

Venues Developed by Central Public Works Department

CPWD was engaged by the Sports Authority of India (SAI) for upgradation/ renovation of five competition venues – Jawaharlal Nehru Stadium, Dr. SP Mukherjee Stadium, Major Dhyan Chand National Stadium, Indira Gandhi Stadium, and Dr. Karni Singh Shooting Range, as well as one training venue – DPS, RK Puram. In addition, CPWD renovated the Kadarapur Shooting Range on behalf of CRPF.

We found that the appointment of Consulting Engineering Services (CES) as the main design consultant for the five main stadia, in September / October 2006, was seriously flawed. CES was favoured at the evaluation stage by award of marks on “concept design” (which were largely outputs of a previous set of consultancy contracts for “condition survey” awarded to CES). Further, the technical qualification of CES on the basis of “concept design” is all the more amazing, since OC's consultant, EKS was engaged only in November 2006 and thereafter prepared the venue briefs, on the basis of which “concept designs” were to be prepared. The performance of CES in almost all the venue consultancy contracts was abysmal. The financial liability of CES for numerous deficiencies should be determined, and CES should be blacklisted for consideration for future consultancy contracts. We also recommend that CPWD's Central Design Organisation be strengthened, to reduce undue dependence on external consultants.

A Centralised Co-ordination Committee, chaired by Chairman, OC and including representatives from venue owners/ implementing agencies, was responsible for selection of brands of sports surfaces. We found clear instances of favouritism and bias shown by this Committee (which was largely guided by the OC) in selecting sport surfaces for athletic tracks, hockey turf and badminton court mats.

A joint tendering mechanism was put in place for selection of agencies for laying the sports surfaces at the venues. We found serious deficiencies in the award of the contract for laying of synthetic athletic track surfaces by CPWD to Shiv Naresh Sports Pvt. Ltd. The restrictive tendering conditions resulted in a situation where the awarded rates were much higher than comparative rates. We also found that the area over which synthetic track was laid included 9,130 sqm outside the main track and area of final warm-up and call rooms at JLN Stadium at a cost of Rs. 6.63 crore; we are unable to derive assurance that this additional quantity was required for the Games, and confirmed as such by OC. We also found deficiencies in the quality of the main competition track during our field visits in November 2010.

A joint tendering mechanism was evolved for supply and installation of VVIP/ VIP chairs and media chairs for five venues. We found a systematic pattern of calculations and re-

calculations for inflation of rates, which ultimately benefited the vendor, Superior Furnitures.

We found massive overkill in purportedly building “redundancy” in power supply arrangements for the venues, including:

- *Installation of DG Sets as permanent fixtures (the prospects of utilisation of which during the non-events period are negligible) for “critical loads” as assessed by CPWD which were close to the normal power requirement;*
- *Installation of UPS (whose requirement on a legacy basis is, in our opinion, more or less insignificant); and*
- *Hiring of additional DG sets of huge capacity by OC.*

In Jawaharlal Nehru Stadium, we found instances of non-adjustment for work not executed, extra payments for work already covered by the scope of the lumpsum contract, and non-levy of compensation for delayed completion of the work of the membrane roof. The creation of a tunnel at JNS for entry and exit of performing artistes at the opening and closing ceremonies was initiated only in November 2009; we are unable to ascertain how much of the delays are attributable to the introduction of the tunnel at this late stage. During a joint inspection in January 2011, we found several deficiencies in execution of work, including leakages in underground parking and evidence of water logging in the lower basement.

The main work of Dr. Shyama Prasad Mukherjee Swimming Pool Complex was awarded on a lumpsum contract. We found a number of concessions to the contractor, in deviation from the spirit of the lumpsum contract – large number of extra items, additional payment for work covered in the original contract, as well as substitution of the original galvalume (aluminium-zinc coated steel) roof with an aluminium roofing system, due to the failure of the contractor; this was also noticed in the replacement of the roof at JNS Weightlifting auditorium. The essence of the lumpsum character of the contract was, thus, defeated. We also found instances of execution of poor quality of work.

Work at the Indira Gandhi Stadium Complex involved upgradation/ construction of venues for cycling, gymnastics and wrestling. We found that an otherwise ineligible firm for the composite work of the indoor cycling velodrome was qualified (and ultimately became the successful bidder) through a change in accounting periods (to ensure compliance with the condition of not having incurred losses in more than 2 of the last 5 years), as well as inconsistent and unreliable figures of liabilities. Strangely, competition for laying the permanent timbre track for the velodrome was limited to Indian furniture contractors (in association with an international track design and construction expert), with no attempt to float international tenders; this was compounded by dilution of eligibility criteria. We also found deficiencies in the bidding process for the wrestling stadium, with an inexplicable delay of four months in declaring the pre-qualified bidders, ultimately

resulting in a single financial bid, which raises concerns on the competitiveness of the bidding process. Further, we found numerous irregularities/ relaxations in the tendering process for different works relating to the gymnastics stadium, hostel/ media centre and roads, boundary wall etc. to favour a particular bidder, Swadeshi Construction Co. Our verification of its correspondence address revealed that it was a residence, casting further doubt on its credibility and authenticity.

In the case of the Major Dhyan Chand Stadium, we found dilution of pre-qualification criteria benefiting a particular contractor; further, estimates were lowered substantially from the RFQ to the RFP stage, which may have discouraged larger companies from participating. We also found that the “justified” rates calculated by the CPWD did not truly reflect the market, as we found evidence of much lower rates for components of the main work from outsourced agencies. Also, despite additional costs for reduced time period for completion factored into the “justification” process, the project took 37 months, against the stipulated 18 months; no compensation had, however, been levied. We also found inexplicable delays, with re-tendering twice along with dilution of bid criteria, in award of the work of the PA system to a firm, which was ineligible in the first and second rounds of tendering.

The originally envisaged renovation/ upgradation of Dr. Karni Singh Shooting Range was changed to reconstruction of ranges after a delay of seven months, creating a squeeze of time at the execution stage. Due to the failure of the contractor, part of the work was awarded (after relaxation of eligibility conditions to another agency). We found deficiencies in the quality of works executed, which persisted even after the Games. We also found certain deficiencies in the execution of works at the Kadarapur Shooting Range. The training facilities to be constructed at the CRPF campus, Jharoda Kalan for police sportspersons for participation in CWG-2010, had not been completed.

17.1 Engagement of Design consultants

17.1.1 Venue Appraisal Studies and Venue Briefs by EKS

In June 2005, at the conceptualisation stage of the CWG – 2010, EKS was appointed¹ as a consultant for conducting a baseline study – 'Venue Appraisal Services' (VAS). This included

- comments on the appropriateness of the proposed infrastructure for meeting internationally accepted standards;
- technical venue requirements;
- recommendations regarding alternate venue opportunities/ upgradation of existing venues; and
- preparation of Master Plan for CWG - 2010 venues, etc.

The competition venues were finalised in January 2006 in the 9th Group of Ministers (GoM) meeting. Subsequently, in November

¹ On the proposal of OC to the GoM in its 4th Meeting in March 2005 at a cost of Rs. 0.49 crore to be borne by DDA

2006, EKS was again appointed as the main consultant by the OC for preparing Venue Briefs, which were to be the basic guiding documents for the venue developer to develop sports venues for hosting international sports events during CWG – 2010.

The venue briefs stipulated that the design and technical solutions for venue development were to be prepared by the design consultants appointed by the respective agencies.

17.1.2 Engagement of CES for “Condition Survey”

In July 2004, soon after the award of CWG-2010 to Delhi but before planning for the same had started at the Government's level, SAI entrusted renovation of stadia to CPWD. Following this (in March 2005), CES was awarded contracts for condition survey and repairs for five stadia namely – MDC National Stadium, Dr. S.P.M Swimming Complex, Indira Gandhi Stadium Complex, Jawaharlal Nehru Stadium, and Karni Singh Shooting Range for a total consultancy fee of Rs. 0.43 crore². As a part of this set of

earlier contracts, CES prepared reports in several volumes for all these stadia, which included concept designs, BOQs, technical specifications, etc. These contracts were continuing even in March 2007; the exact dates of completion of contracts could not be ascertained from CPWD.

17.1.3 Selection of Consultant Engineering Services (I) Ltd. (CES) by CPWD as main consultant in all the five stadia

In the meantime, subsequent to the identification of the venues, CPWD initiated the work of award / identification of Design Consultants for its venues during the period June – July 2006.

For the engagement of specialized agencies for consultancy services for works in all the stadia, an evaluation committee³, on the approval of the Additional Director General (TD) – CPWD, was constituted. The tenders for the main consultancy contracts for the development of the five stadia, for CWG – 2010 were floated by the individual stadiums. Details of firms that technically qualified and then were awarded the consultancy contract are given in Table 17.1.

Table 17.1 - Consultancy firms technically qualified and awarded consultancy contract

Venue	Firms pre-qualified.short listed	Firm declared technically qualified	Firm awarded the work
Jawaharlal Nehru Sports Complex	JNS Complex <ul style="list-style-type: none"> ■ CES (I) Pvt Ltd. ■ STUP Consultants Pvt. Ltd. ■ RITES Ltd. ■ Tata Consulting Engineers Ltd. ■ Intercontinental Consultants and Technocrats Pvt. Ltd. (ICT) ■ Dalai Mott MacDonald 	CES (I) Pvt. Ltd.	CES (I) Pvt. Ltd.

² MDC + KSSR = Rs.9.87 lakh; IG+SPM = Rs. 12.55 lakh; JNS = Rs. 20.44 lakh

³ Members of the committee were CE CDO-cum-Project Manager CWG – 2010; CE (NDZ) – IV; CE (Electrical); Chief Architect; ED-Finance (SAI); SE (Designs)-I, CDO; SE (Designs)-II, CDO; and SE DCC – III – member-Secretary.

Venue	Firms pre-qualified.short listed	Firm declared technically qualified	Firm awarded the work
	JNS Weightlifting Auditorium <ul style="list-style-type: none"> ■ CES (I) Pvt Ltd. 		
Indira Gandhi Stadium Complex (in two packages)	Package – I (Gymnastics) <ul style="list-style-type: none"> ■ CES (I) Pvt Ltd. ■ STUP Consultants Pvt. Ltd. ■ Development Consultants Pvt. Ltd. ■ M. N. Dastur Ltd. ■ Construma Consultants Pvt. Ltd. 	CES (I) Pvt. Ltd.	CES (I) Pvt. Ltd.
	Package –II (Wrestling, Warm-up Halls for Gymnastics, External Utilities) Five firms pre-qualified which included ⁴ <ul style="list-style-type: none"> ■ FMM Pvt. Ltd. ■ Span Consultants Pvt. Ltd. ■ CES (I) Ltd. 		
Dr. S.P.M. Swimming Pool Complex	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd. ■ STUP Consultants Pvt. Ltd. ■ RITES Ltd. ■ Tata Consulting Engineers Ltd. ■ Intercontinental Consultants and Technocrats Pvt. Ltd. 	<ul style="list-style-type: none"> ■ CES (I) Pvt. Ltd. ■ Intercontinental Consultants and Technocrats Pvt. Ltd. 	CES (I) Pvt. Ltd.
Major Dhyan Chand Hockey Stadium	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd. ■ STUP Consultants Pvt. Ltd. ■ Mott MacDonald Pvt. Ltd. 	CES (I) Pvt. Ltd.	CES (I) Pvt. Ltd.
Dr. Karni Singh Shooting Range	<ul style="list-style-type: none"> ■ Kothari & Associates. ■ Span Consultants Pvt. Ltd. ■ CES (I) Ltd. ■ Architects Bureau ■ TEAM 	<ul style="list-style-type: none"> ■ CES (I) Pvt. Ltd. ■ Span Consultants Pvt. Ltd. 	CES (I) Pvt. Ltd.

CES technically qualified in all the five contracts. In three stadia, its financial bid was the only one to be opened, effectively denying the benefit of competitive bidding.

The contracts for design consultancy were awarded to CES in all the five venues at the rates indicated in Table 17.2:

⁴ Other details not available in records furnished to audit

Table 17.2 - Stadium wise awarded cost of consultancy services to CES

Venue	Awarded Cost
Jawaharlal Nehru Stadium Complex	Rs. 8.97 crore
Indira Gandhi Stadium Complex (in two packages)	Rs. 5.17 crore (The scope of work increased, post award, to include interior space planning of gymnastics stadium at an additional cost of Rs. 0.38 crore)
Dr. S.P.M. Swimming Pool Complex	Rs. 6.41 crore
Major Dhyan Chand Hockey Stadium	Rs. 2.09 crore
Dr. Karni Singh Shooting Range	Rs. 0.32 crore (Original consultancy work not foreclosed, and new consultancy work assigned at an additional cost of Rs. 0.55 crore augmenting the cost of consultancy work to Rs.0.80 crore)
Total	Rs. 22.96 crore

We found that CES emerged as the only technically qualified bidder for three stadia, primarily on account of marks assigned to them on the parameters of 'concept designs' and other details (which were largely outputs of the previous set of

consultancy contracts). All other bidders, despite possessing specific experience in sports stadia, were held to be technically not qualified, by assigning lower scores to them on the parameters of 'concept design' as indicated in the Table 17.3:

Table 17.3 - Marks obtained bidders on the parameter of concept design

Venue	Maximum and minimum qualifying marks	Marks obtained on concept design	Firm Declared technically qualified
Jawaharlal Nehru Stadium Complex	Maximum Marks – 30 Minimum Marks – 22	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd – 26.62 ■ ICT Pvt. Ltd. – 10.87 ■ TCE Ltd. – 16.59 	CES (I) Pvt Ltd.
Indira Gandhi Stadium Complex (in two packages)	Details regarding marks obtained not furnished.	Details regarding marks obtained not furnished.	CES (I) Pvt Ltd. for both the packages
Dr. S.P.M. Swimming Pool Complex	Maximum Marks – 30 Minimum Marks – 20	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd – 26.00 ■ ICT Pvt. Ltd. – 22.50 	CES (I) Pvt Ltd and ICT Pvt. Ltd qualified (Financial offer was evaluated on techno-commercial parameters where ICT scored 68 marks and CES 86.64)
Major Dhyan Chand Hockey Stadium	Maximum Marks – 20 Minimum Marks – 15	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd – 17.50 ■ Mott MacDonald Pvt. Ltd. – 7.50 ■ STUP – 0.00 	CES (I) Pvt Ltd.
Dr. Karni Singh Shooting Range	Maximum Marks – 40 Minimum Marks – 25	<ul style="list-style-type: none"> ■ CES (I) Pvt Ltd – 27.50 ■ Span – 31.00 	CES (I) Pvt Ltd. & Span qualified (CES quoted the lowest Rates of Rs. 39.51 lakh as against Span's quote of Rs. 61.73 lakh)

- **CES did not directly possess specific experience in designing sports stadia, with its experience being primarily in providing design consultancy for roads and bridges.** It could show experience for building sports stadia only through purportedly “associating” with foreign consultants, and that too only after purchasing the PQ documents (all the MoU submitted were signed on dates falling after the PQ documents were purchased). Other bidders who were technically rejected had fairly good experience in construction of sports stadia viz.
- **Mott MacDonald** – Wembley Stadium in London, Melbourne Cricket Ground in Australia, Lord's cricket ground in London;
- **STUP** – Stadia for National Games in Guwahati and Hyderabad, Twin Turf Hockey Stadium at Hyderabad.
- Further, we could not see, through perusal of various designs and documents submitted by the consultant, the contributions of the foreign consultants, on the basis of which CES was deemed to be technically qualified vis-à-vis sports stadia. In response to our query, CPWD stated that the tender conditions did not insist on the signature of the foreign consultant. However, in view of the contractual provision regarding involvement of the foreign consultants to the extent of not less than 60 per cent of the total fee, documentary evidence of the actual involvement of the foreign consultants in work was essential.
- The technical qualification of CES primarily on the basis of the 'concept

designs' submitted by it as part of the bidding process is all the more amazing, since EKS was engaged only in November 2006 and prepared the venue briefs thereafter, based on which the concept designs were required to be prepared. Without the venue briefs (and without adequate time being provided), the other bidders could not have been expected to prepare such designs at the bidding stage, nor was this at all necessary. This advantage to CES was irregularly facilitated by CPWD by including the concept design requirement in the RFP for consultancy contracts, well before even the venue brief was ready. This effectively favoured CES.

