	Rate approved (in Rs/cubcm)	Rate admissible (in Rs/cubcm)	Diff. (in Rs/cubcm)	Qty paid (in cubcm)	Amount (in Rs)
98	II(RWP)	Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc	15	5.70	9.30	12580200	116,995,860
	I (ISB)	Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc	15	5.70	9.30	1042650	9,696,645
	II (ISB)	Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc	15	5.70	9.30	6941160	64,552,788
99	I (RWP)	Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc	15	5.70	9.30	14711700	136,818,810
100	III (RWP)	Elastomeric bearing pad of specified size (40x25x8.75 centimeters) and requisite standards European equitant etc	15	5.70	9.30	8589075	79,878,397
Total							407,942,500

ANNEX-V
(Para No 4.2.1.4)

**Overpayment due to sanction of higher rate analysis of Concrete piles
1200 mm – Rs 392.74 million**

Para No	Package No	Name and detail of specification used in the work	Rate approved (in Rs/m)	Rate admissible (in Rs/m)	Diff. (in Rs/m)	Qty paid (in meter)	Amount (in Rs)
24	I (RWP)	Cast in place concrete piles 1200 mm(1.1 to 1.5 meter) dia boring only in normal soil including concrete Class A3, etc	23,687.90	19,106.38	4,581.52	36187	165,791,464
25	I (RWP)	Cast in place concrete piles 1000 mm(1 meter) dia boring only in normal soil including concrete Class A3, etc	17,218.00	12,807.48	4,410.52	420	1,852,418
40	II (RWP)	Cast in place concrete piles 1200 mm(1.1 to 1.5 meter) dia boring only in normal soil including concrete Class A3, etc	23,687.90	19,106.38	4,581.52	24776.70	113,514,946
59	III (RWP)	Cast in place concrete piles 1200 mm(1.1 to 1.5 meter) dia boring only in normal soil including concrete Class A3, etc	23,687.90	19,106.38	4,581.52	21785.30	99,809,787
204	Command & Control	Cast in place concrete piles 1000 mm(1 meter) dia boring only in normal soil including concrete Class A3, etc	17,625.00	15,010.16	2,614.84	2251	5,886,005
205	Command & Control	Cast in place concrete piles 1000 mm(1 meter) dia boring only in normal soil including concrete Class A3, etc	17,625.00	15,010.16	2,614.84	2251	5,886,005
Total							392,740,625

ANNEX-VI
(Para No 4.2.1.6)

**Overpayment due to non-deduction of cost of carriage on bitumen
procured from APL, Rawalpindi – Rs 295.92 million**

Para No	Package No	Name of items	Rate approved (Rs)	Rate admissible (Rs)	Difference (Rs)	Quantity paid	Over payment (Rs)
18	II (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,715.23	3,064.80	5233.95 CU.M	16,041,009
19	II (RWP)	Asphaltic Base Course 3.40 %JMF	15,432.23	13,025.23	2,407	6655.69 CU.M	16,020,245
20	II (RWP)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	15663 SQM	244,342
		Cut back asphalt for bituminous tack coat etc	38.36	28.99	9.37	169918 SQM	1,592,131
47	III (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,715.23	3064.80	6273.192 CU.M	19,226,079
48	III (RWP)	Asphaltic Base Course 3.40 %JMF	15,432.23	13,025.23	2407	7379.15 CU.M	17,761,614
49	III (RWP)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	73330.025 SQM	1,143,948
		Cut back asphalt for bituminous tack coat etc	38.36	28.99	9.37	132503.74 SQM	1,241,560
50	III (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,715.23	3,064.80	6573.50 CU.M	20,146,462
51	I (RWP)	Asphaltic Base Course 3.40 %JMF	15,432.23	13,025.23	2,407	7007.817 CU.M	16,867,815
52	I (RWP)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	35773.82 SQM	558,072
		Cut back asphalt for bituminous tack coat etc	38.36	28.99	9.37	125762.12 SQM	1,178,391
186	Bus Depot	Asphaltic Wearing Course 4.20%JMF	17,820.80	15,024.41	2,796.39	1204.519 CU.M	3,368,305
187	Bus Depot	Asphaltic Base Course 3.40 %JMF	15,526.72	13,329.52	2,197.20	3404.364 CU.M	7,480,069

