

The Maryborough Correctional Centre Project....Setting A Benchmark For The Future

Brett Magnussen
AAIQS B App Sc (QS)

SUMMARY

The effective project management of the Maryborough Correctional Centre was challenging, but the outcomes speak volumes about the effectiveness of the approach taken in all aspects. This was a large, complex project not only due to the nature of the facility, but due to the requirement to manage political issues and risk, community consultation, local industry participation and cultural heritage issues all within a remote delivery framework.

Using effective, innovative and precise project management practises has resulted in excellent outcomes and a project that has set the benchmark for correctional centre delivery in Australia.

The Maryborough Correctional Centre is a 500-bed high security facility for male inmates, with a combination of secure buildings and residential style building accommodation to cater for a classification mix of mainstream, remand, protection and young adult offenders. The design of the centre facilitates the operational objective of segregating the various types of inmates whilst providing a level of perimeter security to the current standards of the Department of Corrective Services (DCS).

In addition to the accommodation function of the centre, programmes, education, sport, vocational training, work activities, visits, medical, prisoner processing and administration functions have also been provided. Ancillary functions of transport and escort, and a dog squad have also been co-located on the site.

Overall, the project consists of twenty-two (22) buildings with a collective gross floor area of approximately 28,000m² together with extensive site works and external services.

The total site is approximately 12.8 hectares in area and is located in a rural setting on the outskirts of Maryborough City. Prior to construction, the site was virgin bushland isolated from any services infrastructure and roads.

The project is the largest dollar value project that Project Services has wholly managed, designed and delivered on behalf of any client. Furthermore, it is the largest project to be procured by way of a traditional lump sum delivery method and the only new correctional centre (DCS) of modern times to utilise this delivery method.

The fact that the project has been delivered ahead of time, to budget and quality as well as achieving community support, effectively supporting government initiatives and further developing a positive partnering relationship between the project team, the client and the contractor is outstanding. The project management team displayed effective management and communication skills in overcoming obstacles, identifying and developing opportunities and serving the needs of all stakeholders and were rewarded with enviable results in relation to the Maryborough Correctional Centre that any organisation would be pleased to accomplish. The project's success has been recognised by the Australian Institute of Project Management's 2002 Project Management Achievement Awards, where the project received a High Commendation in the Queensland Division.

Content

The content of this paper includes a broad outline of the project's success factors, and the special management methods adopted in delivering the project. This paper also includes discussion in relation to the achievement of positive outcomes for all project related stakeholders. In particular, the most challenging project issues are focused upon as follows:

- Community consultation and engagement, which included management of political issues and risk, identification and management of cultural heritage issues, and development of positive community perceptions;
- Implementation of a partnering approach to delivery; and
- Minimising the impact of a geographically dispersed project team.

The project outcomes support that a construction project can achieve all stakeholders' expectations through a process of early identification and prioritisation, and the implementation of appropriate management techniques. The success of the project has been through measurement of these key areas against pre-agreed benchmarks.

PROJECT SUCCESS FACTORS

There were a number of requirements coupled with several expectations that required address/achievement to guarantee all stakeholders rated the project a success. These included:

- Benchmarking of the project's capital costs in comparison to recently completed centres delivered using an alternative design and construction procurement model.
- The development of the project brief and design incorporated the best and most successful features of previous facilities.
- The highest level of quality control was required as failure of any of the security measures is unacceptable.
- Delivery of the project within the client's budget and time constraints.
- High political interest and exposure in the event of failure of the project to achieve objectives.
- The delivery of infrastructure to the site to meet master program milestones.
- Community engagement to ensure local stakeholder acceptance of the project.
- Use of the project to meet or maximise whole of Government priorities whilst being able to achieve the base project objectives.

The consultative approach taken to the project, the high level of co-operation between the client, the project manager, the project team and the contractor, the emphasis on clear and regular communication as well as the commitment to excellent project management to achieve project objectives has resulted in optimum outcomes for the Maryborough Correctional Centre Project. This project is considered to be an outstanding success by all project stakeholders as it has met or exceeded all of the project objectives and client expectations as follows:

- The capital cost per bed is significantly below that of recent, comparative Department of Corrective Services projects.
- The project has been delivered within the project budget.
- The project has been delivered within the project program.
- The project has been delivered within the required level of quality.
- The project has exceeded the expectations for whole-of-Government initiatives including training, local industry participation, and indigenous employment.
- The community has reacted positively towards the project and it has been accepted as a boost to the local economy.
- The project has been delivered in a positive spirit, due to the stakeholders' co-operative approach.
- The project has been delivered with no disputes between the key stakeholders.

SPECIAL MANAGEMENT METHODS

The success of the project was due to the project management team approach adopted with the client, which included the implementation of contemporary management methods. The project was delivered in an open, co-operative manner that focused on teamwork rather than the individual.

There were a number of factors that strengthened performance during planning, the design and documentation phases of the project including:

- The selection of a project team experienced in the design of correctional centres and who were well known to each other.
- The inclusion of a correctional centre expert, the Audit Architect, within the project management team to guide the design team and site contract administration team, mentor the Project Manager, and to build on an existing positive client relationship.
- The project team being drawn essentially from one organisation, Project Services, which minimised co-ordination concerns and eliminated contractual issues.

