

Project Management skills played a major role in the success of the MCG Stand Project



The Great Southern Stand Project at the world famous Melbourne Cricket Ground is arguably the most successfully planned building project in Melbourne in recent times. It took many years of experience, good people, good planning and the latest methods in project delivery to make it a winner. The Melbourne Cricket Club manages and operates the MCG and its General Manager, Dr John Lill, and Committee are experienced in organising major projects at this venue. These projects have included

the light towers, sponsor boxes, the Australian Gallery of Sport and Olympic dining rooms. When the light towers were planned in 1984 the MCC retained experienced project manager Don Wilkinson to see them through the major works. They appointed Paul Steinfort to manage the completion of the Gallery of Sport and Sponsor Box building works. Both have a wealth of knowledge gained in successfully managing major projects around Australia. Both developed, in working for the Club, a healthy respect for the people running

the MCC and a commitment to achieving the best possible result for them. Both worked closely with the club architects, Tompkins Shaw & Evans, who also have a solid track record in producing practical designs to resolve the Club's particular needs. When the time came to plan for the building of a major new stand, Dr John Lill again selected this proven trio to be the basis of the project team and to develop a strategy that would see the projects come to fruition. The planning and project delivery strategy was seen as crucial to achieving a



Paul Steinfort, Brian Smith (from architects Tompkins, Shaw & Evans) and Don Wilkinson, the Melbourne Cricket Club's Project Manager.

controlled project in this potentially sensitive site. Paul Steinfort and Associates (PSA), project management consultants, proposed a novation contract, an advanced form of design and construct contract. Don Wilkinson readily accepted the benefits of such a strategy. In this form of contract the design is developed to a stage where all client requirements are defined, drawn and specified (to around 50% of the overall design process, thus ensuring that the clients get the building they wanted), and then contracting the final design detailing and overall construction responsibility to an experienced design and construct contractor or builder. To operate in this manner, however, you need a flexible and practical design group. The design group that was formed was carefully chosen with these principles in mind. Managed by the

client and co-ordinated by Brian Smith, it comprised architects Tompkins Shaw & Evans in association with the talented concept designer Daryl Jackson, structural engineers Connell Wagner, headed by the very experienced John Peyton, services engineers Rankine & Hill and hydraulic engineers Gutteridge Haskins & Davey (who have substantial experience at the ground from the light towers and other civil projects), together with WT Partnership, who did all the cost planning. The team in conjunction with PSA then refined the design to the stage where it could go to tender (out to contractors for pricing). Time, cost and quality were all important parameters on this project, so that PSA, WT Partnership and the whole of the design team had very exacting roles. But it was also important to test

these parameters with the contractors who would finally have to commit to them. Both Don and Paul had worked for major construction contractors, and knew the importance of this process to the final outcome. So preliminary designs, contract documents and time plans were forwarded to a selected list of potential tenderers. Formal responses were received together with their commitment to work to the relatively new novation form of project delivery. All feedback was considered and the final documents were prepared for tender on time. The completion of a new design involving a mixed group of designers, on time, again, was no accident either. PSA had developed a design progress, planning and monitoring system that tracked every one of the 830 drawings and additional specifications and design briefs that were necessary to gain an accurate and unchangeable price from the contractor when final tenders were submitted. PSA, together with the client and Connell Wagner, also tested and settled on different construction techniques, the most important being



The Stand

The new Southern Stand will be the outstanding facility at the ground, holding about 43% of total spectator capacity and ushering in a new era of public amenities.

At 324 metre in length, the stand is a Melbourne landmark - it is about 50% longer than Melbourne's tallest building, the 54-storey Rialto building. A total of 29,000 cubic metres of concrete and 5,700 tonnes of structural steel will be used in its construction.

Work on the project began in May 1990 with demolition of the old structure including 4.575 sheets of roofing and 550 tonnes of structure steel.

The new Stand is due to be available for the start of the 1992 football season.

The Southern Stand is designed to hold about 48,000 spectators* compared with 44,000 in the old stand.

The Stand comprises four tiers:

Level 1: ground level will hold 16,000 plus standing room for about 5,500

Level 2: 5,300 spectators.

Level 3: 3,200 spectators.

Corporate boxes: about 1,500 spectators.

Level 4: 16,500 spectators.

About 37,000 spectators will be under cover compared with 24,500 in the old stand.

Seating will be available for 41,000 people compared with 35,500 previously.

Spectators will benefit from the much better range of facilities.

Equivalent seats in the new stand will be closer to the action on the turf.

In addition to more generous individual seating space, walking up access is easier than before and passenger lifts will service all levels except the top deck.

Public facilities also include 12 food concessions, eight public bars and seven restaurants and dining facilities.

