

THE  
BENEFITS  
OF A  
SINGLE-SOURCE  
APPROACH

# A NEW WAY

## TO DEVELOP PARKING



**P**arking projects are most often initiated, not for profit, but to fill a need. A developer may want to add parking to make a residential or commercial project more attractive; or a municipality may need additional parking to support downtown business; or a hospital or university may need a new parking facility to meet growing parking requirements on campus. While parking owners would always like their parking facilities to earn a profit, their primary concern is generally addressing a specific parking requirement.

In some cases, these new parking projects are initiated by organizations with limited manpower resources or experience developing and managing parking structures. Some even have no experience at all operating parking structures. Others may have surface parking lots, but they've never needed to create organizations to operate a parking facility.

For owners with little or no experience operating parking, or for those who just don't want to take on the burden of operating their new parking facility, there is an attractive alternative: Design/Develop/Manage. Under the right conditions, this approach can provide significant advantages both during the development stage and when the structure is operational.

BY RICHARD C. RICH, PE

### TRADITIONAL DELIVERY APPROACHES

Traditionally, owners have had four options for developing parking. These include:

- Design/Bid;
- Design/Build;
- Turnkey; and
- Construction Management.

The following is a brief description of each:

**Design/Bid**—Until about 25 years ago, this was the typical way to develop a parking project. The owner would seek out a firm with design experience, and then have a set of documents drawn to meet his needs or requirements. The project would then be put out to bid to general contractors, either on an open advertise basis or by invitation to a limited number of contractors to submit bids. This is generally the most time-consuming way to go because it requires design time, a bidding period, mobilization, and a construction period.

**Design/Build**—With Design/Build, the owner seeks out a team comprised of a design firm and a contractor. The two work hand-in-

The vehicle entrance and exit, and pedestrian traffic should be located in plain view of the management office if possible. Also, locating security monitors in the operations office permits easy access so other personnel can be recruited to view the monitors, providing breaks for the security individual.



hand to develop, in a relatively short period, a detailed schematic design sufficient to obtain subcontractor pricing. By providing a fixed price earlier, Design/Build makes it easier for the owner to obtain financing. The process also permits an accelerated development process because detailed plans and specifications of critical elements, such as foundations, can be developed earlier in the process so that construction can begin sooner. In addition to the time benefits, Design/Build often results in lower costs because the designer and contractor work as a team from the outset to identify savings.

**Turnkey**—Turnkey is a method where the owner seeks a contractor to provide a building to his specifications. In some cases, the contractor finances the construction with a guarantee take-out by the owner once the project is satisfactorily completed.

**Construction Manager**—With this method, the owner separately engages a design firm and a contractor

to work together on the same project. It is similar to a Design/Build, although in most cases the construction manager does not guarantee the final price and the owner generally has to manage more than one contract.

One common element missing from these methods is operations—who is going to operate the structure once completed. Today, owners have a fifth option that offers the benefits of some of the delivery methods discussed above along with the benefit long term professional management and a potential financing resource:

**Design/Develop/Manage**—Through this alternate approach, owners seek a single DDM to handle all aspects of the project: design, pricing, financing, construction, and operating the finished project. If the financing is pursued through bonds, the DDM can also assist with all steps of the financing. Acting as developer, the DDM lines up financing, obtains a guaranteed price for the lender, designs the structure, oversees construction, and

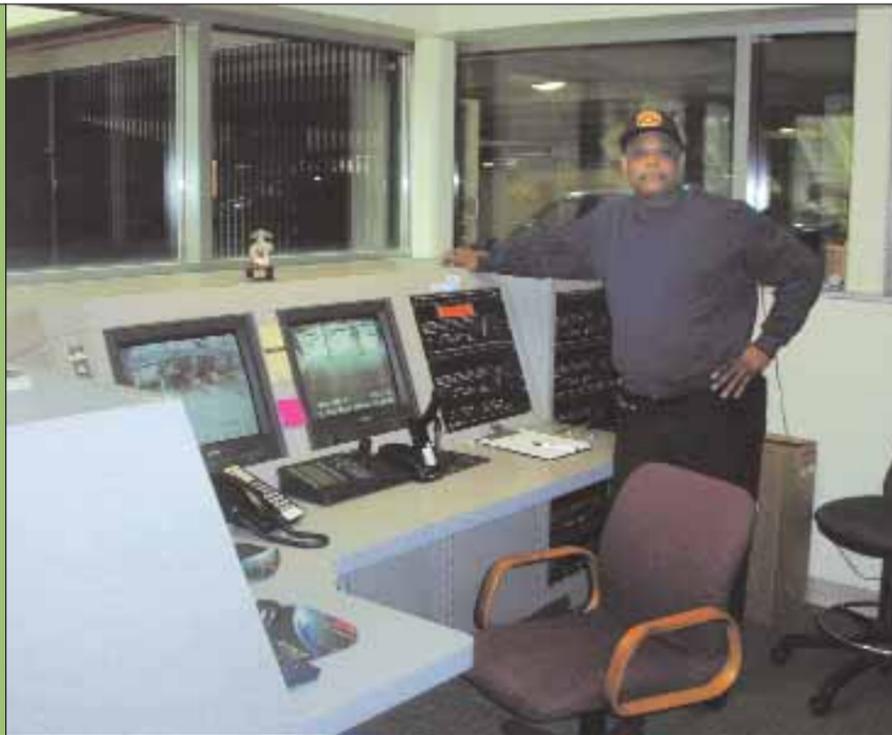
manages the parking structure when it is completed. This approach is particularly useful for owners who don't have staff to coordinate the design efforts, manage the process or operate the finished project. Design/Develop/Manage can also be attractive to experienced owners who want to outsource those responsibilities.