Para No	Package No	Name of items	Rate approved (Rs)	Rate admissible (Rs)	Difference (Rs)	Quantity paid	Over payment (Rs)
188	Bus Depot	Cut back asphalt for bituminous prime coat etc	124.93	117.386	7.544	21490.282 SQM	162,123
		Cut back asphalt for bituminous tack coat etc	39.38	32.252	7.128	53380.564 SQM	380,497
263	I (ISB)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	81031.978 SQM	1,268,150
		Cut back asphalt for bituminous tack coat etc	38.36	28.92	9.44	193,539.932 SQM	1,317,257
261	I (ISB)	Asphaltic Wearing Course 4.10% JMF	17,780.03	14,718.03	3,062	6790.109	20,791,993
262	I (ISB)	Asphaltic Base Course 3.4% JMF	15,432.23	13,026.29	2,405.94	8606.093	20,705,743
296	II (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,718.03	3,062	1907.638	5,841,187
297	II (ISB)	Asphaltic base Course 4.20%JMF	15,432.23	13,025.23	2,407	1525.764	3,672,514
298	II (ISB)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	24972.110 SQM	389,565
		Cut back asphalt for bituminous tack coat etc	38.36	28.92	9.44	25816.912 SQM	243,712
344	III (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,718.03	3,062	4897.14	14,995,042
345	III (ISB)	Asphaltic base Course	15,432.23	13,025.23	2,407	6971.84	16,781,218
346	III (ISB)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	32310.63 SQM	504,045
		Cut back asphalt for bituminous tack coat etc	38.36	28.92	9.44	150312.71 SQM	1,418,951
378	IV (ISB)	Asphaltic Wearing Course 4.10% JMF	17,780.03	14,718.03	3,062	10,704.80	32,778,098
379	IV (ISB)	Asphaltic Base Course 3.4% JMF	15,432.23	13,026.29	2,405.94	10693.86	25,728,785

Para No	Package No	Name of items	Rate approved (Rs)	Rate admissible (Rs)	Difference (Rs)	Quantity paid	Over payment (Rs)
380	IV (ISB)	Cut back asphalt for bituminous prime coat etc	120.43	104.78	15.65	50,445.46	789,471
		Cut back asphalt for bituminous tack coat etc	38.36	28.92	9.44	219,969.42	2,076,511
407	V (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	14,718.03	3,062	4507.73	13,802,669
408	V (ISB)	Asphaltic base Course	15,432.23	13,025.23	2,407	3351.55	8,067,180
409	V (ISB)	Cut back asphalt for bituminous prime coat etc	120.43	104.83	15.60	11390.60 SQM	177,693
		Cut back asphalt for bituminous tack coat etc	38.36	28.92	9.44	122990.05 SQM	1,161,026
Total							295,923,472

ANNEX-VII

(Para No 4.2.1.8)

Overpayment due to sanction of incorrect rates analysis by allowing inadmissible crane and dumper charges for item steel 60-grade - Rs 256.67 million

Para No	Package No	Name of items	Rate approved (Rs/ton)	Rate admissible (Rs/ton)	Diff. (Rs/ton)	Quantity paid (in ton)	Overpayment (Rs)
14	I (RWP)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	16736.457	55,057,587
56	III (RWP)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	12177.310	40,059,453
57	II (RWP)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	11697.90	38,482,347
196	Bus Depot	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	102,985.72	3,447.80	1414.199	4,875,875
267	I (ISB)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	5010.618	16,483,329
303	II (ISB)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	6238.1	20,524,350
348	III (ISB)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	11332.03	37,278,716
382	IV (ISB)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	5559.288	18,288,278
412	V (ISB)	Reinforcement as per AASHTO M-31 Grade-60 etc	106,643.04	103,353.36	3,289.68	6572.256	25,620,615
Total							256,670,550

ANNEX-VIII
(Para No 4.2.1.12)

