

THE CONSTRUCTION RESOURCE

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SPECIAL REGIONAL COVERAGE
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Southeast

ALA., FLA., GA., N.C., P.R., S.C., TENN.



TOP 500 DESIGN FIRMS

THE STRONG MARKET SHOWS NO
SIGNS OF SLOWING DOWN
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A design-build method was utilized to demolish and redevelop the area along the St. Johns River in downtown Jacksonville, Fla. The new 4,000-ft riverwalk features 75,000 sq ft of concrete paver boardwalk consisting of new precast concrete piles, caps and decking, colored brick pavers, steel fabricated guardrails, two floating docks and two permanent slips for dinner cruise boats.

Design-Build Today

Collaborative Construction

Design-build remains an increasingly popular project-delivery method

By Eda Galeno

WHAT'S INSIDE

- ♦ Joining Forces on Successful Projects
- ♦ Implementing Innovative Strategies
- ♦ Taking a Solutions-Focused Approach
- ♦ Creating the Crown of Miami
- ♦ Merging Design and Construction
- ♦ Building the Perfect Team

Joining Forces on Successful Design-Build Projects



A design-build project, Jacksonville University's 11,000-sq-ft Admissions Office was configured to host prospective students and their families in exciting spaces, including a grand lobby with interactive technology, swag shop and group presentation space.

The number of design-build projects continues to grow throughout the Southeast in a variety of markets. Some notable design-build projects that are currently underway include a new mobile launcher for NASA at Kennedy Space Center on Merritt Island, Fla.; Charlotte Water's extensive Capital Improvements Program for the delivery of its collection and transmission systems, pump stations and treatment plants in North Carolina; and capital improvement programs for both the Georgia and South Carolina departments of transportation.

Bringing insight to the design-build process are Melanie Wright and Peter Kinsley.

Wright holds an Associate Design-Build Professional certification and works in business development at RS&H. She is president of the Florida region for the Design-Build Institute of America (DBIA), where she also serves on the Board of Directors.

Kinsley is president of Haskell's Infrastructure & Transportation Group. He currently serves on the DBIA's

Board of Directors and previously acted as its chair. He is also the past president of the Water Design-Build Council.

What's driving the growing use of design-build in construction projects?



Wright: The increased need for speed to market as well as cost and schedule certainty is driving more owners to use design-build and progressive design-build delivery systems. Both methods offer owners the opportunity to engage designers and contractors early to develop infrastructure solutions on an accelerated schedule while meeting key performance requirements.

Examples of this growth can be seen in the aerospace, aviation and life sciences markets. In the aerospace market, public- and private-sector entities are not only racing to Mars but also competing to make cost-effective space travel available to the general public. In aviation, facility upgrades and

expansions are on the critical path for many airlines and airports to keep pace with demand and stay one step ahead of the competition.

Private entities in the life sciences market are increasingly leveraging design-build delivery to develop flexible, adaptable design and construction solutions on accelerated schedules to meet growing demands for research and laboratory facilities.

While the aerospace, aviation and life sciences markets are currently experiencing growth, other markets such as transportation and water/wastewater have high levels of design-build activity and are expected to sustain across the Southeast region.

In addition, public-private partnerships (P3s), while typically led by master developers, often utilize design-build teams. P3 work in Florida has included infrastructure projects like the I-4 Ultimate, higher education such as the Florida International University-Broward College West Academic Facility, and civic facilities like the Boynton Beach Town Square,

which includes a city hall, library, district energy plant, and police and fire facilities. Others include electric company JEA in Jacksonville, Fla., which is using a P3 approach to address biosolids and composting needs.



What are the benefits of design-build projects?

Kinsley: Design-build projects provide greater opportunity for innovation and cost savings. They allow for an early recognition of construction costs prior to completion of the final design.

Partnering the owner with design and construction professionals early in the process creates an innovative environment where a custom solution focused on owner goals and objectives can be developed through a collaborative process.

Speed of delivery and monetary savings are additional benefits of the method. Design-build allows for a single procurement for both design and construction, concurrent design and construction, early release of long-lead materials and equipment, and the ability to phase construction. Owners also find significant value in transferring risk via a single contract for both design and construction services.

In the past, owners looked to design-build on their most large and complex projects in order to transfer risk and create the greatest opportunity to innovate and reduce cost. However, owners are now recognizing that the benefits of design-build are applicable to projects of all sizes and complexities, and they're using this delivery method more extensively on all job types within their CIP.

What are the best types of projects for design-build, and what jobs are not a good fit for the process?

Wright: Choosing a project-delivery method is one of the critical decisions owners make when developing their capital improvement programs, and it requires careful consideration of scope of work, budget, schedule and risk allocation. Projects generally well-suited for design-build include most, if not all, of the following characteristics:

- An owner that desires innovative solutions, integrates the designer and contractor into the development process, and partners with the design-build team;
- A process that provides opportunity to achieve best value for funds invested, allocates project risks to the appropriate parties and fast-tracks project components; and

- A project with complex features, opportunities for innovation and defined performance requirements.

Although design-build offers significant opportunities for collaboration, innovation and acceleration, it's not ideal for every project. Projects that are generally not suited for design-build include prescriptive project scope and requirements with little to no opportunity for innovation and/or creativity and an unbalanced allocation of project risks.

What are drawbacks of design-build projects?

Kinsley: The biggest drawback of design-build is the owner's perceived lack of design control. For owners using lump-sum priced-based selection, this introduces the responsibility of creating a procurement document that communicates their design intent.

An alternate that is quickly gaining market share is progressive design-build, where the design-builder is selected on qualifications or best-value, and together, the owner and design-builder develop project requirements and advance design to an agreed-upon level prior to setting the final design and construction price. This phased or progressive approach gives the owner design control without having to develop a prescriptive or performance-based procurement document. ♦

Four Decades of Innovative Solutions & Cost-Effective Strategies

Implementing innovative solutions and cost-effective strategies on all projects, no matter the size or scope, is emphasized by the Wayne J. Griffin Electric team. From the earliest phases of preliminary budgeting through execution, the Griffin design team works collaboratively with all members of the project team to ensure the best value for the client. The company's team of professionals utilizes BIM modeling to offer value-engineering alternatives, reduce design time and achieve the most effective use of prefabrication. Working

within the larger project team to find efficiencies during the preconstruction phase not only enables optimal use of equipment and materials but also allows for greater quality control and high standards of safety.

Throughout the construction process, Griffin works closely with design and project teams to provide real-time input on materials, construction methods proven to drive efficiency, and options customized to site conditions that serve to reduce incremental costs for the duration of a project.



Equipment and materials are prefabricated at Griffin Electric to reduce time and increase quality control.

Maintaining good communication and teamwork with all project partners are critical factors that enable Griffin Electric to deliver the high-quality results that its clients have come to expect for more than four decades. ♦