- In response to our observation, CPWD replied that the condition survey was conducted to assess the repair and retrofitting cost and nothing was decided about the new structures. Therefore no insight was available to CES regarding the nature and scope of work for CWG-2010. Moreover concept plan was desired to judge the aptitude and vision, and the consultants who are bidding for mega sports stadia can prepare concept plan on the basis of scope of work, site visits and pre-bid meetings.
- However, the advantage to CES is evident from its own statement in the section “Project Appreciation” of the technical bid document that 'Consultants, during a prior assignment, took up extensive reconnaissance survey and condition survey of installations and utilities of the area. In the process, the Consultants have gone through available drawings and condition survey data

which enabled them to have full understanding of the project and its requirement indicated in the TOR.' This amply evidences that the prior assignment of condition survey to CES created a foundation for the preparation of concept plan, project appreciation and technical proposal and this advantage was not available to other bidders.

The inexperience of CES was evident from numerous deficiencies noticed during the execution of the design consultancy contracts such as

- frequent and drastic changes in designs and drawings,
- changes in BOQs and tender documents, frequent delays in submission of designs and drawings,

- delays in obtaining approval from local bodies, and
- engagement of additional specialist design consultants for works which were, primarily, the responsibility of the main consultant, etc.

Details are given in Annexe 17.1. This adversely affected the planning as well as execution of the various projects. All such deficiencies were condoned or ignored by CPWD. Penalties for such failures were either not included in the contract⁵ or, where included⁶, were not enforced. Some of the glaring deficiencies are summarised in Table 17.4:.

Table 17.4 – Deficiencies in consultancy work of CES

Stadium	Deficiencies (in brief)
JLN Stadium	Defective assessment of the requirement of lump sum contract resulted in deviations primarily on account of changes in BOQs, resulting in gross deviation ⁷ of Rs. 41.24 crore.
JLN Weightlifting Stadium and Dr. SPM Swimming Pool Complex	The scope of roofing work was changed from Zinalume steel to aluminium (Kalzip), resulting in extra payment to contractor of Rs. 6.79 crore.
Dr. Karni Singh Shooting Range	There were huge deviations and extra items worth Rs. 20.37 crore due to improper assessment of BOQs for the work. The basic item of excavation in hard rock could not be envisaged earlier (despite the hilly location of the venue). Further, rebate of Rs. 0.50 crore could not be availed.
IG Stadium Complex	In the work of “improvement of roof truss”, there were huge deviations in steelwork alone, ranging from 83.8 per cent to 139.70 per cent, amounting to Rs. 15.62 crore.
MDC National Stadium	Astronomical increase in the quantities of cables, ducts, pipes etc. in the work of SITC of PA system and electrical component of the main work resulted in additional financial burden of Rs. 4.11 crore.

⁵ Major Dhyan Chand Stadium

⁶ Jawaharlal Nehru Stadium, Dr. SPM Swimming Pool Complex, Indira Gandhi Stadium Complex and Dr. Karni Singh Shooting Range.

⁷ Sum of positive (+) and negative (-) deviations.

The performance of CES in almost all the venue consultancy contracts was abysmal. The financial liability of CES for the numerous deficiencies should be ascertained and recorded. Further, CES should be blacklisted for consideration from any consultancy or other contracts with CPWD and the GoI, to prevent recurrence of such events. In addition, responsibilities should be fixed on the officials who facilitated appointment of CES and grant of undue favour to it in the course of these consultancy contracts.

Separately, several other consultants were also engaged for other venues i.e. WADA block, shooting range etc. (CPWD); and other sporting venues developed by DDA, PWD, GNCTD, NDMC, DU, JMIU, AITA. The engagement and performance of these consultants has been discussed in the relevant sections of the report.

For the preparation of venues for the CWG – 2010, approximately Rs. 113 crore was spent on engagement of design consultants for all venues including those of DDA, NDMC, PWD GNCTD and others.

17.2 Lack of organised in-house design skills in CPWD

CPWD's, Central Design Organisation (CDO) consists of four units namely

- the Design Unit;
- Repair & Rehabilitation Unit;
- Computer Centre Unit; and
- Technology Application Development Cell Unit.

CDO is mainly responsible for structural analysis, design of large projects and special structures, development of in-house expertise in the field of repairs and rehabilitation, development of new innovative technologies for the department and computerisation.

The CDO currently has 1 CE, 6 SEs, and 24 EEs/AEs/AEEs, besides other supporting staff. However, the CPWD did not utilise the services of CDO for design consultancy for any of the stadia for CWG-2010, and instead engaged external agencies for design and other consulting services for these projects, as discussed in the previous paragraph.

In response, CPWD stated that:

- for planning and design for all the sports stadia in a time bound manner for the CWG-2010, a well coordinated multidisciplinary planning and design team covering architectural, structural, mechanical, audio-visual, Integrated Building Management System etc were essential requirements.
- All these specialisations did not exist in CPWD, that too under single command, which was absolutely essential for timely accomplishment as a coordinated job of multidisciplinary consultants.
- Even in its limited role in structural design and drawing, CDO did not have skilled and experienced structural engineers to deal with the structural complexities of sports stadia involving use of new imported structural materials, necessitating latest state of the art technologies in structural engineering as well as material science.

In our view, it is absolutely essential for CPWD to develop, maintain and properly

utilise a core multi-disciplinary pool of planning and design expertise; and CPWD cannot be perceived merely as a project monitoring agency.

In the Games Project, CPWD visibly abdicated all designing responsibilities by entrusting them to external consulting agencies. As has been adequately pointed out elsewhere in the report, the performance of these agencies was less than satisfactory. However, the lack of adequate multidisciplinary planning and design team left CPWD at the mercy of the consultants. Further, due to short term nature of the consulting engagements, there is no 'institutional memory'. Moreover, once the Government pays the consultants, the design should become the intellectual property of the Government and should be patented in its name.

We recommend that immediate steps should be taken to strengthen the Central Design Organisation (CDO), both in terms of the number of technical officers as well as in the quality of resources provided. Where necessary, upgradation of relevant state-of-the art skills may be ensured through appropriate training.

This would reduce CPWD's undue dependence on external consultants. CDO should function as a centre of excellence for

- Innovation of designs of building, bridges and other infrastructure and its documentation;
- Documentation of designs given by consultants and their patenting;

- Standardisation of designs and their availability and dissemination to other agencies within the public sector; and
- Peer review.

17.3 Procurements through common tendering

17.3.1 Selection of brands of Sports Surfaces

On 24 May 2008, Shri Kalmadi constituted an expert committee for finalising the selection of brands of sports surfaces and sports equipment for CWG-2010. The Committee was chaired by Shri Bhanot, and included representatives from the 17 National Sports Federations, GNCTD, SAI, DDA, NDMC, AITA, and CGF.

Separately, on 14 June, 2008, in pursuance of a meeting held by Minister of State, YAS with CM, Delhi and Chairman, OC, Shri Bhanot notified the constitution of a "Committee for Centralised Co-ordination for finalisation of Overlays, including Sports Specific Surfaces/ Equipments" on the grounds that the OC had the ultimate responsibility for ensuring that "look and feel" of the Games was maintained, and the required certification from the respective International Federations was obtained in time. This Committee for Centralised Co-ordination was chaired by the Chairman, OC, and included Secretary, Sports and CS, GNCTD and the heads of SAI, DDA, NDMC and CPWD. This Committee was to take inputs from the earlier constituted expert committee. Subsequently, a Joint Tendering Mechanism was agreed to, where a lead agency was decided for each surface

The chronology of events relating to the specification of brands for sports surfaces is summarised in Table 17.4:

Table 17.4 – Deficiencies in consultancy work of CES

Timeline	Event
24 May 2008	Constitution of (expert) committee by Shri Kalmadi
14 June 2008	Constitution of Committee for centralised co-ordination
22 July 2008	Expert committee recommended brands for various sports surfaces (in most cases, single brands)
26 September 2008	Centralised Co-ordination Committee, after considering Expert Committee recommendations, shortlisted three brands for most surfaces.
16 November 2008	Expert committee shortlist conveyed to MYAS
16 December 2008	List of shortlisted brands placed before Centralised Co-ordination Committee for consideration. Committee decided that MYAS would designate a centralised procurement agency.
29 January 2009	OC floated EOI, at Secretary MYAS's direction, for offering opportunities to other suppliers. Only four vendors for lawn bowls and two for wooden floor were considered additionally eligible.
13 April 2009	Centralised Co-ordination Committee prepared a final list of shortlisted brands.
2 July 2009	MYAS approved the list of brands shortlisted by the Centralised Co-ordination Committee.

We found clear instances of favouritism shown by the Centralised Co-ordination Committee (which was largely guided by the OC), as summarised below:

17.3.1.1 Athletics

The top four brands of synthetic track surfaces with maximum IAAF Class-I certificates were Mondo (19), Conica (15), Polytan (8) and Rekortan (4). The Expert Committee decided to procure Conica Full PUR track surface, and ruled out Mondo⁸, based on the following:

- The Athletics Federation of India representative observed that the Mondo track was earlier laid at

⁸ Mondo is the official supplier of athletic tracks for the last nine Olympics (including Beijing Olympics 2008) as well as the upcoming London Olympics 2012.

Thiruvananthapuram, Jamshedpur, Lucknow and New Delhi was not suitable for Indian weather conditions and at all these places, the track was cracked out within two years and had a very short life.

- Further, the Mondo track was a pre-fabricated track, whereas other tracks were polyurethane tracks and easy to repair in case of any damage at the spot.

However, at the meeting of the Centralised Co-ordination Committee on 26 September 2008, DG SAI raised the issue of IAAF approved brands for synthetic tracks. Again, in the Committee meeting on 2 April 2009, DG, SAI mentioned that he had been advised that Mondo was preferable for athletics track as it was pre-fabricated, and in case of damage to the track during the

Opening Ceremony, the particular damaged surface could be easily replaced. This was countered by Shri Bhanot, and it was decided not to go in for pre-fabricated synthetic surfaces, based on the poor experiences of pre-fabricated tracks in India. Finally, three brands (Conica, Polytan and Rekortan) were shortlisted.

We found no evidence / reports to substantiate claims of the poor performance of Mondo's tracks. Further, the rejection of a firm supplying surfaces for Beijing Olympics 2008 is in stark contrast to the use of supply at Beijing Olympics 2008 as justification for vendors for other surfaces.

17.3.1.2 Hockey

The expert committee had shortlisted three companies for hockey on the assumption that these global surface providers would be able to produce polyethylene surfaces with the approval of International Hockey Federation (FIH) instead of the hitherto used polypropylene surfaces. However, there was a deviation in qualifying criteria for the hockey surface, necessitating a fresh EOI. After evaluation of the EOI by a committee, four products of different fiber i.e. polyethylene, polypropylene and nylon were recommended. These were produced by the same vendors, whose names were shortlisted earlier. The selection of polyethylene, a new type of synthetic surface instead of the hitherto used polypropylene surface is indicative of the fact that ***the criterion regarding the selection of widely used surface for selection of company*** was not followed consistently by the expert committee.

17.3.1.3 Badminton

The Expert Committee decided to recommend Yonex, since it was being used at Beijing Olympics 2008 and other events, and also because BWF confirmed that only Yonex court mats and shuttlecocks were exclusively approved. We found this assumption to be of doubtful veracity. BWF has 23 approved brands, but has an exclusive sponsorship contract with Yonex for use at BWF events. Although the BWF website lists CWG-2010 as a BWF event, this appears to be incorrect as the badminton events at neither the Olympics nor the Asian Games are listed as BWF events.

17.3.1.4 Permanent timber track for the cycling Velodrome

The Expert Committee recommended Schuermann Architects (who built the velodrome for Beijing Olympics-2008) as the international technical delegate for cycling events and mentioned that no architect other than Schuermann Architects could guarantee to meet the specifications of International Cycling Union (UCI). However, this was not implemented, since the bidding condition stipulated by CPWD restricted competition to Indian furniture contractors in association with an international track design and construction expert (refer paragraph 17.8.2.4 of the report). The contract was finally awarded to Comfort Net Traders, in association with another international architect.

Clearly, the selection of brands for sports surfaces was not transparent and objective. It appears from the minutes that objections raised by venue owners were ignored by Shri Bhanot by giving selective technical information.

17.3.2 Laying of synthetic athletic tracks surface

As already discussed in para 17.3.1.1, the Centralised Co-ordination Committee shortlisted three brands/ manufacturers (Conica, Polytan and Rekortan) for laying synthetic athletic track surfaces at five venues⁹, thereby creating grounds for restrictive tendering. CPWD was identified as the nodal agency for joint tendering for selection of agency to lay the track surfaces at these venues. A joint tendering committee¹⁰ was constituted to oversee the tendering process.

17.3.2.1 Dilution of eligibility criteria to suit the agencies that finally bid.

In July 2009, Press Notice inviting bids for laying synthetic athletic track surface at five stadia was issued. The eligibility criteria included:

Agency	Eligibility Criteria
Manufacturers of the shortlisted brands (having registered office in India)	Completion of two works (laying athletic synthetic track surface approved by IAAF) costing not less than Rs. 4 crore each
Authorized Indian Representatives of manufacturers of the approved brands	Completion of one work (laying synthetic athletic track surface approved by IAAF) costing not less than Rs. 4 crore each

⁹ JNS, Thyagraj Stadium, Chhattarsal Stadium, Commonwealth Games Village and Polo Ground of Delhi University.

¹⁰ Its members included Chief Engineer (CWGP), CPWD (Chairman), Chief Engineer (PWD, GNCTD), Chief Engineer, DDA, Addl Chief Engineer, NDMC, University Engineer, DU; Representative of SAI, SE (C), CPWD

We found that the relaxation of conditions from completion of two similar works to one and reduction of value of works to Rs. 4 crore each (which was only 10 percent of the estimated cost of the work as against the generally prescribe 80 percent of estimated cost for one work, which would amount to Rs. 30.73 crore in case of an authorised Indian representative bidding) was tailor made to suit only the three bidders (authorised Indian Representative of each brand) who responded, as indicated below:

Brand Manufacturers	Authorised Indian representative	Value of single work completed (Rs. in crore)
Polytan	Inderjit Mehta Construction Pvt. Ltd.	4.60
Canica	Shiv Naresh Sports Pvt. Ltd.	4.32
Rekortan	Jubilee Sports Technology Pvt. Ltd	4.99

Clearly, all the bidders just met the much diluted eligibility criteria and the dilution was probably done only to ensure that these agencies could bid.

17.3.2.2 Selection of Shiv Naresh Sports Pvt. Ltd. and the reasonability of the rates it quoted

From the three bids received, the contract was awarded to Shiv Naresh Sports Pvt. Ltd. (SSPL)¹¹ who was the L1 bidder at Rs. 60.38 crore for the five venues of which Rs. 27.61 crore was for JNS alone.

¹¹ SSPL was primarily a manufacturer of sports wear as per its website.



Athletics track at Chhatrasal Stadium

We found that the restrictive tendering conditions created around the tendering process by limiting the competition to three brands only resulted in a situation where the rate at which the contract was finally

awarded was not at all comparable with the rates of similar works quoted or intimated at different works/stages as indicated in Table 17.5.