### A CLOSER LOOK

There are numerous design-related and financial benefits to Design/Develop/Manage approach. The design of any parking structure must revolve around all aspects of the project, including function, operating efficiency, aesthetics, development and operational costs. The DDM knows that they will ultimately be responsible for the structure's cost and operation, and they are more likely to create a design that is competitively priced, meets the client's program requirements, and includes useful operating features.

For a Design/Develop/Manage

When the DDM has ultimate responsibility for the effectiveness of security tools, they are less likely to cut corners. As a result, these structures generally feature state-of-the-art tools like CCTV, sound monitoring, and mechanisms for closing the building to both autos and pedestrians when the structure is closed.



With Design/Develop/Manage (DDM), a single consultant handles all aspects of parking design, construction, and operation of a parking structure. Pictured is the construction of the Chicago Veterans Administration Parking Structure, a DDM facility.

project to succeed, there are a number of issues that the DDM must pay particularly close attention to:

**Budget**— The DDM must work with the owner to establish a budget for construction by taking into consideration all local costs, what the potential revenues may be, and in some cases what the subsidy may be if there is a shortfall in revenue. The DDM must also work with either an underwriter for the bond issue or a conventional lender, to develop the basis for financing based on the projected cost and revenue or subsidy.

While designing the structure, the DDM must consider not just the construction budget, but the operating budget as well. Everything that is needed to operate the building efficiently must be included in the original design and budget or the DDM may have to make up the difference out-of-pocket once the facility is completed and accepted by the owner.

**Operational Efficiencies**— Focusing on efficiency will inevitably improve the structure's design. While every building is unique, there are a number of common design features that can often be found in the best

structures. These include long span design, and a clean traffic flow to operate efficiently.

**Security**—The operating office is the best location for security monitors. This is true for several reasons. First, the office is visible to those entering and exiting the building, so visitors realize that there is a security system and that it is being monitored. The vehicle entrance and exit, and pedestrian traffic should be located in plain view of the office if possible. Also, locating security monitors in the operations office permits easy access so other personnel can be recruited to view the monitors, providing breaks for the security individual.

When the DDM has ultimate

responsibility for the effectiveness of security tools, they are less likely to cut corners. As a result, these structures generally feature state-of-the-art tools like CCTV, sound monitoring, and mechanisms for closing the building to both autos and pedestrians during hours in which the structure is closed.

They are also likely to include comprehensive signage packages providing the most efficient and cost-effective wayfinding methods. These may include dynamic and LED signs, or zones with monitored access and space counts in larger structures.

**Operating Equipment**— The DDM is certain to select the most effective operating equipment based, not only on the reliability of the equip-

ment, but also on its effectiveness. For The DDM, choices aren't based on selecting the most interesting bells and whistles. Decisions are based on selecting the equipment that will permit them to manage the facility as effectively as possible.

When selecting revenue control software, DDMs will pick the software that can easily be integrated into the clients' existing systems. Secure storage should be provided for storing maintenance equipment such as mechanical sweepers, snow removal equipment, and wash-down equipment and supplies. It is important to plan dry, enclosed storage facilities designed to accommodate new ticket supplies and storage of used tickets for up to 15 months for auditors. This can be a huge advantage because design decisions are being made by individuals who will also be operating the facility, there are never any surprises once the structure is completed.

#### ENORMOUS BENEFITS

Owners should consider Design/Develop/Manage approaches when they need new parking. Under the right circumstances, a single-

WHEN SELECTING REVENUE CONTROL SOFTWARE, DDMS WILL PICK THE SOFTWARE THAT CAN EASILY BE INTEGRATED INTO THE CLIENTS' EXISTING SYSTEMS.

source approach can provide enormous benefits. Of course, there are challenges presented by this approach. The Design/Develop/Manage firm must be able to wear every hat imaginable: designer, project manager, financial consultant, and facility operator. And selecting an unqualified firm can have disastrous repercussions.

However, owners who make the right choices in pursuing Design/Develop/Manage reap the rewards. They can expect excellence in design, affordability, and smooth and efficient operations. ■

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THERE ARE NUMEROUS DESIGN-RELATED AND FINANCIAL BENEFITS TO DESIGN/DEVELOP/MANAGE APPROACH.