**All spectator totals have been based on initial architectural plans and may vary from final total.*

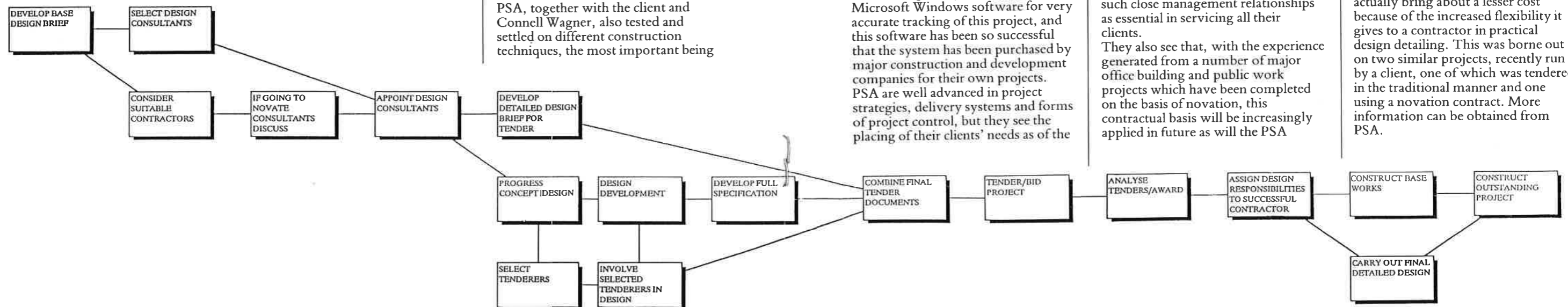
the decision for a majority precast structure with steel upper beams. They helped structure the contract and then played a very important role once the contract had been let in verifying the project plans and progress of the successful contractors, John Holland Constructions, thus assuring the MCC of timely completion. PSA used their own specially developed Microsoft Windows software for very accurate tracking of this project, and this software has been so successful that the system has been purchased by major construction and development companies for their own projects. PSA are well advanced in project strategies, delivery systems and forms of project control, but they see the placing of their clients' needs as of the

utmost importance and always work to develop a special bond with them. It is no accident that PSA were engaged for this major project, and no accident that it has run so well. What has been of particular interest on this project is the professional understanding that existed between the client's representative, Don Wilkinson and Paul Steinfort. PSA see such close management relationships as essential in servicing all their clients. They also see that, with the experience generated from a number of major office building and public work projects which have been completed on the basis of novation, this contractual basis will be increasingly applied in future as will the PSA

generated computer tracking system used for overall project management.

Novation Contract Process

The novation contracting process is outlined on this flow chart for better understanding. There was concern initially that this form of contract, whilst giving greater guarantee on final cost, may increase a project's cost. However, it seems that it may actually bring about a lesser cost because of the increased flexibility it gives to a contractor in practical design detailing. This was borne out on two similar projects, recently run by a client, one of which was tendered in the traditional manner and one using a novation contract. More information can be obtained from PSA.



PSA Has Built A PROFESSIONAL TEAM



From left: Andrew Sewell, Mark Betts, Jenny Troy, Byron Troy, Garry Smart and Paul Steinfort pictured outside their St Kilda Road Offices

Each member of the team at PSA played a part in the MCG project. Byron Troy was heavily involved in the initial planning and test programming of different structural systems of construction timing. Byron has extensive project planning experience with over 25 years of project work under his belt. Last year he topped the class in the first year of the Masters in Project Management degree course at RMIT. Garry Smart has been responsible for the development of most of the software used by the Client team for programming and progress tracking. Garry received his initial grounding in the practical demands of major projects whilst developing the software on site with PSA for projects such as the new Shell Headquarters, 101 Collins Street, 120 Collins Street, new Telecom Corporate Building, new Commonwealth Offices and the Australia

Post National and State headquarters. Mark Betts, who holds both an MBA and engineering degree, has provided administrative management skills for a number of these projects and has played a solid role at the MCG.

In the area of education Paul Steinfort is also Chairman of the Masters in Project Management development committee at RMIT and lectures in Project Control to both the Masters Students and the Civil Engineering undergraduates. As part of his commitment to the future he employs work experience students from RMIT or University on an ongoing basis. PSA presently have two third-year students in their office, one doing a Civil Engineering degree and one doing a Building degree. Both have been learning the systems and monitoring procedures on the MCG and Paul is very sure that trained young professionals are an

important part of the future of the project industry. Paul is also a liaison engineer for the Engineers in Schools Programme being run by the board of education of the Institution of Engineers Australia. He sees the need for the broader community to understand the importance of technology in education as the key to Australia's development. Last year Paul also travelled to the annual Project Managers Institute symposium in the USA and represented the Victorian division of the Australian Institute of Project Management at key international meetings.

Their team, together with many other successful projects under their belt, gives PSA a solid understanding of the demands and skills of project management and a valuable role in the future of the industry.