Table 17.5 — Comparative rates of similar work obtained for different works or stages

Agency	Net Rate per sqm (in Rs.)	Total cost for normal stress area at all venues as per NIT (48469 sqm) (in Rs. Crore)	Event
SSPL	7,604.05	36.86	Net rate after rebate of 17.06% and addition of service tax @10.30%.
NCCL at DU	7,337.00	35.56	Rates tendered in April 2008 inclusive of all taxes.
BASF (Manufacturer)	4,928.70	23.88	Rates indicated by the manufacturer and partner of SSPL in September 2009.
SSPL to NCCL at Ranchi	2,784.00	13.49	Work completed in January 2009
Jubilee Sports Technology (I) Pvt. Ltd.	4,650.00	22.53	<ul style="list-style-type: none"> ■ Rates obtained by CPWD in June 2009 for preparing cost estimates; and ■ However, the agency bid at the rate of Rs. 9000 per sqm in its bid for CWG-2010.
Inderjit Mehta Construction Pvt. Ltd for CRPF Campus, Jharanda Kalan	4,516.05	21.89	<ul style="list-style-type: none"> ■ Rates offered to CPWD in February 2010 for CRPF campus at Jharoda Kalan; ■ However, the agency bid at the rate of Rs. 8850 per sqm in its bid for CWG-2010

Note. The above rate only covers laying of surface track; the cost of sub-base is not included

As is evident from above, advantage was taken of the artificial restriction on the agencies that could participate as well as the limited time, which inhibited the possibility of re-tendering. The rates quoted by the bidders were much higher than the rates quoted by the same agencies for other similar projects or points of time. Hence, the reasonableness of cost at which the athletic synthetic track surfaces were laid for CWG-2010 cannot be assured by us.

17.3.2.3 Quantity and quality of work executed by SSPL at JNS

As per the NIT, the synthetic athletic surface track was to be laid over an area of 27,530 sqm. We found that this area included 9,130 sqm laid outside the main track and area of final warm up and call rooms at a cost of Rs. 6.63 crore. We are unable to derive assurance that the quantity of 9,130 sqm was contractually required for the purpose of CWG-2010 and confirmed as

such by the OC. Further, though the athletic surfaces in the main competition track and the warm up track were suitably certified as Class I and Class II, this area of 9130 sqm was not certified.

As per the performance standards appended to the Agreement, no surface imperfections such as bubbles, fissures, delamination, uncured areas, bumps or depressions should be present on the tracks. During our field visits to the Stadium ground on 15, 19 and 23 November 2010, we observed that in the main competition track, the surface of the track were uneven at numerous places, there were signs of water logging even after dry up, and patch work had been done at over 40 places in areas ranging from 2 sqm. to 20 sqm. approximately. Apparently, there were deficiencies in the execution of base work resulting in depressions at numerous places causing uneven surface, water logging and resultant patch work as stated above.



Patch work on the athletic synthetic surface track



Patches of water logging

17.3.3 Unjustified inflation of rates of VVIP/VIP and media chairs procured for five stadia, resulting in extra expenditure of Rs. 3.66 crore

EOIs were invited in Decembers 2009 from the manufacturers/suppliers of seats/chairs for supply and installation of 15,900 VVIP/VIP chairs with arms, cushion and arm rest and media chairs with cushion, folding table and arm rest for five venues¹² for CWG-2010. The manufacturers/ suppliers were to visit the venues to understand the requirement and to submit salient data with brief technical parameters/ specifications, details of turnover, manufacturing capacity, delivery period and prices (inclusive of installation cost). They were also required to install their samples at JNS and submit model wise technical specifications and catalogues, and photos of samples installed along with the response to EOI. Of the 15

agencies that installed their samples at JNS, a committee of seven senior officers headed by the DG, SAI approved, in December 2009, a total of 14 samples (11 for VVIP/VIP and 3 for Media) of six manufacturers¹³.

In January 2010, NIT was issued inviting agents or manufacturers of the shortlisted makes/models to bid¹⁴. Four bids were received. None were from the manufacturers, except Superior Furniture, who was awarded the contract based on its L1 bid in March 2010.

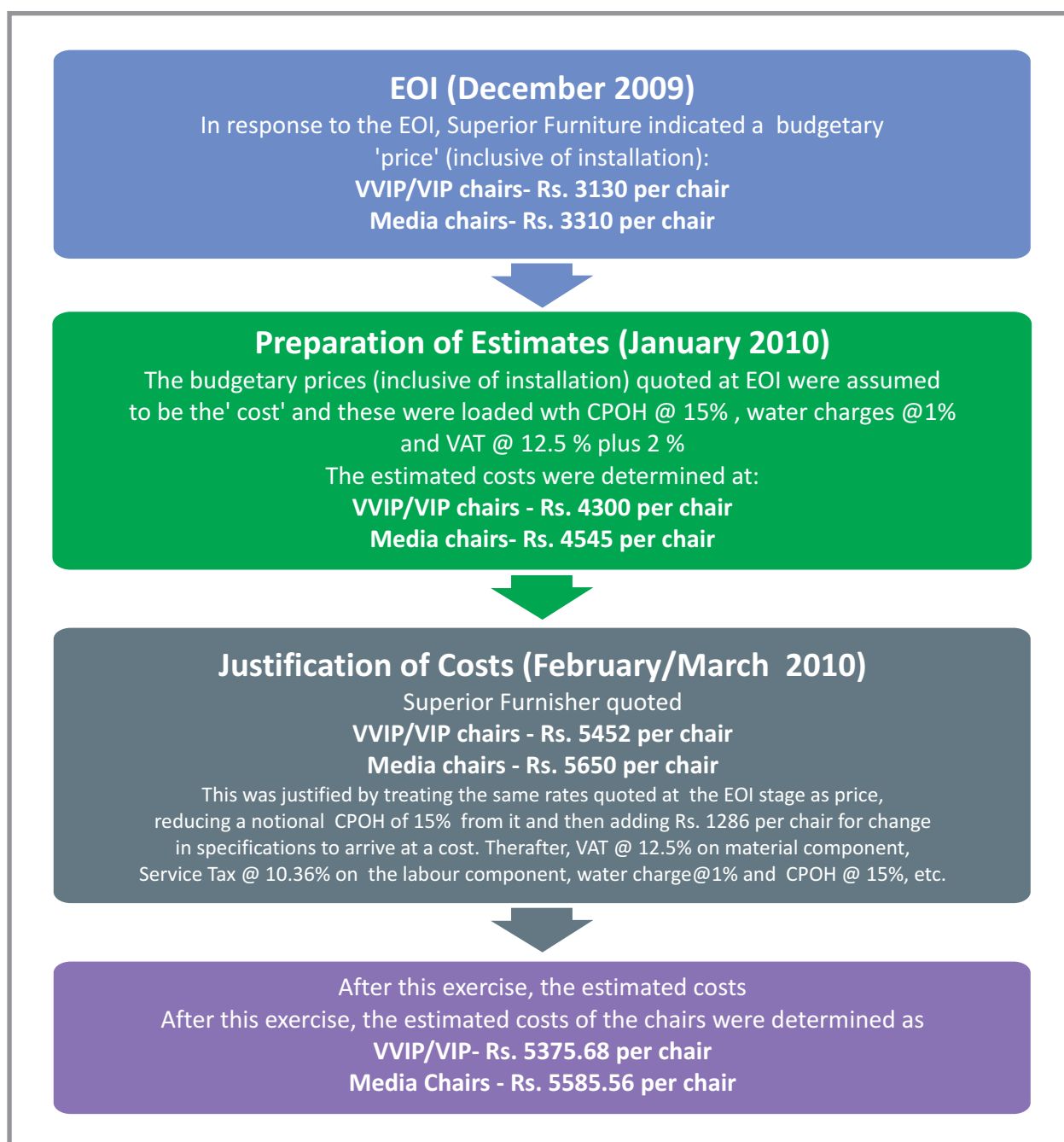
We found that though Superior Furniture was the L1 bidder, its rates were inflated and CPWD justified these inflated rates by Rs. 3.66 crore to award the contract. This is established by the estimates prepared at different points of time, as depicted in Figure 17.1.

¹² JNS, IG Complex, MDC, SPM, and KSSR

¹³ Hoabo Chair Co. Ltd(China), Zhejiang Dageng Sports Equipment Co. Ltd (China), Starena International Pty Ltd., Australia, Superior Furnitures India, Hangzhou Juniu Chairs Industry Co Ltd (China) and Camatic Pty Ltd. Australia.

¹⁴ Shiv Naresh Sports Pvt. Ltd., Superior Furnitures, Millith Karv, and Pen Workers

Figure 17.1 - Estimation of Rates of VVIP/VIP and Media Chair



From the calculations and re-calculations shown above, it is evident that these were manipulated and the rates inflated, which ultimately benefitted Superior Furniture, who was awarded the contract (March 2010) to supply the chairs at a negotiated tendered rates of Rs. 5362 and Rs. 5623 for VVIP/VIP and Media chairs respectively. The additional cost on this account worked out to Rs. 3.66 crore.

Further, we found that about 2500 chairs costing Rs. 1.34 crore, so installed, were removed from the seating areas of various stadiums before start of the games to make broadcasting and media platforms, which is the normal practice in holding international events. These were lying uninstalled in the stadiums.

We also found that Superior Furniture was also allotted the work of designing , fixing and dismantling of Mild Steel (MS) sitting arrangement for Rs. 1.40 crore in IG Complex as extra work without calling any tender or work order.

17.4 Installation of DG Sets as permanent fixture

OC's consultant, EKS, in its venue brief stated that if two high voltage electricity feeders were provided, critical supplies should be evenly distributed across both the feeders. A backup generator of capacity sufficient for the Games 'critical supplies' should also be provided. EKS had also proposed provision for plug-in or permanent prime generators. In pursuance thereof, all the venues obtained two independent high voltage feeders from their respective power supply companies. In contrast, in the return venue brief, the design consultants firm, appointed by the respective venue development agencies,

suggested permanent DG Sets as backup power source. Resultantly, taking this as a ground, CPWD opted for permanent installation of DG Sets. The CPWD took a plea that when EKS proposed plug in type of DG Sets it was intended for non-regular activities like overlays which were to be looked after by OC and this was not meant for permanent installation created by CPWD. The fact, however, remains that despite suggestion/ proposal from M/s EKS for plug-in or permanent generators, CPWD installed all DG Sets in all the five venues as permanent fixtures without any cost benefit analysis (permanent fixtures v/s hiring as and when required). The prospects of utilisation of these permanent DG Sets, during non-events period, are negligible resulting in unfruitful financial burden; this was also the case in DU.

Stadium-wise sanctioned load, critical load, DG Set capacity installed, UPS Capacity installed and temporary DG Sets for which orders were placed by the OC are detailed in Table 17.6:

Table 17.6 — Details of normal sanctioned load, critical load, DG set capacity and UPS capacity.

S.No.	Stadium	Normal Power requirement as per sanctioned load from the concerned power distribution utility	Critical Load as assessed by CPWD	DG Set Capacity Installed	UPS Capacity Installed	Order for Temporary DG Sets placed by OC
1.	Jawaharlal Nehru Stadium	12,000	10,065	11,530	3,330	45,290 ¹⁵
2.	Dr. S.P.M. Swimming Pool Complex	3,471	2,806	3,750	2,500	3,660 ¹⁶
3.	Dr. Karni Singh Shooting Range	2,777	2,159	2,250	1,020	5,202 ¹⁷
4.	Major Dhyan Chand Stadium	3,888	4,558	4,500	3,590 ¹⁸	5,390 (for IG Stadium Complex, MDC Stadium and Central Vista)
5.	Indira Gandhi Stadium Complex	11,111	10,650	10,650	5,328	
TOTAL				Rs. 34.63 Crore	Rs. 39.84 Crore	

Note.

- **Normal Power requirement as got sanctioned from the power utility** – While converting the power requirement from KW to KVA (in cases of KSSR, MDC and IG Stadium Complex), the power factor has been taken as 0.9.
- **Critical load** – While calculating the critical load/ emergency load for DG Supply, CPWD stated that the configuration given in the return venue brief by the design consultants carried no weightage other than confirm to the OC that the Games requirements would be met. The appropriate time to finalise the configuration of the DG Sets was at the time of obtaining the technical sanctions, so that the “latest requirements” were met. Hence, while justifying the critical load arrived at, in response to our audit query, CPWD stated the following issues were taken into consideration (a) suggestions of the CES; (b) suggestions of the fire department (c) CPWD's general specification for electrical work Part- I Internal; and (d) other issues which the department thought necessary.
- **DG Set Capacity installed** – While calculating DG Set capacity, CPWD has taken into consideration a load factor of 0.8 (80% loading) and power factor as 0.8. Further, the department has also taken into consideration parallel N+1 system to provide full redundancy for the games critical supply as per the suggestions of the design consultants (CES).

¹⁵ Includes DG Sets for DPS, RK Puram.

¹⁶ includes Central vista, Talkatora Indoor Stadium and Shivaji Stadium.

¹⁷ Includes Shri Fort Sports Complex, Saket Sports Complex, Thyagraj Sports Complex, Jamia Milia Islamia, RK Tennis Complex and CRPF Campus (Kadarpur) – breakup not available from OC's records.

¹⁸ 4 sets of 2 X 40 KVA DG Sets shifted to JNS

Thus, an expenditure of Rs. 112.29 crore was incurred by CPWD, DU and OC for permanent installation of DG Sets/ UPS

- Rs. 34.63 crore by CPWD for DG Sets
- Rs. 39.84 crore by CPWD for UPS
- Rs. 6.03 crore by DU for DG Sets & UPS
- Rs. 28.08 crore for hiring of DG Sets (primarily for JNS)
- Rs. 3.71 crore for hiring of DG Sets for IG Stadium Complex & MDC Stadium.

Clearly, there was a massive 'overkill' in purportedly building 'redundancy' in power supply, when October was identified as a lean season in terms of power demand¹⁹, and the Ministry of Power allocated an additional 100 MW of power for Delhi for the Games.

The issues relating to installation of DG Sets as permanent fixtures at venues developed by other agencies (DDA, PWD, GNCTD and NDMC) are discussed in chapters pertaining to these agencies in this audit report.

17.5 Installation of additional UPS as parallel redundancy

While installing UPS System for supporting not only the Key Technology Equipments (as suggested by EKS in the venue brief and the design consultant in the return venue brief) but also for sports lighting, the department had installed additional UPS for a total capacity of 1370 KVA as parallel redundancy in MDC National Stadium, despite absence

of any such provision in the venue brief or the return venue brief resulting in addition financial burden to the tune of Rs.2.01 crore. This was on the instructions of the Committee of Secretaries.

The permanent DG Sets in the stadia could, perhaps, still be used (at least to a part of the installed capacity) for national / international sports events. However, the requirement of UPS on a legacy basis, is in our opinion, more or less insignificant (except for the minor requirement for key technical equipments viz. PA Systems, computers etc. and not for sports lighting). Moreover, the batteries attached to these UPS also have a relatively short life. CPWD/ SAI may therefore consider identifying the requirement of UPS strictly for key technical equipments, and ensure that these are properly maintained in the long run. The balance of UPS (which is likely to be substantial) may be transferred, free of cost/ at nominal rates, to other government departments/ agencies requiring relatively large IT Systems (typically large data caches). This will, at least, ensure productive utilisation of these assets.

¹⁹ The efforts of Pragati Power Corporation Ltd. in augmenting power generation and Delhi Transco Ltd. in increasing power transmission capacity are described substantially in Chapter 26.