**Overpayment due to extra labour rate in item of pre-mixed carpeting-
Rs 69.88 million**

Para No	Package Number	Name of item	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (in per cu.m)	Overpayment (Rs)
5	I (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,766.78	665.45	7007.81729	4,663,352
8	I (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	6573.50	4,456,675
117	II (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,766.78	665.45	6655.69	4,429,028
118	III (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,766.78	665.45	7379.15	4,910,455
123	II (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	5233.95	3,548,461
124	III (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	6273.19	4,253,035
181	Bus Depot	Asphaltic Base Course 3.40%JMF	15,526.72	14,827.12	699.60	3404.364	2,381,693
185	Bus Depot	Asphaltic Wearing Course 4.20 %JMF	17,820.80	17,108	712.80	1204.519	858,581
251	I (ISB)	Asphaltic Base Course	15,432.23	14,766.78	665.45	8606.093	5,726,925
253	I (ISB)	Asphaltic Wearing Course	17,780.03	17,102.04	677.99	6970.109	4,725,664
289	II (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	1907.36	1,293,360
290	II (ISB)	Asphaltic Base Course 3.40%JMF	15,432.23	14,766.78	665.45	1525.764	1,015,350
339	III (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	4897.14	3,320,114
340	III (ISB)	Asphaltic Base Course 3.30%JMF	15,432.23	14,766.78	665.47	6971.83	4,639,550
372	IV (ISB)	Asphaltic Base Course	15,432.23	14,766.78	665.45	10,693.86	7,116,229

Para No	Package Number	Name of item	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (in per cu.m)	Overpayment (Rs)
374	IV (ISB)	Asphaltic Wearing Course 4.2% JMF	17,780.03	17,102.04	677.99	10,704.80	7,257,747
401	V (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,102.06	677.97	4507.73	3,056,105
402	V (ISB)	Asphaltic Base Course 3.30%JMF	15,432.23	14,766.78	665.47	3351.55	2,230,356
Total							69,882,680

ANNEX-IX

(Para No 4.2.1.15)

Overpayment due to allowing inadmissible short carriage – Rs 57.67 million

Para No	Package No	Name of item	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (in per cu.m)	Overpayment (Rs)
11	I (RWP)	Granular sub-base	1,683.25	1,232.35	450.90	2841.189	1,281,092
17	I (RWP)	Water bound macadam	2,220.99	1,938.75	282.24	5724.209	1,615,600
128	II (RWP)	Granular sub-base	1,683.25	1,232.35	450.90	434.11	195,740
129	III (RWP)	Granular sub-base	1,683.25	1,232.35	450.90	8343.62	3,762,138
134	II (RWP)	Water bound macadam	2,220.99	1,938.75	282.24	2311.20	652,313
135	III (RWP)	Water bound macadam	2,220.99	1,938.75	282.24	18125.70	5,115,797
178	Bus Depot	Water bound macadam Base Course	2,299.33	2,005.81	293.52	5003.833	1,468,725
179	Bus Depot	Granular sub-base	1,745.49	1,275.38	470.11	11229.077	5,278,901
256	I (ISB)	Granular sub-base	1,683.25	1,232.34	450.91	17324.093	7,811,607
264	I (ISB)	Water bound macadam	2,220.99	1,854.58	366.41	12828.359	4,700,439
291	II (ISB)	Granular sub-base	1,683.25	1,344.56	338.69	1363.287	461,732
292	II (ISB)	Water bound macadam	2,220.99	1,938.74	282.25	2963.203	836,364
309	II (ISB)	Sub base	1,683.25	1,571.02	112.23	1363.287	153,001
341	III (ISB)	Granular sub-base	1,683.25	1,344.56	338.69	12890.90	4,366,018
342	III (ISB)	Water bound macadam	2,220.99	1,938.74	282.25	17392.89	4,909,143
350	III (ISB)	Sub base	1,683.25	1,571.02	112.23	12890.90	1,446,745
	III (ISB)	Base Course	2,220.99	2,136.81	84.18	17392.89	1,464,133

