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Client Communique

How to avoid an ill-informed property master plan

In this communique, Danaë Bain, Senior Associate of EPM Projects who has many years of experience in managing school master planning projects, shares about the traps of an ill-informed master plan.

What is a Master Plan?

Ill-informed and poorly timed decisions about property development and use can have a dramatic impact on the extent to which a school achieves its strategic objectives.

A master plan is a tool to guide the way in which property is acquired, developed and used. It is not a detailed design. It demonstrates the way in which the built and natural environment can be harmonised in an efficient, effective and sustainable way. It responds positively to constraints of all kinds, maximises opportunities and is flexible and adaptable to accommodate changes in the school's strategies.

What factors should not be overlooked in the preparation of a master plan?

It is natural to visualize a master plan as a series of drawings.

Consequently, the focus of a master plan can be the drawings whereas the true value of a master plan is the process itself. A master plan that does not consider all the relevant factors will be unreliable. In the worst case, an ill-informed master plan creates significant financial and operational risk for a school.

How do you avoid an ill-informed master plan? I have seven recommendations.

1. Alignment with School's Strategic Objectives & Pedagogies

First and foremost, a master plan should clearly address the school's strategic plan over a corresponding horizon. At its core, a master plan must be an enabler of the school's pedagogical framework and practice. The master plan should be a 'living strategy' that is regularly reviewed

and updated as the school reviews its strategic objectives.

2. Adaptive to Changes in Teaching & Learning Methods

A master plan should enable a physical environment that can be easily adapted to support changes in teaching and learning methods. For example, there has been an increase in recent times in the provision of 'makerspaces' for robotics, CAD, coding etc. Whilst it is not possible to predict how technology will impact the way children learn, a master plan should anticipate change so that buildings are designed to be flexible and adaptable at minimal cost and operational impact.

3. Mapping the Constraints & Opportunities

For a master plan to be reliable, it must be informed by the constraints to development. To maximise the economic use of

land and to minimise the cost of development, a master plan should also leverage the opportunities. A thorough constraints and opportunities analysis completed before the master plan diagrams are developed will avoid a situation where the master plan is unable to be implemented and will reduce the risk of consequent projects. While the cost and time involved in investigating and mapping constraints and identifying the opportunities can be significant, it is likely to be far more expensive and disruptive [and potential embarrassing] if this is deferred. Expert consultants should be appointed to investigate and map the constraints and identify the opportunities to development.

4. Maximise the use of Property

Land is a finite resource and one of the single largest economic assets of a school. While buildings can be built and replaced, land cannot. A building that does not maximise the use of the land that it is situated on over the design life of the building (50 years according to the Building Code of Australia) is, arguably, a false economy.

The process of mapping the constraints and opportunities to development should identify land

that that is underutilised and the potential operational value of adjoining property. It is helpful to know as much as possible about the intentions of neighbouring landowners and their land at the time of preparing a master plan, as this could reveal opportunities for a more efficient, effective and sustainable master plan.

A well thought-through master plan will inform a strategy for acquiring property to minimise the risk of the master plan becoming obsolete as soon as the school acquires additional land.

The school should invest in thorough due diligence before incorporating any additional land into the master plan, including things such as constraints from heritage, bush fire and land use (zoning) permissibility etc.

It is also important to consider the optimal use of the school's current property and facilities to inform any decisions to purchase additional land. For example, the school could consider whether it is more economical to excavate and use the space below ground e.g. under an oval for facilities such as carparking or to add storeys to existing buildings, as an alternative or in priority to acquiring land.

5. Consultation and Briefing

A good quality master plan is based on a master plan brief that is informed by appropriate engagement and consultation with key stakeholders. While it is not necessary to consult everyone, a master plan that overlooks early and regular consultation with key stakeholder's risks being unreliable and misses the opportunity to engage the whole school community towards the school's strategic objectives.

Following the process of stakeholder consultation and mapping the constraints and opportunities, the decisions of the school should be clearly documented in the form of a master plan brief. The master plan brief does not propose the solution. Rather, it sets out the challenge that the master plan should solve. It is important that the purpose and function of the various facilities is adequately documented in the brief, so that when the detailed design for each of the facilities is progressed, the functional requirements are carried through with predictable spatial and cost impacts. An example is a sports hall to accommodate courts that are to be used for competition will have

greater spatial requirements than practice courts.

6. Cost & Affordability

The process to prepare the master plan should consider the probable costs of the master plan projects and the means of the school to fund the master plan (including any enabling works). This is preferable to cost and affordability becoming a 'surprise' at the time of embarking on a project. Factors to consider include ability to finance debt, cash flow and debt policies, and sensitivity analysis of the best / worst case scenarios. Such reviews could result in a master plan project needing to be delivered over two or more stages. This can have a significant impact on its design and therefore the way a project is incorporated into the master plan.

Some facilities proposed under a master plan may lead to increased student capacity, and therefore an increase in enrolments and revenue. Other facilities might provide increased amenity, however they may not directly contribute to an increase in revenue. The staging of facilities, and their ability to generate revenue, should be considered so that it is appropriate within the

context of the school's financial capacity.

7. Implementation

The process to prepare a master plan should include a strategy to implement the master plan. This includes staging the master plan projects, enabling works as a precursor to a project and how the master plan will be implemented in a way that minimises the operational impacts on the school. Where existing buildings are proposed to be demolished to make way for new buildings, the required churn space can tend to be underestimated or overlooked. Whether the churn space is to be provided in an existing building, or in a temporary building, the school should consider the amount of space and the specific facilities require, as well as the costs and statutory approvals to provide the churn space. It is easy to underestimate the time and cost involved in these enabling projects.

By nature, a master plan will take years to fully implement which means that a school will be subject to many years of construction. This can lead to 'construction fatigue', with the risk of the school postponing projects. The way in which the master plan will be

staged should be carefully considered when setting the timeframes for implementing the master plan.

Conclusion

A well-researched master plan will be an asset and an enabler to the school's strategic objectives, while an ill-informed master plan will be a nice set of drawings at best and potentially expose the school to significant risk.

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