17.6 Jawaharlal Nehru Stadium Complex



Jawaharlal Nehru Stadium

Jawaharlal Nehru Stadium Complex (JNS) was the main venue for CWG-2010. It underwent major redesign and reconstruction for this event. It hosted the competitive events for athletics, weight lifting and Lawn Bowl as well as the opening and closing ceremonies.

The major works undertaken at JNS were

- Construction of a new tensile membrane roof and support structure for it;
- Structural repair & space planning of entire JNS;
- Construction of weightlifting auditorium;
- Construction of Administrative Block²⁰ and World Anti Doping Agency (WADA) Laboratory;

²⁰ Now housing the SAI. The diversion of fund of Rs. 19 crore from the scheme for "Preparation of Indian Teams for CWG-2010" for construction of this administrative block is described in Chapter 32.

- A Hostel/ Media Accommodation block;
- Reconstruction of lower tiers; and
- Installation of sports lighting and PA system.

17.6.1 Construction of fixed tensile membrane roofing over the seating area

CPWD awarded a lumpsum contract for construction of fixed tensile membrane roofing over the seating area in JNS at a cost of Rs. 308.08 crore to Shapoorji Pallonji & Co. Ltd. (SPCL) for completion by September 2009.

17.6.1.1 Non adjustment of Rs.5.99 crore for work not required to be executed

The lump-sum agreement provided for regulating increase / decrease in quantities of work at variation rates. Payment of Rs. 314.46 crore had been made to the



Tensile membrane roof over JNS

contractor, but adjustments totalling Rs. 5.99 crore for items of work not required to be executed were pending. Details are given in Annexe 17.2.

CPWD in its reply stated that these adjustments would be affected in the final bill. This shall be verified at the time of subsequent audit of final payments.

17.6.1.2 Extra payments of Rs.4.96 crore for items of work covered by scope of contract

The scope of work clarified at various places in the contract that the quoted cost of lump sum contract would cover all incidental work actually required, but not specifically stated in the tender. We noted that extra payments of Rs.4.96 crore had been made/ approved for several items of work covered within the cost of lump sum contract. Details are given in Annexe 17.3.

17.6.1.3 Non levy of compensation (estimated maximum of Rs. 30.80 crore) for delay in completion of work and payment of escalation cost of Rs.7.02 crore for the EOT period

The work was awarded in December 2007 for completion by September 2009. The schedule of work stipulated eight milestones and in case of non-achievement thereof, an amount equal to 0.5 percent of the tendered amount was required to be withheld for the contractor's failure to achieve each of the milestones. The Contract provided for levy of compensation from the contractor @ 1.5 percent of the tendered cost per month subject to a maximum of 10 percent. For early completion of work, the contractor was entitled to bonus @ 1 percent per month subject to 5 percent of the tendered value. The work was completed in August 2010. We found that delays in achievement of targeted completing date were at least partly attributable to SPCL, as indicated below:

- After erection of X column in September 2009, it was found that there were gaps in head plates, resulting in defective geometry of the alignment. To correct the alignment, the contractor took over three months (9 September 2009 to 7 December 2009) causing delay in progress of work;
- Issues regarding fabrication and erection of ramps and catwalk, erection of cable, casting of staircase, fixing of railing, drainage pipeline etc were not resolved as of December 2009. SPCL observed that its associates, viz. P&R Group (for steel work), and Taiyo Membrane Corporation (engaged for membrane work on the recommendations of CPWD), were not committed towards completion of work in time due to problems of co-ordination and organisation;
- About 61 curved beams, 40 RT1 beams, RB beams, flood light mast and some catwalk structure units, and the entire parapet were not installed even as of 4 January 2010;
- No proper methodology for laying of the cable on the stairs and temporary connecting to the lower compression ring was planned. All the ring cables were coiled in the wrong direction, leading to loss of time in laying of the cable net, the methodology of cable jacking was flawed and incomplete. Consequently, jacking work was stopped for 20 days during erection, and on-site strengthening was done;
- The manpower, tools and machinery, and expertise for fabric installation

were found to be grossly inadequate, causing unprecedented setback to the membrane installation and other works of the stadium;

- Two shipments of bolts and nuts were brought to site only in May 2010, SS drainage pipe were brought from Mumbai in June 2010, and the programme for fabrication and erection of additional props to ramps was submitted only in August 2010; and
- Inadequate personnel were deployed for membrane work, the methodology for installation of fabric was not correctly planned, the length of the light mast cable was wrongly calculated, the length of the inner edge cable was also wrongly estimated, and the location of all the catwalk clamps were wrong and they had to be shifted by 750 mm to 1200 mm each.
- CPWD clarified to the contractor (January 2010) that there were no hindrances at site, and issued several notices including on 28 April 2010, 5 May 2010 and 16 August 2010, holding the contractor responsible for slippages, slow progress of work and non-achievement of revised milestones.

The work was certified to have been completed on 26 August 2010 subject to measurement, quality check and also removal of various defects in shear walls, stair case columns, parapet, ceiling, wall, tie beam, ramps, ramp slab, stainless steel (SS) drainage pipe, steel structure and SS railing requiring rectification.

Thus, the contractor was, at least partly responsible, for the delay of over eleven months in completion of work with

numerous defects, and thus liable to recovery of compensation upto a maximum of Rs. 30.80 crore. Though several notices for imposition of penalty / compensation were issued to the contractor, no action for levy and recovery of compensation from the contractor was initiated. CPWD granted extension of time upto 26 August 2010 and also released the amount of Rs. 2.75 crore withheld from the contractor's bills for non-achievement of 5th and 6th milestone, without any recorded justification. Taking serious note of the delays, shortcomings and repeated failures in completion of CWG works, the Additional Director General-in-charge of Commonwealth Games projects directed in August 2010 that the contractual remedies for failures of the agencies to complete the works in time must not be lost sight of at any cost and the individual officers shall be responsible for inaction. However, no action had been taken as of February 2011 for levy and recovery of compensation from the contractor.

As detailed separately, the impact of late inclusion of the tunnel in November 2009, on the erection of the membrane roofing and other construction activities of JNS is not clear to us, on the basis of available records. However the month of commencement of tunnel work (December 2009) falls well after the scheduled date of completion of the membrane roof (September 2009).

Payment of Rs. 29.70 crore had been made to the contractor as of September 2010 on account of increase in the cost of labour and material on the basis of rise in the quarterly cost of index as per provision of contract. We noted that escalation beyond the stipulated date of completion of work

was admissible only if no penal action had been taken for failure of the contractor to complete the work in time, as per the provisions of the contract. Completion of work was delayed by over eleven months due to various delays, attributable at least partly on the contractor/sub-contractors, but CPWD never enforced contractual remedies against the contractor, and also made payment of Rs. 7.02 crore, as of September 2010, toward escalation costs for periods beyond the stipulated date of completion i.e., 3 September 2009.

17.6.2 Tunnel at JNS

In September 2009, in the 3rd meeting of the 'new' GoM, the Core Group of creative persons, while making a presentation on the concept and theme of the opening ceremony, requested that in order to facilitate the ingress and egress of the performing artists during the ceremony, a tunnel may be constructed from the interior of the JNS to the outside. Minister, YAS expressed strong reservations against increasing the scope of work, which could jeopardize the timely completion of the stadium that was already running against very tight time lines. However, the Core Group insisted that it would not be possible to deliver the opening and the closing ceremony, in a befitting manner, without the tunnel. Finally, the 'new' GoM decided that it was an engineering issue and the technical feasibility of construction the tunnel within the time frame, keeping in mind the laying of the synthetic turf and the scheduled test events, should be carefully considered by the engineering team before a decision in this regard was taken. Thereafter, in October 2009, in the 4th

meeting of the 'new' GoM, approval was given to the proposal to engage Shri Mark Fisher – Production designer and entertainment architect²¹ immediately so that the work relating to the 'trench' and other infrastructural additions to JNS could be commenced by CPWD immediately. This engagement was strongly recommended by the Core Group of creative persons and supported by the OC. Thereafter, in November 2009, CPWD provided revised milestones for completion of various works at JNS, as indicated below

Milestone	Date
Finalisation of design of new tunnel by OC	3 November 2009
Approval of fire, security and athletics federation etc	11 November 2009
Date of start	12 November 2009
Completion of tunnel	15 June 2010
Completion of synthetic tracks	22 April 2010

We found that these milestones could not be achieved. The work involved synchronization with the erection of cable and membrane work of roof structure and synthetic track being undertaken by different agencies. There were significant delays in completion of works. However, we are unable to determine how much of it is attributable to the introduction of a new

²¹ Shri Mark Fisher was engaged simultaneously for the designing of the band stand (which was abandoned subsequently) and the tunnel, and was also subsequently engaged for the Aerostat.

and substantial infrastructural requirement at a very late stage. While the milestones proposed by CPWD indicated that the completion of the synthetic track would proceed side-by-side with the construction of the tunnel, we are not aware of how these activities actually progressed concurrently on the ground.

17.6.3 Construction of weightlifting auditorium with two tier underground parking

The work was awarded to Nagarjuna Construction Co. Ltd.(NCCL) at the tendered cost of Rs.65.45 crore for completion by June 2009.

17.6.3.1 Irregular payment of escalation

We found that powers delegated to senior officers in CPWD for modifications in contractual conditions were used to regularise inadmissible payment of Rs.1.95 crore to the contractor on account of escalation in price of steel as indicated in Case study-17.1

Case Study: 17.1

Exercise of powers in favour of contractor

CPWD Works Manual and Clause 10 CA of the General Conditions of Contracts (GCC) of CPWD Works 2007 provide for varying the amount of contract, due to increase or decrease in price of materials pertaining to the work as mentioned in Schedule F forming part of the agreement, provided such variations were effected up to the stipulated period of contract, including justified extensions. Notice Inviting Tenders (NIT) for construction of weightlifting auditorium approved by competent authority in January 2008 did not include such provisions, which was included through a corrigendum. However, the list of materials for which Clause 10CA would be applicable was not appended with the corrigendum, nor included in Schedule F. Thus the agreement signed between CPWD and the contractor indicated applicability of Clause 10CA without appending thereto the list of materials on which the Clause would be applicable. In the absence of the list of materials in Schedule F, no price variation for any of material was admissible. CPWD erroneously made payment of Rs. 0.86 crore under Clause 10 CA in respect of reinforcement steel which was objected to by audit in November 2008. CPWD admitted (July 2009) that no material was listed in Schedule F to the agreement but stated that in the pre bid conference it was clarified to bidders that Clause 10 CA would be applicable and continued with similar payments adding up to Rs.1.95 crore. Audit again objected to the payment in December 2009.

We found that using the powers to modify the contract conditions, CPWD approved modifications to Clause 10 CA in December 2010 for inclusion of cement, reinforcement bars, structural steel sections/flat/sheets/ plates/ tubes etc in Schedule F, in disregard to the sanctity of the contract.

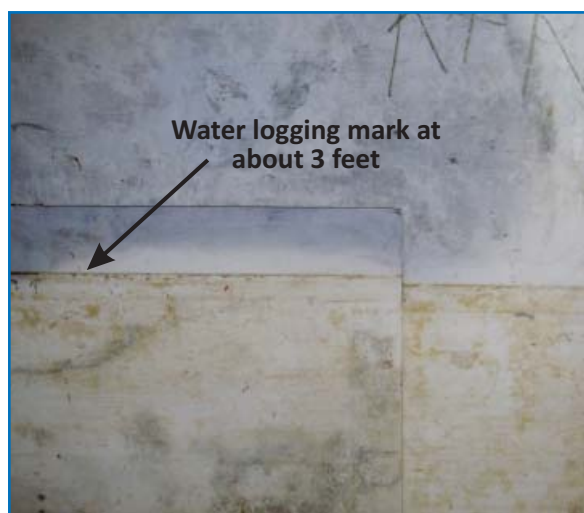


Weightlifting Auditorium

17.6.3.2 Defects in execution of work

Joint inspection of the site with CPWD officers on 22 January 2011 revealed:

- Leakages in underground parking;
- Incomplete flooring work in lower basement;
- Incomplete painting/white washing in lower and upper basements;
- Evidence of water logging in the lower basement up to 3 feet; and
- Two storied parking measuring 15293 sqm had not been used during CWG-2010.



**Water logging mark at about 3 feet
Underground parking at JNS**

17.6.4 Consultancy services for WADA lab and administrative block

Consultancy work for construction of WADA and administrative block were routine construction activities, planning, designing and drawings work and could well be handled by CPWD through its Central Design Organisation (CDO). However, CPWD opted to hire consultants and awarded consultancy contract at a cost of Rs. 40 lakh. We noted that:

- While the consultancy contract for detailed architectural and structural planning, designing, drawings, all internal services etc., was awarded only in March 2007, the pre-qualifications bids for construction work notifying estimated cost of Rs. 24 crore assessed by CPWD had already been invited in February 2007 indicating much of the planning and designing work had already been completed departmentally.
- The evaluation criteria was diluted three day before the extended date of submission of consultancy bid on grounds of better participation of consultants. Against the original criteria of 30 out of 40 marks in concept, appraisal and methodology and a total of 80 out of 100 marks, the diluted criteria provided for scoring at least 25 out of 40 marks in concept, appraisal and methodology and a total of 65 out of 100 marks to be eligible/ considered for financial evaluation. M/s Kothari and Associates scored 26 marks in concept and methodology and a total of 79.9 marks. But for dilution of evaluation criteria they were not eligible for financial evaluation.

The consultancy services were required to be completed in 90 days with stipulated

date of completion of 12 June 2007. We, however, noted:

- Drawings and write up were submitted to MCD on 5 June 2007;
- Draft tender documents were submitted in August 2007;
- Structural design and drawing were submitted in November 2007; and
- GFC drawing for upper floor of the Administrative Block had not been submitted as of November 2007.

Due to delay in submission of estimates, tender documents etc. by the consultant the work was awarded in September 2007, seven months after pre-qualification process. Further, defective planning and cost estimates resulted in large deviations of Rs. 4.52 crore and extra items of Rs. 1.11 crore.

Case Study: 17.2

Recovery of income tax at the instance of audit

Under provisions of the Section 194J of Income Tax Act, 1961, tax on technical and professional services is required to be deducted at source @ 10 percent. During audit of CWG related projects undertaken by CPWD, we noted that deductions were made at the rate of 2 percent. On the matter having been reported to Ministry of Urban Development in September 2009 CPWD reported (January 2011) recovery of Rs.1.65 crore. However, recovery of Rs.5.30 lakh could not be made due to closure of contracts. No recovery of penal interest from defaulting agencies and/or penalty from authorities responsible for short recovery was reported. Correctness of up to date deductions, interest and penalty in terms of the Income Tax Act would be verified in due course.

17.6.5 Construction of Road, Storm Water Drains and RCC Seating Tiers of Warm-up Area

This work was awarded to NKG Infrastructure Ltd. at their tendered cost of Rs. 21.02 crore²², with stipulated date of start of July 2009 and completion by January 2010. We found the following instances of unwarranted expenditure.

- M-30 grade, 80 mm thick inter locking paver blocks²³, meant for heavy vehicular traffic, were irregularly laid in the stadium on the pedestrian footpath.



M-30 grade interlocking paver block meant for heavy traffic laid on footpath

- Grass pavers with green honey comb panels, meant for distributing load from vehicular and pedestrian traffic to the base course below, and for minimising the grass and root compaction, were laid in the parking area. However these were found lying on the surface, broken and scattered, defeating the very purpose of laying these pavers. The expenditure on the item was Rs.0.09 crore (upto Sept. 2010)

²² 0.06 percent below the estimated amount of Rs.21.04 crore

²³ 80 mm thick GRC/FRC decorative



Broken and scattered green honeycomb panels in parking areas



The work was an integral part of the facilities to be provided during the games. Non availability of the same has defeated the purpose of the work.