Para No	Package No	Name of item	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (in per cu.m)	Overpayment (Rs)
377	IV (ISB)	Granular sub-base	1,683.25	1,232.34	450.91	8467.56	3,818,107
381	IV (ISB)	Water bound macadam	2,220.99	1,854.58	366.41	17,086.18	6,260,547
403	V(ISB)	Granular sub-base	1,683.25	1,344.56	338.69	2963.02	1,003,545
404	V(ISB)	Water bound macadam	2,220.99	1,938.74	282.25	2610.42	736,791
414	V (ISB)	Sub base	1,683.25	1,571.02	112.23	2963.02	332,540
Total							57,671,018

ANNEX-X
(Para No 4.2.1.16)

Loss due to inclusion of 5% mega project allowance twice – Rs 57.31 million

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Rate admissible (Rs)	Diff. (Rs)	Qty paid	Amount (Rs)
166	I (RWP)	Steel structure A-36 for pedestrian bridge etc	208.20	198.29	9.91	623981.566 kg	6,183,657
167	I (RWP)	Steel structure A-36 for Bus Shed etc	204.60	194.86	9.74	316069.54 kg	3,078,517
168	I (RWP)	P/L Polyurethane paint etc	789.98	752.370	37.61	27341.65 Sqm	1,028,319
169	II (RWP)	Steel structure A-36 for pedestrian bridge etc	208.20	198.29	9.91	289736.24 kg	2,871,286
170	II (RWP)	Steel structure A-36 for Bus Shed etc	204.60	194.86	9.74	244063.54 kg	2,377,178
171	II (RWP)	P/L Polyurethane paint etc	789.98	752.370	37.61	13196.89 Sqm	496,335
172	III (RWP)	Steel structure A-36 for pedestrian bridge etc	208.20	198.29	9.91	588511.419 kg	5,832,148
173	III (RWP)	Steel structure A-36 for Bus Shed etc	204.60	194.86	9.74	273786.53 kg	2,666,680
174	III (RWP)	P/L Polyurethane paint etc	789.98	752.370	37.61	19898.98 Sqm	748,400
279	I (ISB)	(413-c) Polyurethane finish paint	789.98 per SM	769.69 Per SM	20.31	37429.998 SM	760,203
	I (ISB)	(413aai) Structural steel for Bus Station	204.60 per kg	197.60 per kg	7.00	403690.877 kg	2,825,836
	I (ISB)	(413ai) Structural steel for Pedestrian bridge	208.20 per kg	201.50 per kg	6.70	997814.222 kg	6,685,355
330	II (ISB)	(413-c) Polyurethane finish paint	789.98 per SM	769.69 Per SM	20.31	11,274.516 SM	228,985
	II (ISB)	(413aai) Structural steel for Bus Station	204.60 per kg	197.60 per kg	7.00	20176.200 kg	141,233
	II (ISB)	(413ai) Structural steel for Pedestrian bridge	208.20 per kg	201.50 per kg	6.70	135,972.52 kg	911,016
365	III (ISB)	(413-c) Polyurethane finish paint	789.98 per SM	769.69 Per SM	20.31	2333 SM	47,383
	III (ISB)	(413aai) Structural steel for Bus Station	204.60 per kg	197.60 per kg	7.00	325,379.90 kg	2,277,659
	III (ISB)	(413ai) Structural steel for Pedestrian bridge	208.20 per kg	201.50 per kg	6.70	691,863.55 kg	4,635,486

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Rate admissible (Rs)	Diff. (Rs)	Qty paid	Amount (Rs)
387	IV (ISB)	(413-c) Polyurethane finish paint	789.98 per SM	769.69 Per SM	20.31	9417.67 SM	191,273
	IV (ISB)	(413aii) Structural steel for Bus Station	204.60 per kg	197.60 per kg	7.00	334,181 kg	2,339,267
	IV (ISB)	(413ai) Structural steel for Padedtrian bridge	208.20 per kg	201.50 per kg	6.70	107,048 kg	717,222
425	V (ISB)	(413-c) Polyurethane finish paint	789.98 per SM	769.69 Per SM	20.31	37429.998 SM	760,203
		(413aii) Structural steel for Bus Station	204.60 per kg	197.60 per kg	7.00	403690.877 kg	2,825,836
		(413ai) Structural steel for Padedtrian bridge	208.20 per kg	201.50 per kg	6.70	997814.222 kg	6,685,355
Total							57,314,832