In addition the success of the project was heavily influenced by implementation of the following management methods:

- The project was well defined at an early stage through issue of a Project Execution Plan.
- The formalisation of a Communications Plan to ensure all stakeholders were adequately informed of relevant project data, which resulted in high acceptance of the project and a broader acknowledgement of successful outcomes.
- Value management of the proposed design to confirm the project scope and the 'fit for purpose' of the design, optimisation of the project budget, and agreement of the project delivery by all stakeholders.
- Formal risk management workshops were undertaken with the client to mitigate and to avoid or alternatively accept the risks involved in a complex project of this nature.
- Risk management techniques were utilised to address contentious issues throughout the design and construction phases.
- The management of significant cultural and political expectations through effective consultation and communication.
- The development of a formal partnering approach during the construction phase to assist in recognising each stakeholder's priorities and to define the overall project objectives. The partnering charter assisted the parties to work in a co-operative and constructive environment.
- The implementation of an Internet Portal to maximise access to information and act as an innovative, electronic contract administration tool to enable integrated collaboration for all levels of stakeholders, to minimise the time for information transfer, and to enable efficient document management and tracking.

Project Services has featured this project as a 'case study' at recently held internal project management forums to educate the large group of Project Managers in the organisation (over 100) of the various techniques utilised in order to transfer the learnings and knowledge through the organisation for application on future projects.

ACHIEVING POSITIVE OUTCOMES FOR ALL PROJECT STAKEHOLDERS

Whilst the project has achieved positive outcomes for the client in a traditional sense, time, cost and quality, the project team has always shared a strategic vision of aiming to meet a wider range of issues. These issues were drawn from the project's identified stakeholders, and are discussed in further detail below.

The mechanisms used to identify and manage the project's key issues were the preparation of a risk plan and the implementation of ongoing risk mitigation techniques. A formal risk management workshop was undertaken during the design phase with attendees including all identified stakeholders.

Major risk 'headings' included the external environment, project interfaces, and project management. Risk categories and risks were identified, along with their consequences, probability, impact and rating. Also documented were current controls, the residual risk and further action required.

The pivotal issues identified during the workshop related to:

- Community Consultation.
- Local Industry Participation.
- Procurement Methodology.

An individual action plan was prepared and implemented for each major issue following endorsement by the Steering Committee.

Risk management techniques were utilised throughout the project to identify potential risks and to develop strategies to avoid or mitigate those risks. Furthermore, these issues were escalated to the appropriate forum for resolution of an action plan.

The Steering Committee's key focus was to overview project progress and to identify any potential risk issues in addition/subsequent to the risks contained in the Register. The risk issues were then assigned for resolution within a pre-determined timeframe. Each risk issue continued to be monitored by the Steering Committee until the issue was 'closed out'. In all cases the risks identified at the commencement of the project have been managed effectively to achieve either total avoidance of the risk or reductions of the risk to such an extent that impact is extremely minimal and could be adequately contained in the contingency.

As an example, issues initially identified as representing potential risks and subsequently effectively delivered were:

- Procurement of a security and communications sub-contractor experienced in the installation and maintenance of Department of Corrective Services facilities.
- Agreement of a contractual disputes (including escalation) partnering process.
- Agreement of a Commissioning Plan for the Handover phase of the project.

Community Consultation and Engagement

This project has experienced a high level of public and political exposure and as such has required an extremely sensitive approach to community consultation and community engagement. The Steering Committee recognised this as an issue and reacted by forming a Community Consultation Sub-Committee. The Project Manager was very much involved in engaging the community to resolve several challenges to provide project outcomes. These included:

- Site designation and completion of an environmental impact statement. In order to finalise these issues, current legislation required undertaking a Cultural Heritage Study. This involved identifying the traditional landowners, the Butchulla people, understanding their issues, and gaining their trust, including:
 - Negotiating issues with three diverse representatives as the traditional landowners include three different 'clans' of the Butchulla people.
 - Recognising the presence of a number of 'scar' trees and their importance, and negotiating an agreement to retain the trees in an area dedicated to the traditional landowners.
 - Negotiating terms and conditions for the employment of cultural monitors during the Bulk Earthworks contract.
 - Gaining final sign-off of the environmental impact statement and its recommendations and, the environmental management plan.
- Briefing of the adjoining property owners in relation to the construction and operation of a correctional centre. This was a very emotive issue initially, however, generally most of the neighbours' fears were allayed and they were appreciative of being given accurate information.
- Preparation of a Local Industry Plan to maximise the use of local material, equipment and services. The Project Manager chaired a public meeting to inform and take questions on the measures implemented in

providing these opportunities. This forum was well attended and has led to significant local opportunities during the construction phase of the project. In fact, total expenditure on local industry products and services is in the vicinity of \$6.2M, with expenditure on services/products of Queensland firms equating to over \$58M – almost 93% of the total trade value of the project. The project also contributed to the local economy through the engagement of local labour on the site. The local site labour site equated up to 65% of the total site labour at its peak (179 local workers) equating to approximately \$12M in local labour injection. The project has been recognised for its achievements with respect to local industry participation in the category of Major Government Project in the 2002 Local Content Awards (a joint initiative between the Industrial Supplies Office (ISO) Queensland, The Department of State Development, and the Institute of Engineers, Queensland Division).