17.6.6 Construction of Sub-Station building I, III, IV & underground water tanks & pump rooms

This work was awarded to Rama Construction Company at Rs. 7.41 crore with stipulated date of completion as September 2009.

17.6.6.1 Unrealistic Estimate

The detailed estimate for the above work was for Rs. 8.83 crore. The work was

awarded to Rama Construction Company at the negotiated amount of Rs. 7.41 crore. Against this, the contractor had been paid Rs. 15.10 crore by the eleventh RA bill, which is more than twice the original amount. This was due to deviation in quantity and execution of extra items, which indicates that the estimates were unrealistic.

17.6.7 Construction of Boundary Wall of Stadium Complex

Arora Construction Company was awarded the above work for Rs. 6.17 crore, which was 5.80 per cent above the estimated cost of Rs. 5.83 crore.

In this regard, the following was noticed:

17.6.7.1 Extra expenditure incurred due to lack of proper planning

In March 2010, CPWD was directed to fix a 6 mm thick M.S. plate on both sides of the boundary wall to make it bullet proof (against the Delhi Police's original request of a 2.8 mtr impenetrable brick boundary wall, which was turned down by the GoM). By this time, 90 percent of the work was already completed as per the original drawings

In its reply CPWD stated that there was no such provision even in highly secured premises such as Parliament House, Rashtrapati Bhawan.

In our opinion, ordinary, customary or usual materials of construction would have turned out to be equally suitable and at the same time would have been cost effective alternatives to ensure that the boundary wall was secure and bullet proof. A case has been worked out for brick boundary wall with concertina coil which would have

served the same purpose and its cost would be approximately Rs 5 crore, which is much lesser than the final gross amount of this work which is likely to exceed Rs. 16.00 crore, (including the cost of originally designed walls and extra items subsequently included to meet security requirements) spent at the insistence of the security agencies.

17.6.7.2 Unwarranted Execution of Work

The site was handed over to the contractor in a piecemeal manner. Throughout the execution of the work, various authorities kept inspecting the site and accordingly the drawings were changed from time to time. Since an integrated approach was not adopted, work seems to have been executed in an ad hoc manner.

We found that the boundary wall between Gate No. 9 and Gate No. 10 served no real purpose. This was built as per initial plans but abandoned subsequently to include the SAI building within the JNS complex. The expenditure incurred for this work, which is approximately Rs. 0.60 crore, was thus wasteful



Boundary wall between Gate No. 9 and Gate no. 10

17.6.7.3 Execution of Defective Work

CPWD had pointed out various pending/ defective works to the contractor in a letter dated 11 October 2010. The contractor did not take any action. A reminder in this regard was sent to the contractor on 7 January 2011. During our field visits to the site on 13 January 2011, various defects in the work of the JNS boundary wall were noticed, which are depicted below pictorially.



Unplastered Wall of JNS



Gap in MS Plate security cover

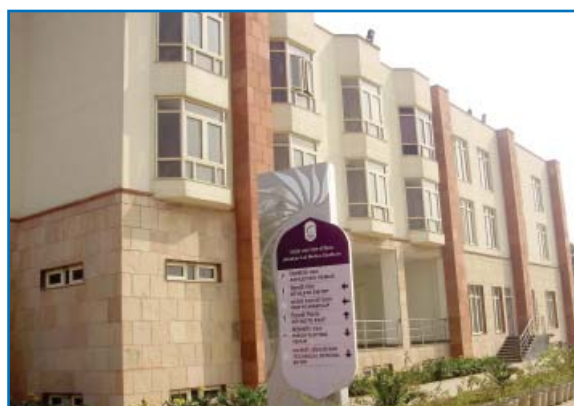


Unfilled Gaps in boundary wall

CPWD, in its reply, stated that the defects had since been rectified.

Further, CPWD recorded a completion certificate in which detail of defects were not recorded, and no payment on account of defective work was withheld from the contractor till the 13th R.A. Bill (the last bill made available to us).

17.6.8 Non utilisation of completed Hostel/ Media Accommodation Block



Unused Hostel Block

The hostel/media accommodation block was completed in June 2010 at a cost of Rs.12.07 crore (as per payment made till November 2010). The building was not handed over to SAI till November 2010 and as such, the accommodation was not used during the Games.

17.7 Dr. Shyama Prasad Mukherjee Swimming Pool Complex



SP Mukherjee Swimming Pool Complex

17.7.1 Introduction

Dr. Shyama Prasad Mukherjee Swimming Pool Complex (SPM), constructed in 1982 for Asian Games, with facilities of two outdoor and one indoor pools and seating, was planned to be upgraded and renovated for CWG 2010 with state of art facilities to meet the international standards and conventions for hosting world class aquatic event. The work involved demolition of the major portion of existing infrastructure, including free standing pillars, and reconstruction of these facilities.

The major work of construction of new insulated metal sheet roof, alongwith roof supporting structure, and its integration with the structure, was tendered as a lumpsum contract²⁴. This work was awarded to Ahluwalia Contracts (India) Limited (ACIL) at the tendered cost of Rs.229.73 crore in December 2007, against an estimated cost of Rs. 176 crores calculated in October 2007. The main components of the subsequently calculated justified cost were introduction of new items of work, change in CPOH²⁵ from 10 percent to 15 percent, escalation in material costs, and introducing new cost components e.g., additional cost due to compression of time, labour costs

²⁴ In a lump sum contract, contractors are required to quote a lump sum amount for completing the work in accordance with the given designs, drawings, specification and functional requirements and shall have no claim for any payment on account of deviations and variations in quantity of any items or components of the work, unless they are authorized deviations from the parameters, drawings and specification contained in the tendered documents. Authorized variations are regulated by rates specified in contract for additions to or deductions from the lump sum amount. Item rate tenders, on the contrary, specify all possible items of work with accepted rates for regulating payments to contractor. Authorized deviations, extra and substituted items are regulated by general provision of contract

²⁵ Contractor's profit and overheads

attributable to provisioning of labour huts off-site, labour transportation etc.

We noted that in deviation of the spirit of a lump sum contract, ACIL was allowed a number of concessions.

17.7.2 Undue concessions to ACIL.

The last date for submission of tenders which was notified as 16 November 2007, was extended four times upto 14 December 2007. The estimates put to tender were Rs. 176 crore, and the L1 bid of ACIL was Rs. 229.73 crore. The difference in the bid from the estimates was partly justified by revising the CPOH from 10 percent to 15 percent, permitted interestingly on the same date by DG (Works), CPWD as the much extended last date to bid i.e. 14 December 2007. The approval of the Ministry of Urban Development for revision of CPOH was received only in July 2008. In reply CPWD stated that the dates are coincidental. However, CPWD irregularly allowed enhanced COPH without the approval of Ministry.

22 extra items valuing Rs.28.10 crore had been sanctioned despite these being included in the lumpsum contract. These included the following

Additional payment of Rs.4.17 crore had been made for an item of work covered in the original contract as detailed in Case Study 17.3.

Case Study: 17.3

Extra payment of Rs.4.17 crore for items of work already covered in the scope of work of lumpsum contract.

Despite clear provisions for use of stainless steel plates, bolts, nuts etc. in the item of

galvanized strands for stainless steel connections in the drawings, technical specifications and notes below the item in bill of quantity, CPWD proposed an extra item of stainless steel plates and bolts on the ground that word “stainless steel” had not been mentioned in the nomenclature of the item of work. Extra payment of Rs.5 crore to ACIL for stainless steel plates and bolts was approved by the competent authority in February 2010. Payment of Rs.4.17 crore had been made to ACIL as of November 2010. After continued deliberations/ discussions and reporting by us, CPWD agreed (December 2010) that the item of stainless steel plates and bolts, etc. was part of the agreement item and nothing extra was payable and assured make recovery from ACIL.

- Additional payment of Rs.2.16 crore had been made by redefining substituted items as extra items.
- The quality of high cost items of stainless steel railing @ Rs.23,500 per meter was increased from 40 m to 1640 m.

17.7.3 Change of Roof

Agreement for construction of new insulated metal sheet roof alongwith supporting structure and its integration with existing structure, etc. included provision for 13060 sqm of galvalume profiled roof sheet as top layer. The eligibility criteria notified through press notice for pre qualification of contractors included the condition of satisfactory completion of at least one work of insulated metal sheet roof with roof area not less than 4000 sqm. The evaluation committee of senior officers approved five agencies after assessing their competence to complete the work. The high tendered rates of 36.04 per cent above the estimated cost for civil work was justified by CPWD on grounds of specialized piles job, steel profile sheet roof, indigenous construction using local material and the high degree of mechanisation, etc. The successful bidder was required to submit credentials of the roofing associate for approval of CPWD.

ACIL submitted details of Multicolor Steels India Pvt. Limited as their associate for roof work. The entire work was stipulated to be completed by 16 June 2009, but ACIL intimated that they were not able to find a suitable vendor for this work in October 2009, indicating loose control of CPWD on ACIL. It was noticed in October 2009 that Multicolor did not possess the technology or machinery to provide the exterior standing seam roof profile as shown in drawings and specifications.

Instead of executing the agreement item at the risk and cost of ACIL, CPWD decided to substitute the item with Kalzip aluminium roofing system, in a series of undue financial favours to ACIL, which also

defeated the basic purpose of lump sum contract. Case Study 17.4 refers.

In addition, 81 items of work valuing Rs. 14.86 crore were added subsequently as extra items of work as these were not envisaged at the tendering stage.

Case Study: 17.4

Failure of CPWD to enforce contractual remedies against contractor

Two contracts awarded by the CPWD for construction of new insulated metal sheet roof along with supporting structure etc. at Dr. S.P.M. Swimming Pool Complex and construction of weightlifting auditorium with two tier underground parking at JNS included similar item of work “providing and fixing of double skin insulated roofing system comprising of seam profiled permanently colour coated galvalume/ zinalune steel” @ Rs.7850 per sqm. and Rs.2349 per sqm. In both cases, it was the responsibility of the main contractor to engage technically competent and capable vendors for the roofing system.

However, the vendors engaged by contractors were found to be incompetent and incapable to provide the committed roofing system. Both the contractors did not execute the item of work and CPWD decided to provide Kalzip roofing system in both the venues. However, the same authorities in CPWD sanctioned variable rates of Rs.7316.44 per sqm. for weightlifting auditorium by treating the item as 'substituted item' and Rs.9168.35 per sqm. for Dr. S.P.M. Swimming Pool

Complex by treating the item as 'extra item'.

Instead of executing the agreement items in both the cases at the risk and cost of the contractor under provisions of the agreement, CPWD preferred extra payment of Rs.6.79 crore to the contractors by substituting the original item.

CPWD replied that in view of the technical responsibility of the entire building being with the main contractor, resorting to getting the roof work done independently at the risk and cost of the main contractor did not appear to be a viable solution. However, in both the cases the Kalzip roofing system was provided by manufacturers of the Kalzip roofing system/ their agent, and the main contractors had no role except pocketing unearned profits.

17.7.4 Defects in agree

- Scope of work provided contradictory provisions in the agreement whereby as per provisions in Volume I of the agreement, the service building was covered in the scope of work but as per provisions in Volume II, it was excluded from the scope of work. On being reported in audit, CPWD agreed not to treat the work as extra item.

17.7.5 Specifications not as per sporting requirements

Sporting requirements notified by the OC through venue brief had not been adhered to fully. There were deviations in dimensions of swimming pool, diving pool and warm up pool as detailed in Annexe 17.4.

17.7.6 Overpayment of Rs.0.39 crore.

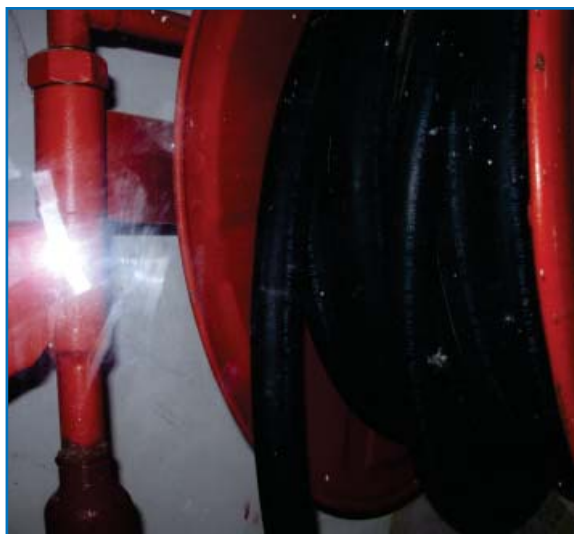
- As per the agreement, the beam detector was required to be provided for a range effective for 110 meters. CPWD accepted the contractor's view that all the beam detectors of approved makes were upto 100 meters range only. This item was substituted with beam detectors of 100 meter range.
- Against the provision for foreign make pool re-circulating pumps and booster pumps, local make equipments were provided.

However, payment was made considering the rates available in the billing schedule instead of variation rates. This resulted in overpayment of Rs. 0.39 crore. On being pointed out, CPWD assured adoption of variation rates.

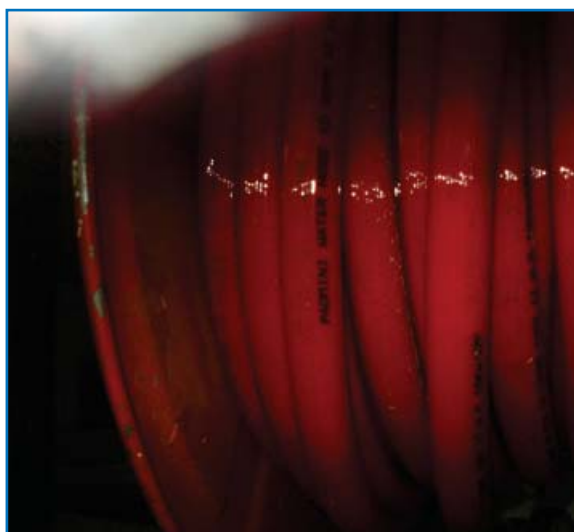
17.7.7 Excess procurement of sporting equipment

Against the requirement of 18 racing lanes, CPWD procured 29 racing lanes, incurring excess expenditure of Rs.0.22 crore for additional 11 racing lanes. Again, 20 of 32 starting blocks required for swimming pool were transferred by the OC to SPM Complex and CPWD also procured 36 starting blocks, incurring avoidable expenditure of Rs.0.34 crore.

CPWD in its reply stated that these procurements were made as per OC's guidelines for sports equipment. As such, procurement of excess equipment resulted in wasteful expenditure.

17.7.8 Supply of inferior hose pipes for firefighting system

Hose reel used before games



Hose reel replaced after games

ACIL provided Power Max make hose pipes for fire fighting system, instead of the contractual requirement of Padmini/Gate make hose pipe as per IS:12585. Instead of rejecting the entire lot of pipes, CPWD allowed part payment and reported the requirement of replacement of hose pipes through the completion certificate. The inferior quality hose pipes were replaced after closure of CWG 2010.

17.7.9 Execution of poor quality work



Poor quality of tiling work executed in the pool

During joint inspection of the venue on 25 August 2010 we noted floor tiles of competition pool, warm up pool and diving pool damaged/missing at many places. After having been pointed out in audit, CPWD reported replacement of these tiles through ACIL.

17.7.10 Execution of defective work



Digging work still in progress (Dec. 2010)

During physical inspection of the venue in December 2010(after CWG 2010), we noticed that the work of digging work/road of 6 feet depth and 4 feet width (approx.) from service building to stadium was still being carried out..

17.7.11 Lack of authenticity of completion of the work

The work of providing Integrated Building Management System was awarded at a cost of Rs.0.40 crore for completion by 7 January 2010. Initially CPWD indicated the work as 'work in progress' (December 2010) and subsequently (February 2011) indicated that the work was completed in September 2010 (February 2011).