ANNEX-XI

(Para No 4.2.1.18)

**Overpayment due to allowing of extra labour in rate analysis of item
Steel A-36 – Rs 52.15 million**

Para No	Package No	Name and detail of specification used in the work	Rate approved (Rs)	Rate admissible (Rs)	Diff. (Rs)	Qty paid	Amount (Rs)
32	I (RWP)	“Steel structure A-36 for pedestrian bridge etc”	208.20	193.50	14.70	623981.566 kg	9,172,529
39	III (RWP)	“Steel structure A-36 for pedestrian bridge etc”	208.20	193.50	14.70	571695.539 kg	8,403,924
		“Steel structure A-36 for pedestrian bridge etc” on underpass	208.20	193.50	14.70	16815.881 kg	247,193
101	II (RWP)	“Steel structure A-36 for pedestrian bridge etc”	208.20	193.50	14.70	289736.24 kg	4,259,123
		“Steel structure A-36 for pedestrian bridge etc” on underpass	208.20	193.50	14.70	38835.10 kg	570,876
103	I (ISB)	Steel structure A-36 for pedestrian bridge and pedestrian underpass etc	208.20	193.50	14.70	997813.772	14,667,862
	II (ISB)	Steel structure A-36 for pedestrian bridge and pedestrian underpass etc	208.20	193.50	14.70	135972.52	1,998,796
	III (ISB)	Steel structure A-36 for pedestrian bridge and pedestrian underpass etc	208.20	193.50	14.70	691863.55	10,170,394
	IV (ISB)	Steel structure A-36 for pedestrian bridge and pedestrian underpass etc	208.20	193.50	14.70	107048	1,573,605
	V (ISB)	Steel structure A-36 for pedestrian bridge and pedestrian underpass etc	208.20	193.50	14.70	73724.178	1,083,745
Total							52,148,047

ANNEX-XII
(Para No 4.2.1.19)

**Overpayment due to inadmissible pre-heating charges of bitumen –
Rs 47.24 million**

Para No	Package number	Name of item	Rate approved (Rs/cu.m)	Rate admissible (Rs/cu.m)	Diff. (Rs/cu.m)	Quantity paid (in per cu.m)	Overpayment (Rs)
4	I (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,977.44	454.79	7007.81729	3,187,085
7	I (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,201.21	578.82	6573.50	3,804,873
115	II (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,977.44	454.79	6655.69	3,026,275
116	III (RWP)	Asphaltic Base Course 3.40%JMF	15,432.23	14,977.44	454.79	7379.15	3,355,963
121	II (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,201.21	578.82	5233.95	3,029,514
122	III (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,201.21	578.82	6273.192	3,631,048
180	Bus Depot	Asphaltic Base Course 3.40%JMF	15,526.72	15,081.52	445.20	3404.364	1,515,623
184	Bus Depot	Asphaltic Wearing Course 4.20 %JMF	17,820.80	17,254.40	566.40	1204.519	682,239
250	I (ISB)	Asphaltic Base Course	15,432.23	15,064.71	367.52	8606.093	3,162,911
252	I (ISB)	Asphaltic Wearing Course	17,780.03	17,312.29	467.74	6970.109	3,260,199
287	II (ISB)	Asphaltic Base Course 3.40%JMF	15,432.23	15,064.71	367.52	1525.764	560,748
288	II (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,312.28	467.75	1907.638	892,298
337	III (ISB)	Asphaltic Base Course	15,432.23	15,064.71	367.52	6971.84	2,562,290
338	III (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,312.28	467.75	4897.14	2,290,637
371	IV (ISB)	Asphaltic Base Course 3.4%	15,432.23	15,064.71	367.52	10,693.86	3,930,207
373	IV (ISB)	Asphaltic Wearing Course 4.2% JMF	17,780.03	17,312.29	467.74	10,704.80	5,007,063
399	V (ISB)	Asphaltic Base Course	15,432.23	15,064.71	367.52	3351.55	1,231,761
400	V (ISB)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,312.28	467.75	4507.73	2,108,490
Total							47,239,224