- Preparation of a procedure for the construction phase in relation to media opportunities. As a result, the project has been afforded positive media from the very outset.

One of the Queensland Government objectives in the construction of any project is the training or up-skilling of people. The project specification included a mandatory requirement/formula for training hours as does all Queensland Government projects. However, in order to ensure the selection of a tenderer not only on price, but also on Government initiatives and project objectives, the project management team requested tenderers to demonstrate how they would address training throughout the construction of the project.

Walter Construction Group's tender was able to demonstrate previous successes in this area as well as detailing their proposed training strategy for the Maryborough Correctional Centre, which the project management team deemed to be commendable. Their strategy included maximum use of apprentices and trainees, trade recognition of workers, up-skilling courses, and construction and supervision of a single building (Multi-Purpose Hall) entirely by apprentices and trainees.

The Department of Corrective Services' various correctional centres were involved in the production of various joinery, metalwork and linen items for incorporation into the Maryborough Correctional Centre. These centres played an important part in training for the project in that the inmates were manufacturing the items under supervision by Department of Corrective Services' trade instructors. This work contributed towards the inmates' trade recognition.

The Project Team also committed to training through the employment of an apprentice Clerk of Works who has participated in all aspects of the project, including the Multi-Purpose Hall. The consultants gave opportunities for Project Services' cadets to be involved in assisting in design and construction inspection activities, thus providing these cadets with invaluable experience in participating on a major project.

Implementation of a Partnering Approach to Delivery

The project management team identified the potential for a confrontational relationship to develop with the contractor due to the size of the project and its delivery method. In order to mitigate this risk, the tender documents included the project objective of co-operative contracting for the tenderers to address as a selection criteria. The successful tenderer chose a formal partnering approach.

The partnering approach has been adopted during the construction phase at all levels of the project, from the toolbox to senior management. Partnering encourages all participants to raise an issue for discussion without fear of criticism. This approach has allowed individuals to deal with usually challenging issues in a positive way by being able to understand each other's circumstances and to make allowances as necessary, such as commercial objectives versus probity objectives.

Partnering has allowed all stakeholders a vehicle to freely state their feelings and for those issues to be escalated and resolved. Partnering improved communication throughout the construction phase due to the following initiatives:

- Identification and recognition of each parties' objectives.
- Agreement of the project objectives and the formal sign-off of a partnering charter.

- Use of a questionnaire for site workers and other team members to register perceptions in relation to achievement of agreed project objectives to strive for continual project improvement in relation to these objectives.
- Willingness to use a partnering approach on specific issues such as a workshop to agree the requirements for the defects, commissioning and handover phase.

Minimising the Impact of a Geographically Dispersed Project Team

The project management team identified a need to address communication for the construction phase of the project. In previous projects, contract administration has often been cause for frustration to each party because of the time involved in information flow – traditionally governed by the speed of the post, courier, etc. The issues considered for this project included:

- Maryborough is remote from Brisbane where the design team, the client, and senior management from Project Services and the Contractor are located.
- The Project Team is located in different areas. The design team is located in Brisbane, the Project Manager is located in Maroochydore, and the contract administration team is located on the site.
- The size and nature of the project was likely to produce an enormous volume of correspondence requiring appropriate control systems.
- The risk of the Project Team not responding to an issue in a timely manner might result in a contractual claim.
- The requirement for all stakeholders to be able to collaborate and share accurate project information.

To ensure these communication logistics issues would be effectively managed, the project management team required the provision of a web-based integrated tool for collaboration as part of the tender selection criteria.

The implemented tool took the form of Internet portal by Prolog, which provided password protected access for all stakeholders with pre-determined access rights to a range of project related information data including:

- All current drawings and specifications.
- Directory of project personnel and contact details.
- Progress photographs.
- Log of all RFIs including email bring-up to recipient.

The portal has been influential in achieving project improvements in the following areas:

- Excellent document management control;
- Improved information flow;
- Faster resolution of RFIs;
- A reduction in paper-based document production and therefore, cost savings;
- Ability to categorise RFIs and analyse (ie discrepancies versus samples – QUT has access to the project Portal and is undertaking research in this regard); and
- Improved computer proficiency by site/trade-based personnel.
- All variation orders, site instructions and other notices were issued electronically to the Contractor by the Superintendent's Representative. Thus, reducing paper and making it more efficient to distribute these notices to other team members.

CONCLUSION

The project is deemed to be a success story based on the positive feedback through community forums, contract partnering sessions, and client/operator de-briefings. In order to quantify the success of the project, a set of key performance indicators (kpi's) have been developed by government as a basis for scoring by a

cross-section of project stakeholders. Stakeholder interviews have been completed and although the results have not been finalised, it would appear that the project will be afforded a positive scorecard.

It is likely that government will utilise the kpi's developed for this project and the success of this project as a benchmark for measuring the performance of other construction projects.