17.7.12 Inadequate horticulture work

Against the estimated requirement of 10432 sqm of horticulture work, CPWD inflated the estimate to 15000 sqm on ad hoc basis. However, the actual quantity executed/developed was only 7810 sqm., including grassing work in 2367.48 sqm area.

17.8 Indira Gandhi Stadium Complex

17.8.1 Introduction

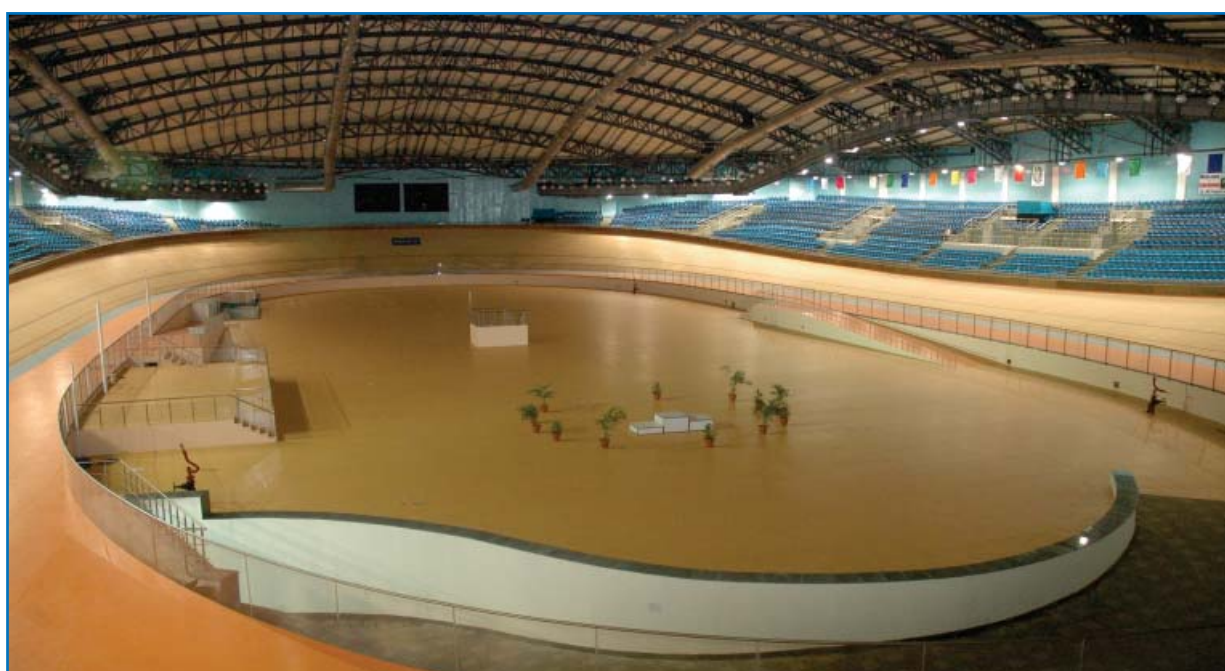
Table 17.7 shows the major works that were executed at the Indira Gandhi Stadium complex for CWG-2010:

Table 17.6 — Major works executed at IG Stadium

(Rs. in Crore)

Work	Consultant	Estimated Cost	Awarded Cost	Contractor
Construction of Indoor Cycling Velodrome	STUP	78.39	97.20	JMC Projects (India) Ltd
Design and Construction of permanent Timber Cycling Track	Dale Hughes (USA)	15.00	17.45	Comfort Net Traders (India) Ltd.
Construction of Wrestling Stadium	CES	65.33	79.20	Era Infra Engineering Ltd
Structural Retrofitting (Gymnastics Stadium)	CES	49.81	63.54	JMC Projects (India) Ltd
Roof truss (Gymnastics Stadium)	CES	33.45	36.80	Swadeshi Construction Co. Ltd.
Construction of warm-up halls (Gymnastics Stadium)	CES	14.16	17.96	Swadeshi Construction Co. Ltd.
HVAC (Gymnastics Stadium)	--	31.30	26.89	Voltas Limited
Construction of 150 bedded Hostel cum Media Centre	SPAN	12.06	15.56	Swadeshi Construction Co. Ltd.
Construction of Roads Storm Water Drains, Boundary wall	CES	25.40	32.02	Swadeshi Construction Co. Ltd.
Sub Station Equipment	CES	39.57	23.82	Ahluwalia Contractors (India) Ltd.

17.8.2 Indoor cycling velodrome



IGI Cycling Velodrome

The proposal was initially to renovate the existing open cycling velodrome but, after considering the options of a partially covered velodrome with demountable timber track between May 2007 and September 2008, a decision was finally taken by MYAS to construct a fully covered air conditioned velodrome with permanent timber track.

As brought out in our Study Report, of July 2009, this change in specification from an open stadium to a fully air-conditioned Indoor Velodrome was largely at the instance of the International Cycling Union (UCI).

This delay was also reflected in the finalisation of the return venue brief in February 2009, venue brief of which was submitted in November 2006, with

cascading changes in the succeeding milestones. The major works were of constructing the stadium structure and laying the timber cycling track.

17.8.2.1 Selection of JMC Projects (India) Ltd.

JMC Projects (India) Ltd. was awarded the contract of composite work for Indoor Cycling Velodrome. We found that it did not fulfil the prescribed eligibility conditions as listed below:

- The compliance with the condition that the agency should not have incurred any loss for more than two years in the last five years was circumvented by a change in the accounting period in the year 2004-05²⁶ (though it does not appear to have been done specifically for this project) as indicated, below

Accounting Year	2007-08	2006-07	2005-06 (Six Months)	2004-05 (18x Months)	2003-04
Profit after Taxes	30.67	15.90	1.32	(11.57)	(4.04)

- Clearly, an otherwise ineligible agency qualified due to the adjustment in the financial statements and performance.
- Inconsistent figures of liabilities were provided by JMC. In the first instance it indicated a liability of Rs. 1179.79 crore for 33 works in progress as on 30 June 2008, which was subsequently increased to 66 works of Rs 1734.36 crore as on 31 March 2008. Simultaneously, in the tender documents for the contract for structural retrofitting/repair and E&M for the gymnastics stadium in the same venue, the liability as on 31 March 2008

was indicated as Rs. 1378.12 crore for 35 works. Such disparity in the figures clearly establishes their unreliability.

JMC Projects (India) Ltd. emerged as the successful bidder based on non-transparent practices. Taking advantage of the adjusted accounting period and despite non-clarity on the quantum of liabilities, it not only won the instant contract but also the contract for structural retrofitting/ repair and E&M of the gymnastics stadium. Incidentally, the same contractor was found ineligible while bidding for works in the MDC stadium.

²⁶ Accepted by the ROC in June 2005

Separately, we found that for the award of work of construction of trap and skeet nos. 4, 5, 6 and underground tank at Dr. Karni Singh Shooting Range (KSSR)²⁷, six bidders, who responded, did not fulfil the specified criteria of executing three similar works of Rs. 3 crore each in the last five years. The condition was thereafter relaxed to execution of similar works of Rs. 1 crore per month, which enabled the shortlisting of JMC Projects (India) Ltd. and Swadeshi Construction Co. from among the 6 respondents. The work was finally awarded to JMC Projects (India) Ltd. for Rs. 4.75 crore, being the lower bidder of the two.. This agency also could not complete the work as per the stipulated time. In addition, we found that since CPWD no longer includes the clause pertaining to execution of works at the risk and cost of the original contractor in the event of unsatisfactory performance in its contracts, they have no recourse to recover Rs. 0.20 crore from the original contractor.

17.8.2.2 Change in the roof works

- CPWD identified Lloyd Insulations as the agency which would execute the roof work as a sub-agency of the main contractor. JMC indicated Rs. 2.99 crore as the cost of this work. We found that the work was finally executed by Bemo Roof System, since Llyod Insulations failed to execute the work. Till date, Rs. 4.48 crore has been paid for the work.

It is a clear indication that CPWD and its design consultant (STUP), could not assess the complexity of the work, and such

²⁷ This work was initially included in the scope of work of Era Infra Engineering Ltd., the main contractor for construction of KSSR. In August 2009, it was taken away from it, due to its failure to complete the work in time.

change in the agency mid-course would inevitably lead to extra costs.

17.8.2.3 Deviations in execution of PA system works

There were astronomical increases ranging from 100 to 1800 per cent in the quantities of cables, conduits and hardware items amounting to Rs. 1.51 crore stated to be consumed in execution of the work.

17.8.2.4 Award of work for Timber Track

We found that the competition for the specialised work of laying permanent timber track for the velodrome was limited to Indian furniture contractors in association with an international track design and construction expert. It appears particularly strange that considering the lack of domestic experience and complexity of the task, CPWD chose to limit the Indian partner to furniture contractors, rather than those associated either with construction or the sports industry. No attempt was made to float international tenders, despite the compelling need for association of an international expert. Further, the eligibility criteria regarding similar works and turnover were also diluted.

The contract was finally awarded to Comfort Net Traders (India) Pvt. Ltd. at a cost of Rs. 17.45 crore from among three bidders, an agency that had supplied chairs at various venues in association with Nussli. Comfort Net was also part of the consortia, who were awarded venue overlays contracts by the OC (commented upon in Chapter – 9)

We also found that extra work of Rs.0.50 crore of laying PVC flooring was also awarded to Comfort Net without tendering.

17.8.3 Wrestling Stadium



IG Wrestling Stadium

This stadium featured main competition arena, athletes warm up hall and front/back of house facilities²⁸, with a seating capacity of approximately 7500. The venue brief was prepared in November 2006, return brief in October 2007, but no final approval was reportedly received.

17.8.3.1 Selection of Era Infra Engineering Ltd.

In October 2007, the pre-qualification process was initiated and in February 2008,

out of the 9 respondents, 6²⁹ were pre-qualified. Subsequently, one³⁰ of the 6 pre-qualified agencies was not issued tender documents on the grounds of non submission of EMD. Finally, of the five remaining PQ agencies, only Era Infra Engineering Ltd. submitted the financial bid, which was accepted by the competent authority. The chronology of events is given in the figure 17.2.

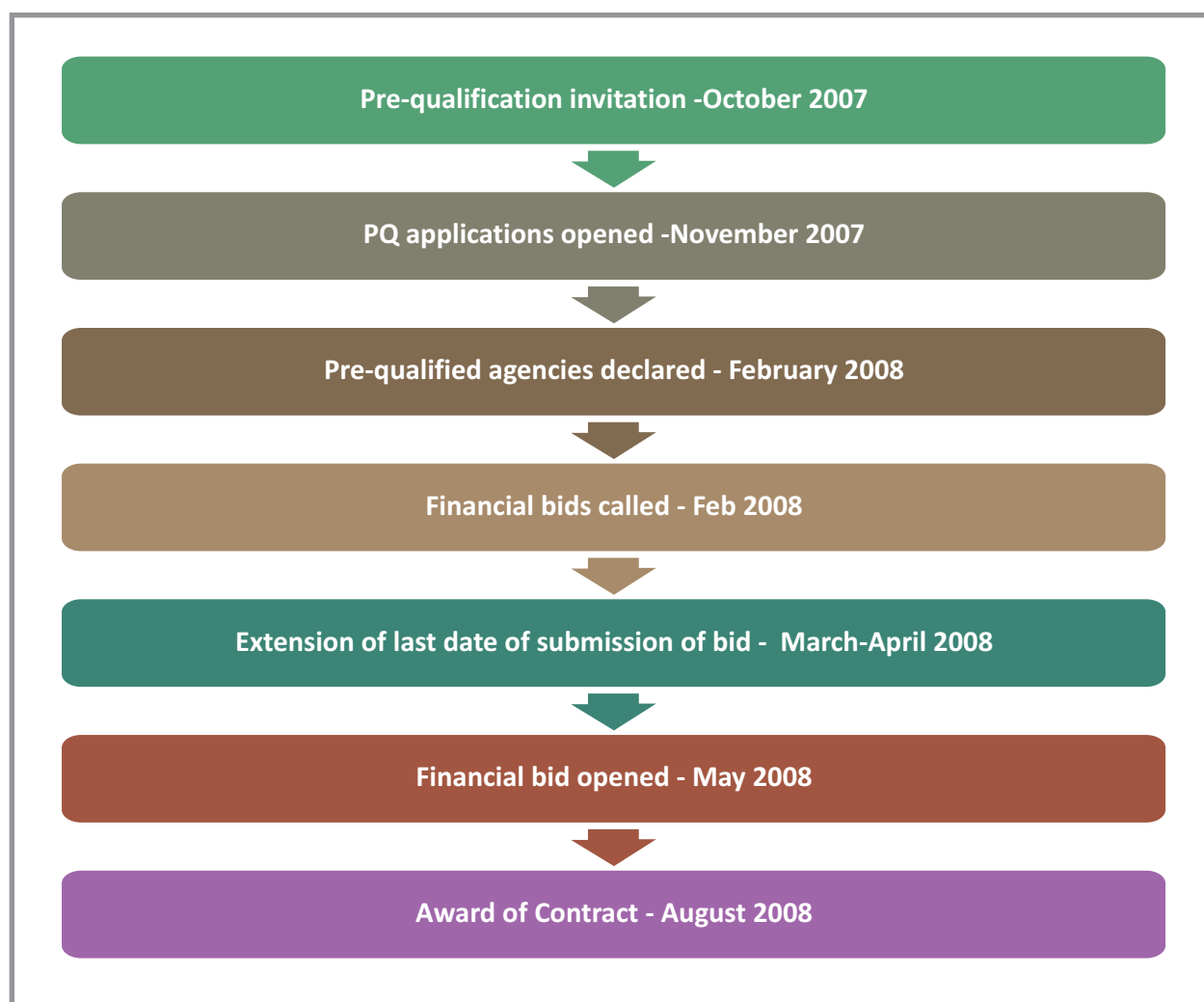
²⁸ **Front of House Facilities:** The facility relate to spectator areas, including transport zones, entries, seating and support areas.

Back of House Facilities: The facilities relate to areas required for accredited personnel, including support areas, transport zones, entries and seating. The BOH areas should generally be separated from spectator areas to assist the management of security and accreditation access.

²⁹ BG Shirke & Co., Era Infra Engineering Ltd., BE Billimoria & Co. Ltd, Ahluwalia Contractors(India) Ltd., JMC Projects (India) Ltd. and Unity Infra Projects Ltd.

³⁰ BG Shirke & Co (EMD not deposited)

Figure 17.2 - Chronology of events in award of contract to Era Infra Engineering Ltd.



We found the following deficiencies in the tendering and award process:

- There was an inexplicable delay of four months in declaring the pre-qualified bidders, belying all the urgency which was otherwise associated with the project.
- Strangely, only one of the five pre-qualified agencies, which had also deposited EMD and obtained tender documents, finally submitted a financial bid, which raises concerns on the competitiveness of the bidding process.
- The pre-qualification of Era Infra Engineering Ltd., the successful bidder,

was also deficient to the extent that there was no clear proof of execution of a steel fabrication work of 20m span.

- One of the applicants, RDS Projects, was disqualified by telephonic/e-mail verification from a Kerala client as to whether electrical and mechanical work had been executed by it. By contrast, we found no documented evidence that any efforts were made to verify whether Era Infra Engineering Ltd. had indeed executed a 20m span structure.

In its reply, CPWD stated that such verification was at the discretion of the concerned officer. However, as such, the

approach remained inconsistent to the extent pointed out by us.

- The bidding capacity of Rs. 1038 crore for Era Infra Engineering Ltd. calculated while pre-qualifying the agency did not take into account any liabilities towards work-in-progress. However, this bidding

capacity of Rs. 1038 crore was considerably higher than the cut-off of Rs 75 crore.