ANNEX-XIII
(Para No 4.2.1.20)

**Overpayment due to allowing contractors profit / overheads on GST –
Rs 38.43 million**

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
01	II (RWP)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid.	1,310	43.48	5343	232,312
	II (RWP)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC.	323	9.90	543	5,375
02	I (RWP)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid.	1,310	43.48	6758	293,838
	I (RWP)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC.	323	9.90	6758	66,904
112	III (RWP)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or	1,310	43.48	5885	255,879

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
		Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid.				
	III (RWP)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC.	323	9.90	5885	58,261
254	I (ISB)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid.	1,310	43.48	12678	551,239
	I (ISB)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC.	323	9.90	12678	125,512
286	II (ISB)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid. (item No.11)	1,398	43.48	1906	82,872
	II (ISB)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC. (item No.12)	380	9.90	1836	18,176
	II (ISB)	4-core 35mm 2 PVC insulated and PVC overall sheathed	2,730	89.90	1010	90,799

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
		600/1000 volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground. (item No.13)				
356	III (ISB)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid. (item No.11)	1,309	43.48	7073	307,534
	III (ISB)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC. (item No.12)	323	9.90	6753	66,854
375	IV (ISB)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe already laid.	1,309	43.48	16,003	695,810
	IV (ISB)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC.	323	9.90	17,232	170,596
398	V (ISB)	4-core 16mm2PVC insulated and PVC overall sheathed 600/1000 volt grade unarmoured copper cables (Newage, pioneer, fast or Pakistan cables and / or approved equivalent) laid direct in ground or pulled in PVC pipe	1,310	43.48	7070	342,753

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
		already laid. (item No.12 of the bill)				
	V (ISB)	Single core 16mm 2 PVC insulated 450/750 Volt grade unarmoured copper cable (Newage, Pioneer, fast or Pakistan cables or approved equivalent) laid direct in ground or pulled in PVC pipe already laid as CPC. (item No.13 of the bill)	323	9.90	7070	69,993
21	I (RWP)	DG Set imported 225 KVA with sound proof canopy and earthing system etc	6,010,325	1,192,325	4	4,769,300
22	II (RWP)	DG Set imported 225 KVA with sound proof canopy and earthing system etc	6,010,325	1,192,325	2	2,384,650
23	II (RWP)	DG Set imported 300 KVA with sound proof canopy and earthing system etc	8,392,325	2,662,325	1	2,662,325
113	III (RWP)	DG Set imported 225 KVA with sound proof canopy and earthing system etc	6,010,325	1,192,325	2	2,384,650
114	III (RWP)	DG Set imported 300 KVA with sound proof canopy and earthing system etc	8,392,325	2,662,325	1	2,662,325
304	II (ISB)	Diesel generator 415 Volt 3face four wire 50HZ skid mounted prime rating DGZ including day tank suitable for 24 hours of rated capacity along with remote fuel monitoring facility and all required accessories along with sound and weather proof canopy. (I) 400 KVA (prime rating at 500C)	9,912,500	2,652,500	1	2,652,500
		II 425KVA (prime rating at 500C)	9,912,500	1,926,500	1	1,926,500
281	I (ISB)	10 m high single bent arm conical octagonal galvanize steel pole etc	49,063	1,615	76 Nos	122,740
		12 m high single bent arm conical octagonal galvanize steel pole etc	79,063	2,635	100 Nos	263,500
		12 m high double bent arm conical octagonal galvanize steel pole etc	81,563	2,720	252 Nos	685,440

