

Master Planning: A Powerful Tool to Add Value to CRE Developments

A master plan can help a developer strike the right balance between long-range investment objectives and the right mix of programmatic elements.

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THE MASTER PLAN is the quintessential tool to enable developers to make informed decisions about site selection, financial viability and program planning, including use, scale and timing. While master plans are essential for large-scale projects and complex mixed-use developments, they can also help developers make decisions about smaller commercial development projects.

The master plan is a valuable tool for evaluating alternative sites as well as for selecting the most appropriate use to ensure the best development potential and return on investment. Master plans can also help the development team embrace sustainable design early in the development process to increase a project's financial viability while decreasing short- and long-term costs.

Smart Site Selection

Commercial development projects become financially viable when their site and programs are compatible. Planners must evaluate the following factors in order to determine the feasibility of a development, to maximize a site's full development potential and/or to determine which of several potential sites is optimal for a particular project.

1) Geometry: Does the site's shape easily accommodate a complex program or does it add to development costs?

2) Geology: How does soil quality impact the type of construction or treatment needed?



A complex master-planning process is transforming Manhattan's West Side Rail Yards into Hudson Yards, a 28-acre, 18 million-square-foot mixed-use development that, upon completion, will include office, retail and residential space as well as parks, open space, and cultural and entertainment facilities. The first tower opened in 2016; the remaining development will roll out in phases over the next decade.

Rendering courtesy of Related-Oxford

3) Zoning: How will the site's zoning — including any stipulations, benefits and/or incentives — impact its development potential?

4) Accessibility: Can access to existing roadways and utilities reduce infrastructure development costs?

5) Legal Attributes: Do covenants, easements or deed restrictions limit how the site can be developed?

6) Financial Attributes: How might the cost of the land and any potential tax incentives impact commercial development?

7) Intangible Assets: Can the project leverage panoramic views or natural features to help create a unique a sense of place?

Financial Viability

A master plan provides valuable information about a proposed development to help determine its financial viability. One particularly useful way to do this is through intelligent master plans with real-time updates. Smart 3-D building information modeling (BIM) enables designers and developers to visualize complicated or large sites

with varying development programs, options or phasing in real time. These models can quickly quantify what changes to the master plan will mean in terms of the total development area, detailed program components, site density and floor-to-area ratio. When combined with construction cost and development pro forma data, the program also can quickly assess a project's financial viability.

Sustainable Site Planning

A good master plan should integrate environmentally sensitive planning principals to help decrease short- and long-term development costs as well as environmental impacts. The master plan can help reduce the project's energy use, emissions and site infrastructure costs, while also embracing natural features unique to the site.

By placing buildings and pathways in line with existing topography and groundwater conditions, for example, a master plan can avoid undesirable damage to sensitive ecology and retain a site's existing natural features. This typically makes a commercial project more attractive as well as more lucrative for the developer, tenants and customers, since sites with panoramic views and unique natural elements typically fetch higher premiums.

Master Planning at Work: Hudson Yards

Hudson Yards, one of the largest private real estate developments in the U.S., is currently under construction in New York City. While the project is exceptional in many ways, it also demonstrates the potential of stra-

tegic master planning to benefit any project. The 28-acre master plan is transforming Manhattan's West Side Rail Yards, once considered undevelopable, over the fully operational rail yards feeding into Penn Station. The city rezoned the land in 2005 and, after the Metropolitan Transportation Authority solicited RFPs in a competitive process, awarded the project to Related Companies at the depths of the 2009 financial crisis. (For more on this project's early development, see "Building a NYC Neighborhood Atop a Rail Yard," Development, summer 2014.)

The master plan for Hudson Yards supports a strong return on investment by applying simple master-planning principles to extreme circumstances. The plan maximizes the development's density to financially balance the large upfront site devel-



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