- The figure of financial turnover for the year 2006-07 was also not verified by the Chartered Accountant.

17.8.4 Gymnastics stadium



IGI Gymnastics Stadium

The Gymnastics stadium is a centrally air conditioned stadium with a seating capacity of 16000.

17.8.4.1 Selection of Swadeshi Construction Co

Several relaxations in the tendering process resulted directly in the selection of

Swadeshi Construction Co. as the successful bidder, as detailed below.

The eligibility criteria were relaxed to enable Swadeshi Construction Co. to qualify. The criteria as prescribed in the then applicable CPWD Manual 2003 and the relaxed conditions are given below

As per CPWD 2003 Manual	As per NIT
2 works of 50 per cent of the estimated cost (i.e. 2 works of Rs. 16.73 crore each)	2 works of Rs. 10 crore
1 work of 80 percent of estimated cost (Rs. 26.76 crore)	1 work of Rs. 15 crore

We found that of the two bidders³¹ that responded, Swadeshi Construction Co. did not fulfil the eligibility criteria prescribed in the manual.

The relaxation was justified on the ground of the work being of 'specialised nature'; we found no evidence of this being prescribed in the NIT. As per the CPWD Manual, the procedure for award of works of specialised nature requires that the tender papers should be issued only after ascertaining from the contractor their expertise and experience in the specialised fields concerned. In fact, while Parnika Commercial and Estates Pvt. Ltd suo moto provided evidence of its having experience of executing long span structures (the probable specialisation required), Swadeshi Construction Co had no such credentials.

Also, the figures of turnover submitted by Swadeshi Construction Co did not indicate separately the amounts attributable to construction works.

Further, though as per manual, pre-qualification procedure was to be followed (involving the calculation of bidding capacity of the tenderers) succeeded by an evaluation procedure, the NIT/tendering process adopted in the instant work as well as the work of construction of warm-up halls, where also Swadeshi Constructions was the successful bidder, disregarded both the evaluation procedure and the need to assess the bidding capacity.

17.8.5 Hostel/media centre; and roads, storm water drain and boundary wall

As per the EFC memo, initially a 100 bedded centrally air conditioned hostel was to be constructed, which was subsequently revised to a 150 hostel without central air conditioning in February 2009 at an estimated cost of Rs. 16.50 crore. The ground floor of the hostel was to be used as a media centre during the Games, but the hostel was not used during the Games.

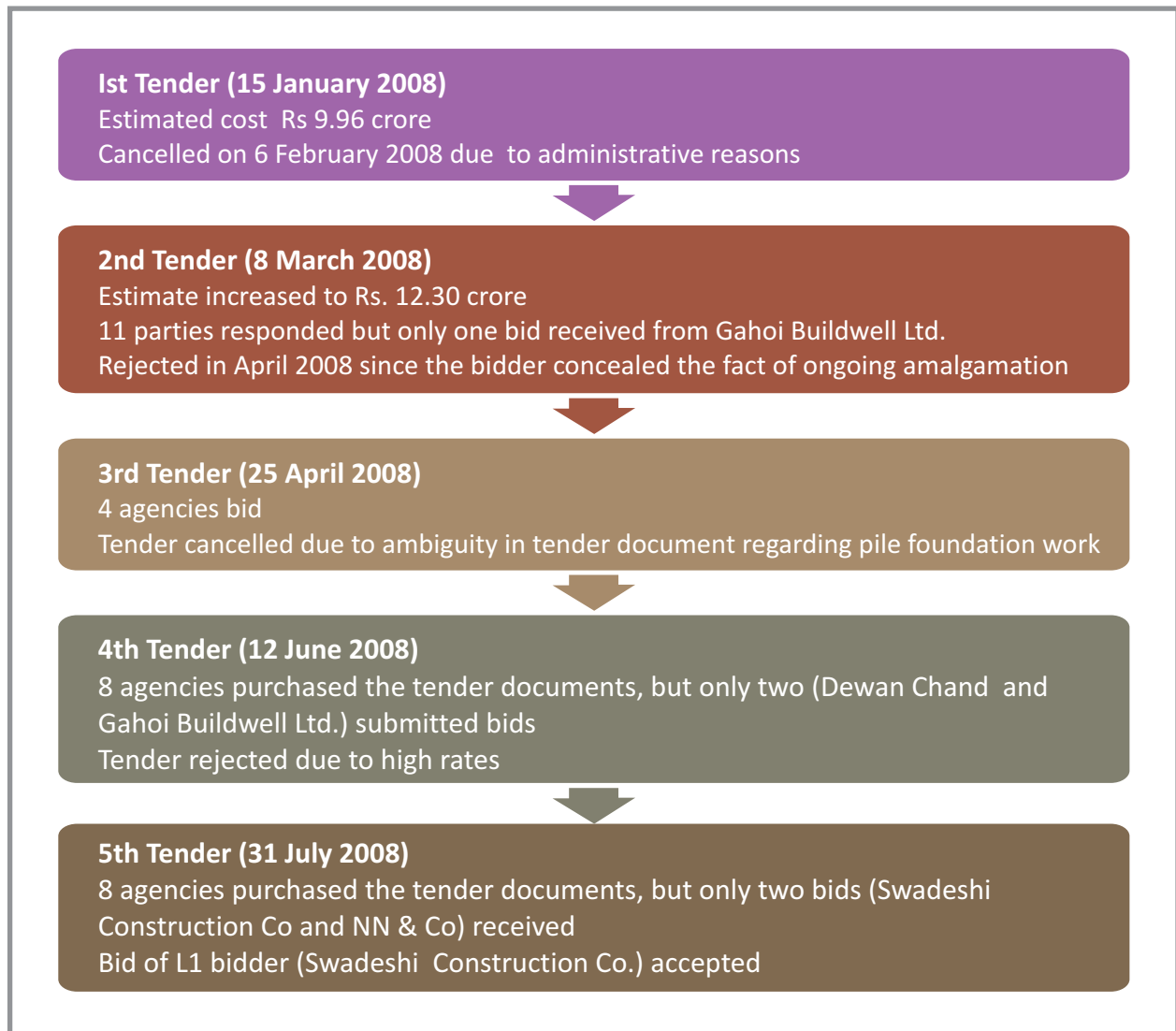
17.8.5.1 Selection of Swadeshi Construction Co.

Swadeshi Construction Co was awarded the work of both construction of hostel and construction of roads, storm water drains and boundary wall.

The tender for construction of hostel was tendered/retendered five times, between January 2008 to October 2008 when the contract was awarded to Swadeshi Construction Co. The tendering process is depicted in figure 17.3.

³¹ Parnika Commercial and Estates Pvt. Ltd. and Swadeshi Construction Co.

Figure 17.3 - Tendering process for award of work to Swadeshi Construction Co.



After a protracted bidding process, Swadeshi Construction Co. was awarded the contract.

We found the following deficiencies in the selection of Swadeshi Construction Co.:

- As per the NIT, the bidder had to submit evidence of works of similar nature. Swadeshi was selected on the experience of construction of Dilli Haat at Pitampura, New Delhi for Rs. 20.78 crore. We found that RCC work comprised only 13 percent i.e. Rs. 2.77 crore, of the cited work. Thus the condition of experience of similar works

which, in the instant case, were 'Building works with RCC framed structures' was not actually fulfilled; and

- The profit and loss account and balance sheet details were not attached with the bid, as required.
- We found that Swadeshi Construction was also ineligible for award of work for construction of roads, storm water drains and boundary wall, but for a series of relaxations given to it during the evaluation at the pre-qualification stage, as indicated below:

- The figures of turnover submitted by it did not separately indicate the amounts attributable to construction works, (though required); audited financial statements were also not submitted for independent verification;
- The turnover of 2007-08 was based on unaudited accounts. If the unaudited turnover of 2007-08 were to be excluded, Swadeshi Construction was not eligible on this parameter. In addition, the percentage of completion

of the two works in progress was not indicated in the performance report; and

- Except two, none of the seven works completed in the last seven years were certified by the competent authority.

17.8.6 Extra items of Rs. 2.48 crore

Swadeshi Constructions was also awarded extra items of works at market rates, without bidding, as summarised in the Table 17.8

Table 17.8 – List of extra items awarded at Market rates to Swadeshi Construction

(Rs. in crore)

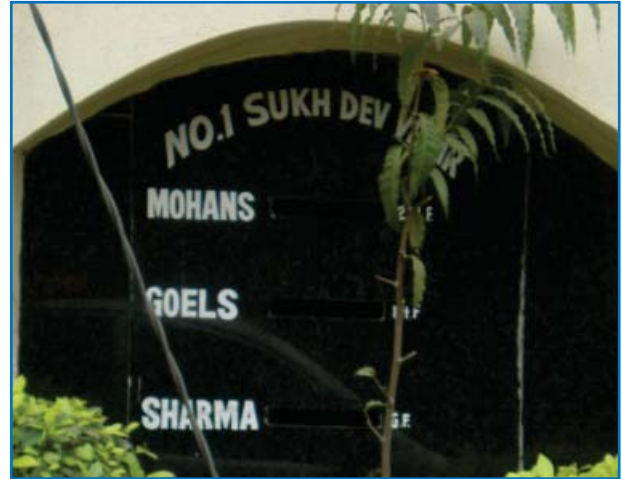
Work charged to	Nature of Work	Amount
Construction of Hostel/wrestling/ gymnastics stadium	Cabling/feeder pillars work for CCTV at the hostel, wrestling stadium and gymnastics stadium	0.77
Construction of Roads etc.	Temporary structure in wrestling stadium	1.71

Interestingly, the extra work of temporary structure for the wrestling stadium was awarded to Swadeshi Construction, instead of the main contractor for the wrestling stadium (Era Infra Engineering Ltd.)

In addition, an amount of Rs. 0.38 crore was paid to Swadeshi Constructions for removal of lime, moorum and building rubbish which was contractually to be done free of cost by the agency.

It is glaringly obvious that Swadeshi Construction Co. was a favoured agency. During the exit meeting, it was stated that it was an enterprising agency that delivered. However, its selection, bypassing prescribed tendering processes, can in no way be justified

Our verification of the correspondence address of Swadeshi Construction Co. (No. 1, Sukhdev Vihar) revealed that this was a residence, casting further doubt on the credibility and authenticity of Swadeshi Constructions Co.



Photographs of correspondence address of Swadeshi Construction Co.(No. 1 Sukh Dev Vihar)

17.9 Major Dhyan Chand Stadium



MDC National Stadium

17.9.1 Introduction

The “Upgradation and Remodelling” of MDC Stadium at the awarded cost of Rs. 209.31 crore included the following:

- Relaying of the two existing synthetic Fields of Play (FOPs);
- Conversion of the warm-up pitch from grassy to synthetic turf;
- Expansion of the spectator galleries; construction of a VIP gallery and facility buildings at FOP-1;
- Construction of a spectator gallery and sports ancillary facilities at FOP-2; and
- Construction of 2-tier basement parking and external/internal development.

The main work was awarded to Unity Infraprojects Ltd. for Rs. 147.82 crore, and 41 smaller works amounting to Rs. 61.49 crore were executed by various other agencies.

17.9.2 Dilution of bid criteria

In response to the RFQ issued in March 2007 for pre-qualification, seven³² firms responded, out of which two³³ were disqualified.

³² Ahluwalia Contracts (India) Ltd., Shapoorji Pallonji & Co. Ltd., L & T Ltd., Unity Infraprojects Ltd., B.G. Shirke Construction Technology Pvt. Ltd., JMC Projects (India) Ltd. and Nagarjuna Construction Co. Ltd.

³³ JMC Projects (India) Ltd. and Nagarjuna Construction Co. Ltd. Interestingly, these two disqualified firms were able to obtain other CWG works.

We found that the Project Manager diluted, without any recorded reasons, the pre-qualification criteria for eligible works in the NIT from that specified in the General Conditions Contract (GCC)-2005. As it stood, the GCC-2005 prescribed that for all works costing more than Rs 10 crore, experience of completion of at least two similar works equal to 60 percent of the estimated cost would make the contractor eligible. This was diluted to 'two similar works of only 50 percent of the estimated cost'. This dilution directly benefited Unity Infraprojects Ltd. and ACIL, which would not have been eligible had the standard criteria been retained.

17.9.3 Reliability of the bid amounts

In our opinion, transparent, fair and competitive bidding is the best determinant of the cost of a project. In the instant case we found several indicators that compel us to believe that the process was not fully reliable, and consequently the rates obtained through the bid may not be the reasonable cost of the work.

- Though five bidders had been pre-qualified, only three finally bid. The two who did not evince interest were L&T (with an average annual turnover³⁴ of Rs. 6941 crore) and Shapoorji Pallonji (with average annual turnover of Rs. 585 crore). In contrast, the three firms that bid had average annual turnover ranging only between Rs. 236-321 crore.
- Seen in the context of fluctuating estimated costs of the project at different stages i.e. Rs. 95 crore at RFQ

³⁴ Covering the period from 2001-02 to 2005-06

stage (when seven firms responded) reduced to Rs. 88.97 crore at RFP stage (when three firms responded), and the final award at Rs. 147.82 crore, the projection of estimates on the lower side may have discouraged the larger companies from participating.

- The justification of costs in response to the lowest quoted bid of Rs. 151.91 crore vis-à-vis an estimate of Rs. 88.97

crore was prepared by the Department on market rates. We found that these rates did not truly reflect the market, as is evident from the much lower rates obtained for components of the main work by Unity Infraprojects Ltd. from outsourced market agencies. Some illustrative cases are given in Table 17.9 below:

Table 17.9 — Illustrative cases of award of sub-contracts at lower rates

Sub-Head of Work (percentage of tendered value comprising of only those items which were easily comparable)	Amount at which work was awarded by Contractor to Sub-agencies (Rs. In crore)	Amount at which work was awarded to the Contractor by the Department (Rs. In crore)	Difference (Rs. In crore)
Aluminum Work (2.21%)	2.32	3.27	0.95
Finishing Works (1.17%)	1.27	1.72	0.46
Waterproofing Works (0.45%)	0.21	0.66	0.45
Internal Utility Services -Supply of SMC panel tanks (0.33%)	0.11	0.50	0.39
Stonework , Marble Work and Flooring (1.70%)	1.38	2.52	1.14
Part Miscellaneous Items (0.86%)	1.06	1.28	0.22
Woodwork (0.32%)	0.38	0.47	0.09
Part Miscellaneous Items (0.29%)	0.27	0.43	0.16
Roofing (2.57%)	2.64	3.80	1.16

Although the department replied that agreement conditions of work orders of sub contractors were fundamentally different in many work orders as they did not cover risk factors, defect, liability, provision of machinery free of cost, performance guarantee, security deposit, VAT applicable on work etc.; yet it did not furnish any

quantitative impact of these factors. Further, the department recalculated and indicated that the percentage of amount charged in excess by the main contractor ranged from 8.3 percent to 202.3 percent . Evidently, the awarded rates were far in excess of a reasonable margin.

ANNEXURE - A

Item / Description	Qty	Rate	Amount
Providing, fabricating, MS structural steel work made up of welded built up sections, angles, plates, connecting MS gussets plates welded / bolted with all necessary washers etc including frame work such as trusses, towers, arches etc including gusset plate and base plate holding down both, grouting, levelling and sand blasting of steel surfaces as per specification including painting.	800.00 Tons	₹ 1,70,000.00 per ton	₹ 1,36,00,000.00

(Rupees: One Crore Four Lakhs Only)

Photograph of sub-contract to outsourced market agency by the main contractor

- The rates obtained for electrical works awarded separately ranged from 4.88 to 43.74 percent below the estimated cost, whereas the electrical works which formed a part of the composite tender were awarded 32.43 to 106.70 percent above the estimated costs. Details are given in Annexe 17.5.
- As per the justification, the daily requirement of labour was indicated at 4793. However, from the monthly progress reports submitted by the contractor, the number of labour engaged daily ranged from 625 to 1400 and as per the fortnightly labour reports appended to the Running Account bills, these ranged from 200 to 1887; in

neither case anywhere near the projected figures.