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
		Road lighting pole foundation	13,980	449.83	444 Nos	199,725
		PVC pipe conduit class D 100 mm dia	1,206	38.89	2340 RM	91,003
		PVC pipe conduit class D 150 mm dia	2,675	88.83	2320 RM	206,086
		PVC pipe conduit class D 300 mm dia	11,215	374.94	1528 RM	572,908
		PVC pipe conduit class B 100 mm dia	763	23.80	14533.493 RM	345,897
		4-core 16mm ² PVC insulated Copper cable etc	1,310	43.48	12678 RM	551,239
		Single core 16mm ² PVC insulated Copper cable etc	323	58.08	12,678 Rm	736,338
		Bore type etc	137,375	4628.25	30 Jobs	138,848
		HT Cable 3 core 120 mm ² etc	8,409	279.52	500 Rm	139,760
331	II (ISB)	12mm high single bent arm conical octagonal steel pole	79,063	2635	57.550	151,644
		Road lighting pole foundation	13,980	449.82	88.680	39,890
		Hot dipped galvanized bracket for mounting of flood light	6,313	214.62	98	21,032
		4-core 16mm PVC insulated	1,310	43.47	1906	82,854
		1-core 16mm PVC insulated	323	9.90	1836	18,180
		4-core 70mm insulated	4,360	146.11	12	1,753
		Supply of 400KVA transformer	2,480,000	69,912	1	69,912
		HT cable 3-core 120mm XLPE cable	8,409	278.52	76	167,712
366	III (ISB)	Road lighting pole foundation	13,980	449.82	171 Nos	76,919.22
		Hot dipped galvanized bracket for flood light	6,313	212.50	215 Nos	45,687.50
		PVC pipe 100 mm Conduits class-D	1,206	38.88	2276.50	88,510.32
		PVC pipe 150 mm Conduits class-D	2,675	88.82	1110 Nos	98,590
		PVC pipe 300 mm Conduits class-D	11,215	374.93	940 RM	352,434
		PVC cable 4-core 16 mm	1,310	43.47	7073 RM	307,516
		PVC cable 1-core 16 mm	323	9.90	6753 RM	66,854.70
		4-core 70 mm PVC 450/750 volt copper cable	4,360	146.11	350 RM	51,140
		3-core 2.55 mm PVC 450/750 volt copper cable	2,820	6.92	4000 RM	27,710
393	IV (ISB)	12 m high single bent arm conical octagonal galvanize steel pole etc	79,063	2,635	230 Nos	606,050
		12 m high double bent arm conical octagonal galvanize steel pole etc	81,563	2,720	61 Nos	165,920

Para No	Package Number	Name and detail of specification used in the work	Rate approved (Rs)	Excess rate 25% on 17% GST (Rs)	Qty paid (in R.M and per job)	Amount (Rs)
		Road lighting pole foundation	13,980	449.83	329 Nos	147,994
		PVC pipe conduit class D 100 mm dia	1,206	38.89	235 RM	9,139
		PVC pipe conduit class D 150 mm dia	2,675	88.83	936 RM	83,145
		PVC pipe conduit class D 300 mm dia	11,215	374.94	624 RM	233,963
		PVC pipe conduit class B 100 mm dia	763	23.80	18251 RM	434,374
		4-core 16mm ² PVC insulated Copper cable etc	1,310	43.48	16003 RM	695,810
		Single core 16mm ² PVC insulated Copper cable etc	323	58.08	17,232 Rm	1,000,835
		Bore type etc	137,375	4,628.25	26 Jobs	120,335
		HT Cable 3 core 120 mm ² etc	8,409	279.52	610 Rm	170,507
426	V (ISB)	12 mm high single bent arm conical octagonal galvanized steel	49,063	1,615	68 No	109,820
		12 mm high double arm conical octagonal (hot dip) galvanized steel	81,563	2,720	16 No	43,520
		Hot dipped galvanized bracket	6,313	212.50	121 No	25,712
		PVC pipe conduit class-D 50 mm	360	11.47	1779 RM	20,405
		PVC pipe conduit class-D 80 mm	750	24.65	2883 RM	71,066
		PVC pipe conduit class-D 150 mm	2,675	88.82	440 RM	39,080
		PVC pipe conduit class-D 300 mm	11,215	374.93	104 RM	38,992
		4-core 16 mm PVC	1,310	43.47	7070 No	307,332
		Single core 16 mm	323	9.90	7070 No	69,993
		HT 3-core 120mm XLPE	8,409	279.52	919 RM	257,879
237	Bus Depot	Different 10 items like cable pipes pole mounted transformers etc	-	-	-	5,176,282
Total						38,426,932

**ANNEX-XIV
(Para No 4.2.1.22)**

Loss due to non-deduction of cost of less used bitumen – Rs 17.97 million

Para No	Package Number	Name of item	Rate approved with 3.40% JMF (Rs)	Rate admissible (Rs)	Diff. (Rs)	Quantity paid	Overpayment (Rs)
3	I (RWP)	Asphaltic Base Course	15,432.23	15,064.71	367.52	3351.55	1,231,761
6	I (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,283.64	496.39	6573.50	3,263,019
13	II (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,531.83	248.20	5233.95	1,299,066
97	III (RWP)	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,531.83	248.20	6273.192	1,557,006
201	Bus Depot	Asphaltic Wearing Course 4.20%JMF	17,780.03	17,531.63	248.40	1204.519	299,203
280	I(ISB)	Asphaltic Wearing Course 4.10%JMF	17,780.03	17,531.63	248.40	6970.109	1,731,375
322	II (ISB)	Asphaltic Wearing Course 4.20%JMF	-	-	-	-	622,193
384	IV (ISB)	Asphaltic Wearing Course 4.20%JMF	-	-	-	-	5,249,810
406	V (ISB)	Asphaltic Wearing Course 4.20%JMF	-	-	-	-	2,244,127
294	II (ISB)	Asphaltic Wearing Course 4.20%JMF	-	-	-	-	473,644
Total							17,971,204

ANNEX-XV
(Para No 4.2.1.23)

Overpayment due to allowing short carriage for non-BOQ Item, RCC Pipes – Rs 12.66 million

Para No	Package No	Name of Items	Rate approved (Rs per meter)	Rate excess due to short carriage (Rs per meter)	Qty paid (in meter)	Amount (in Rs)
140	III (RWP)	“P/L RCC Sewer Pipe 60 inch (1520mm) dia etc”	25,386.28	2,996	1240	3,715,040
141	II (RWP)	“P/L RCC Sewer Pipe 36 inch (900 mm) dia etc”	9,692.34	749	495.501	371,130
142	II (ISB)	P/L RCC Sewer Pipe 72 inch (1830 mm) dia etc	37,091.03	3,745	1487.353	5,570,136
	V (ISB)	P/L RCC Sewer Pipe 72 inch (1830 mm) dia etc	37,091.03	3,745		
143	II (ISB)	P/L RCC Sewer Pipe 36 inch (600 mm) dia etc	4,662.10	749	41.650 482.76	392,783
	V (ISB)	P/L RCC Sewer Pipe 36 inch (600 mm) dia etc	4,662.10	749		
150	IV (ISB)	“P/L RCC Sewer Pipe 60 inch (1520mm) dia etc”	25,386.28	2,996	50	149,800
151	IV (ISB)	“P/L RCC Sewer Pipe 36 inch (900 mm) dia etc”	9,692.34	749	887.59	664,804
152	IV (ISB)	“P/L RCC Sewer Pipe 72 inch (1830 mm) dia etc”	37,091.03	3,745	420	1,572,900
153	IV (ISB)	“P/L RCC Sewer Pipe 48 inch (1220 mm) dia etc”	14,105.87	1,498	150.66	225,688
Total						12,662,281

ANNEX-XVI

(Para No 4.2.1.33)

Overpayment due to sanction of higher rate analysis of tuff tiles and kerb stone in horticulture work – Rs 3.07 million

Para No	Name of Works and Contractors	Rate approved (Rs/sft)	Rate admissible (Rs/sft)	Diff. (Rs/sft)	Qty paid (in sft)	Amount (Rs)
233	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Frigo International	138	112.32	25.68	6564	168,563
	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Nawaz & Co	138	112.32	25.68	6555	168,332
	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Ahmad Shah Abdali	138	112.32	25.68	28571	733,703
	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Rawal Construction	138	112.32	25.68	22885	587,686
234	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Nawaz & Co	180	105.48	74.52	753.60	56,158
	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Ahmad Shah Abdali	180	105.48	74.52	6879	512,623
	Construction of horticulture related Civil Works in Metro Bus Murree Road, Rawalpindi. M/s Rawal Construction	180	105.48	74.52	11254.30	838,670
Total						3,065,735