Despite the additional costs factored in due to the reduced stipulated time period for completion, the project, which was scheduled to be completed in 18 months, took 37 months (without a formal completion certificate being issued till date).

Clearly, the rates obtained from the bid process were not reasonable and have to be viewed keeping in mind that the bid process does not appear to truly transparent, fair and competitive.

17.9.4 Selection of Elgin Electronics Ltd. for Supply, Installation, Testing and Commissioning (SITC) of PA systems

The bid for SITC of Public Announcement System was retendered twice, with change/dilution of bid criteria at each stage:

- In the first tender stage, the NIT, which was issued on 25 March 2008, contained condition of 'technical experience' of the firms being/ having association with an Original Equipment Manufacturer (OEM) and having experience of SITC of PA system of outdoor stadium. In response, four agencies submitted the tender documents, and three³⁵ were shortlisted. Elgin Electronics was rejected on technical grounds. The tender was cancelled due to complaints.
- At the 2nd tender stage, on 31 March 2009 i.e. after one year of the first tender, the technical eligibility conditions were replaced with financial conditions of having experience of two works of SITC of PA systems of the value of Rs. 2.55 crore (60 percent of estimated cost) or one of Rs. 3.40 crore (80 percent of estimated cost) . Six firms responded, and only one (Esco Audio-Visual (I) Pvt. Ltd) qualified. Again, Elgin Electronics was rejected. This tender was also cancelled due to reported monopoly; and
- At the 3rd Tender stage, on 25 April 2009, the condition was diluted to only experience of two works of Rs. 1 core or one of Rs. 2 crore. Seven firms

³⁵ Hi-tech Audio System Pvt. Ltd., Modern Radio House (I) Pvt. Ltd. and Power System

responded, and four³⁶ were found eligible. Elgin Electronic, being the L-1 bidder was selected and awarded the work on 14 July 2009 i.e. after 15 months of initiation of tendering process.

Hence, due to inexplicable delays and successive dilution of tender conditions, the work of SITC of PA System was awarded after a delay of one and half years, and a firm, which was ineligible at the first and second stage, emerged successful finally. Also, the fact that the contractor (Elgin Electronics) did not have a valid association with the OEM (JBL) may potentially affect future maintenance and usability of the PA system. Further, we found that an extra item of laying cables in excess of the contracted quantity ranging 506 – 651 percent was permitted, without obtaining any detailed schematic diagram indicating the location and the length of the cables installed which ultimately resulted in an additional expenditure of Rs. 1.06 crore. In addition to the difficulties in verifying the actual quantities installed without a detailed schematic diagram, the maintainability of this system could be affected. Details are given in Annexe.17.6.

17.9.5 Deficiencies in contract execution

We found a staggering increase in quantities of cables, ducts and pipes for the main composite contract, despite the fact that the associated items (electrical poles, lights, AHUs, cooling fans etc.) were reduced substantially in number. The details are summarised below

³⁶ Hi-tech Audio System Pvt. Ltd., Modern Radio House (I) Pvt. Ltd. and Elgin Electronics and Esco Audio-Visual(I) Pvt. Ltd

- the quantity of various types of cables and conduits for HVAC works, fire fighting works, fire alarm works and Electrical & Installation work increased by 32 per cent to a staggering 6000 per cent over the contracted quantities, leading to an additional financial burden of Rs. 1.10 crore;
- the quantity of various types of ducting for HVAC works increased between 59 to 152 per cent, at an additional cost Rs. 1.17 crore; and
- the quantity of various types of piping & other accessories for fire fighting works increased from 32 to 7450 per cent with additional cost implication of Rs. 0.78 crore.

17.9.6 Non levy of compensation

- Despite delayed completion/ slow progress of the project, no

compensation has been levied for slow progress of work amounting to Rs. 16.49 crore³⁷. Further, since proper record of the hindrances attributable to the contractor have not been maintained, it is difficult to determine the regularity of the provisional EOTs issued from time to time.

17.9.7 Construction of Spectator gallery and ancillary sports facilities at FOP-2

The return venue brief envisaged a temporary spectators' gallery and ancillary facilities at FOP-2. We did not find documentation of the circumstances, under which these permanent structures were constructed as additional works.

17.10 Kadarpur Shooting Range



Kadarpur Shooting Range

³⁷ Rs. 14.78 crore (main composite work) + Rs. 1.71 crore (Synthetic Hockey Pitch laying).



Kadarpur Shooting Range

The cost estimates of Rs.20.51 crore for construction of full bore 1000 yard shooting range prepared in November 2007 were revised to Rs.27.35 crore in March 2009.

17.10.1 Consultancy works for Kadarpur Shooting Range

The consultancy contract for architectural, structural, services planning and designing for construction of full bore shooting range and connected amenities at CRPF Group Centre, Kadarpur, Gurgaon, Haryana was

awarded to Suresh Goel & Associates at a cost of Rs. 0.52 crore. The stipulated date of start and completion were 24 October 2008 and 22 December 2008 respectively. We noted:

- The consultant did not submit the draft tender documents, detailed estimates, details of measurements and analysis of rates, final tender documents and detailed estimates for one of the four works reviewed by us viz. “construction of approach road from dining hall T-

junction to proposed CWG building” for which CPWD recovered Rs.0.02 crore.

- Failure of Consultant/CPWD to assess / estimate the realistic quantities of items of work resulted in extra avoidable payment of at least Rs. 0.15 crore.
- The work was reported to have been completed 25 March 2010 against scheduled completion by 22 December 2008, with a delay of 15 months, besides non-submission of essential documents reported above. CPWD withheld an amount of Rs.0.05 crore pending decision on extension of time, but failed to initiate action for levy and recovery of compensation.

17.10.2 Execution of works

The work was divided into the following broad packages viz.

- Construction of approach road from dining hall T-junction to proposed shooting range;
- Construction of roads, drains, box culverts, back stop walls, side walls and target gallery;
- Construction of facility block, spectators gallery and parking lots including internal electrical installation; and
- Construction of baffle wall providing and laying unfiltered water supply line and chain link fencing.

Deficiencies noticed in the execution of four packages are summarised below:

Table 17.10 – Deficiencies noticed in execution of works

Packages	Deficiencies
<p>Construction of approach road from dining hall T-junction to proposed shooting range</p> <p>(awarded to Narbir Singh at a cost of Rs.2.88 crore for completion in 120 days by 24 April 2009)</p>	<ul style="list-style-type: none"> ■ Sub-standard Granular sub base (GSB) brought by contractor was rejected on 15 April 2009. ■ Hindrance of 42 days was recorded for non-shifting of electrical cable in the hindrance register. We noted that CPWD itself was responsible for shifting of cable. Further the hindrance occurred on 18 April 2009 i.e., just 6 days before the stipulated date of completion of work. ■ The work was completed on 3 October 2009. ■ EOT upto 28 August 2009 was granted in December 2009. <p>CPWD replied that delays were due to non-shifting of electrical cable and non-availability of funds. However, the hindrance register recorded hindrance only for non-shifting of cables.</p>

Packages	Deficiencies
<p>Construction of roads, drains, box culverts, back stop walls, side walls and target gallery</p> <p>(awarded to Narbir Singh at a cost of Rs.11.21 crore for completion in 240 days by 17 November 2009)</p>	<ul style="list-style-type: none"> ■ Despite non-achievement of milestones and delay in completion of work CPWD released the entire balance of Rs.0.56 crore, withheld for non-achievement of milestones, instead of adjusting the same towards levy and recovery of compensation. ■ Material (34.040 T of 16mm steel bars) brought to the site by the contractor was found to be defective, and the contractor was directed to remove the entire steel from the work site. The contractor took over 25 days to cast the base slab of box culvert no. 2, only one CC had been laid, no qualified engineer was deployed at site by the contractor, and adequate efforts had not been made to complete the work in time. ■ Work was completed on 10 May 2010. ■ EOT upto 30 March 2010 was granted in June 2010. CPWD stated in its reply that the delays were due to decisions pending with OC and CRPF authorities and non availability of funds.
<p>Construction of facility block, spectators gallery and parking lots including internal electrical installation</p> <p>(awarded to Bansi Lal & Sons at a cost of Rs.3.77 crore for completion in 180 days by 2 December 2009)</p>	<ul style="list-style-type: none"> ■ The work was completed on 7 May 2010 after delay of five months from the scheduled date of completion. EOT upto 20 February 2010 was granted in May 2010.,
<p>Construction of baffle wall, providing and laying unfiltered water supply line & chainlink fencing</p> <p>(awarded to Narbir Singh at a cost of Rs.2.72 crore for completion in 90 days)</p>	<ul style="list-style-type: none"> ■ The work was completed on 10 May 2010 after a delay of 177 days i.e almost three times the period allowed for completion of work. EOT upto 22 March 2010 was granted in June 2010 <p>CPWD replied that the work was delayed due to non-availability of funds and side by side construction of main works.</p>

Note: The date of completion is the date of inspection by the SE (the authority competent to issue completion certificate) based on which the completion certificate was issued.

17.10.3 Non-completion of training facilities at Jharoda Kalan for police sportsperson

Ministry of Home Affairs sanctioned in August 2009 construction of 5 permanent barracks and providing and laying of synthetic athletic track surface at CRPF campus, Jharoda Kalan by CPWD at a cost of Rs. 7.77 crore. The infrastructural facilities were required for imparting intensive training facilities to 120 selected police

sportspersons for participation in CWG-2010 in the shooting, swimming, athletics, archery, gymnastics, weightlifting and wrestling disciplines. CPWD awarded two contracts in March 2010 for completion of work by July 2010, but the work had not been completed as of January 2011. Thus, the primary objective of imparting training facilities to police sportspersons for participation in CWG-2010 had been defeated.



Incomplete barracks



Construction site of Training Facilities at CRPF Campus, Jharoda Kalan

17.11 Dr. Karni Singh Shooting Range

17.11.1 Introduction

The CWG-2010 requirements included competition arena for 10m pistol and small bore rifle, 25m pistol, 50m pistol and small

bore rifle, range for the finals of the 10m, 25m and 50m competition, spectators areas, transport zones, entries, seating and support areas and Back of House facilities for accredited personnel. The facilities created at Dr. Karni Singh Shooting Range (KSSR) are summarised below:



10 M Range

- Competition arena for 10M pistol and small bore rifle
- 80 firing points
- Fully air conditioned with seating capacity of 500



15 M Range

- Competition arena for 25M pistol
- 60 firing points
- Seating capacity of 500



50 M Range

- Competition arena for 50M pistol and small bore rifle
- 80 firing points
- Seating capacity of 500



Final Range

- Range for holding finals of 10M, 25M and 50M competitions
- Seating capacity of 1000



Trap and Skeet ranges

- Six numbers composite Trap and Skeet Ranges
- Seating capacity of 2000

A new Armoury building for storage of Arms and Ammunition for the sport and Spectator's Plaza were also built.

17.11.2 Change of decision from renovation/up-gradation to reconstruction

Dr. Karni Singh Shooting Range (KSSR) constructed in 1982 for the Asian Games had facilities of 10 mtr, 25 mtr, 50mtr shooting ranges, Trap and Skeet, armoury building, flood lighting etc. with a seating capacity of 15,000. The construction cost of these facilities was Rs.7.41 crore and the life span of the structures was estimated at 80 years. These facilities were in regular use for shooting competitions and between 1995 and 2007, six international competitions and twenty-one national level competitions had been organized at KSSR.

In May 2007, on the advice of the OC, it was envisaged that the facilities could be upgraded and new ranges for pistol and rifle events, built at an estimated cost of Rs. 33 crore. In October 2007, at the direction of SAI, CPWD prepared estimates for three alternatives, giving different mixes of the reconstruction of existing ranges and creation of new ranges/facilities. In January 2008, MYAS finally approved reconstruction of existing ranges, and building new ranges for final events along with additional ranges for Trap and Skeet and back of house facilities at an estimated cost of Rs. 65 crore.

A time lag of seven months between May 2007 and January 2008 created an avoidable squeeze of time at the execution stage. Simultaneously, CES, the consultant engaged in June 2007, for design consultancy for augmenting the facilities at KSSR was contracted at Rs. 0.35 crore for the assignment and later, due to change in scope of work with the decision to construct new facilities, the consultant's fee increased

by Rs. 0.56 crore. We found that, CES was finally paid Rs. 0.81 crore , including Rs. 0.31 crore for the design consultancy assignment for augmentation work.

17.11.3 Non-recovery of extra expenditure of Rs.20.10 lakh incurred due to failure of the contractor to complete the work

The work of civil and electrical works were tendered at an estimated cost of Rs. 56.56 crore against which the L1 bidder, Era Infra Engineering Limited (EIEL) bid Rs 71.65 crore, which was justified by reworking the material costs at market rates and introducing cost components like additional cost due to compression of time, labour costs attributable to provisioning of labour huts off-site, labour transportation etc.

The dates of start and completion of works were October 2008 and August 2009 respectively. EIEL had submitted a construction programme for completion by the scheduled date. However, the work did not proceed as per this construction programme. Though a show cause notice under clause 3 of the Agreement was issued to the contractor in March 2009 for breach of contract, the progress continued to be slow. After expiry of the stipulated date of completion of work in August 2009, CPWD decided to execute the work of Trap and Skeet nos. 4, 5 and 6 and underground tank through JMC. Extra expenditure of Rs.0.20 crore incurred by award of work to JMC at rates higher than included in the contract with EIEL, but could not be recovered from EIEL, which had defaulted, because of the absence of the 'risk and cost' clause in the agreement.

We recommend that the amount may be adjusted against the Performance Guarantee provided by EIEL at the time final settlement of bill.

17.11.4 Award of work to ineligible contractor

Due to failure of EIEL to complete the work in time, CPWD decided in August 2009 to execute work of trap and skeet numbers 4,5 and 6 and underground tank through other agencies. Of the six offers received in response to the press notice, none, including JMC, qualified the eligibility criteria of having completed at least 3 works of Rs.3 crore and above during the last five years and completion of each such work within the stipulated date of completion. Despite the failure of JMC to qualify the criteria, CPWD awarded the works to JMC, after relaxing the condition to one similar work of one crore per month at an extra cost of Rs. 0.20 crore over the rates of original contractor. Even JMC failed to complete the work on time. JMC also executed works at IG Stadium, which has been separately commented upon in paragraph 17.9.2.1 of this Audit Report.

17.11.5 Irregular treatment of substituted items as extra items

Agreement items of work with partial modifications were required to be treated as substituted items, and the rates there for were required to be worked out after adjusting agreement rate of original item for the difference in market rate of original and substituted items. Case study 16.1 indicates two instance of such overpayments.

17.11.6 Defects in execution of work

Several deficiencies in quality of works executed were noted at different stages by the implementing agency. These deficiencies persisted even after the Games were concluded. An illustrative list of such defects are listed below

- leakage in roof sheeting over shooting area in 50 mtr ranges;
- non-settlement of paver blocks/CC pavers at numerous locations;
- non-functioning of aluminium doors and windows in some ranges;
- depressions in newly constructed roads;
- weep holes in target areas and final range (near RCC wall); and
- defects in electric substation work etc.

Rs.0.20 crore had been withheld in August 2010 from the contractor's bill. CPWD reported that most of the defects had been rectified, and the few pending road repairs would be done after the winter season.



Seepage in walls



Patched up in road surface



Weepholes in target area