Brewer Engineering

Due Diligence for Sites in the Houston, Texas Market

Due diligence is the art, science and discipline of looking before leaping. It is the Developer's duty to discover, understand and manage the risks involved in the acquisition, ownership, development and operation of real estate. The scope of due diligence for real estate development includes research and analysis into the market, demographics, competition, financing, leases, title issues and the operating permits required as well as into the physical and political constraints on development of the specific site.

This article is limited to the physical and political constraints on site development.

With the Developer's desired outcomes in mind, consider each of the issues listed below. Identify the constraints, problems, opportunities and costs for the site under consideration. The Developer will decide which issues are important and some Developers may go further as the tasks addressed in this article are not an exhaustive list. The Developer will typically assign some of the issues to a professional consultant team.

Access Driveways Do not assume that access is available just because the site abuts a public highway or street. Determine if the desired access configuration will be allowed.

Alcoholic Beverage Permits Determine permissibility. Engage a specialist consultant if needed.

Architectural Program The architectural program is a concise quantitative and qualitative description of what will be built. The proposed architectural program is needed to guide the site planning and the due diligence process.

Architectural Control/Review Review the deed restrictions, zoning or development ordinances and the rules and regulations of the Municipal Utility District to determine if the project will be subject to any type of architectural controls. Architectural controls may address such things as building materials, color scheme, architectural details, landscape, lighting, signage and screening requirements.

Architectural Site Plan The architectural site plan shows the proposed buildings and facilities (parking, landscape, infrastructure and amenities) drawn to scale. Before (and during) the due diligence process the architectural site plan is only a work in progress – a test fit. As information is gathered and confirmed, the site plan can be refined. One of the primary goals of due diligence is an architectural site plan that fulfills the architectural program and that also honors all the requirements and constraints that are discovered in the due diligence process.

Deed Restrictions Review the title commitment and read the instruments that are listed. Identify design, development or cost impacts.

Drainage and Storm Water Best Management Practices A qualified civil engineer should evaluate the site drainage. The goal in due diligence is to understand the site-specific requirements for storm water management including detention, storm water quality features and required permits. Storm facilities need to be conceptualized and sized as they will affect the buildable area for many sites in the Houston market.

Dry Utilities The goal in due diligence is to establish contact with the providers and work toward service agreements for electric, natural gas, CATV, telephone, communications and data. Focus attention on the approvals needed to turn on the most critical services early (usually permanent power and data) and all services timely. If deed restrictions or codes dictate that underground primary electrical service is required, there may be extraordinary development costs.

Easements and Right of Ways Examine the title work and the survey. Go to the site to look at the easement areas and right of ways and look around the site for evidence of prescriptive (undocumented) easements. Determine if proposed improvements will encroach upon or affect any of them and what kinds of consents, permissions or permits are needed. Contact the facility owner or operator and learn what each facility means to the project. Any existing facility, such as a gas pipeline or overhead wires, may place constraints on a development project. Determine if utility relocations will be needed. Determine if any easements or right of ways will need to be created, modified, released and/or vacated. Perfecting of easements can have major schedule and cost implications.

Environmental A Phase One Environmental Site Assessment (ESA) is recommended before any land acquisition. The presence of recognized environmental conditions may trigger more research to quantify the conditions and determine the scope of the problem. In addition, wetlands, endangered species, archeological or historical features may be issues. For sites with existing structures and buildings, asbestos, lead or mold surveys may be needed. Engage a qualified environmental professional to guide this process.

Fire Protection The City and County have requirements for fire truck access and fire truck route, fire hydrant locations and provisions to assure that adequate fire-fighting water is available. Site and building design need to consider these criteria. The cost of extending water lines, installing fire hydrants, and other measures required, will be paid by the Developer.

Floodplains It is now an accepted fact that the current FEMA Flood Insurance Rate Maps (FIRMs) do not accurately reflect the floodplain or flooding risks. In the Houston market, the City of Houston and Harris County have both formally adopted the current 500-year (0.2 percent chance) flood stage as the reference elevation for setting of minimum finished floor elevations and for other flood protection measures. Steps in due diligence will include a topographic survey showing ground elevations tied to an appropriate benchmark and an examination of the Flood Insurance Study to find the 500-year flood stage elevation on or near the site. It is also advisable to try to determine the highest flood stage elevation of record on or near the site. If the current 500-year floodplain touches the site, or if on-site ground elevations are below the 500-year flood stage, a civil engineer should determine requirements. If the site is in a conveyance zone, a civil engineer should determine the scope of conveyance analysis that will be required. A meeting with the floodplain agency is usually needed.

Geotechnical Investigation and Report Consider having soil borings and soil testing done early. The geotechnical engineer's foundation and site preparation recommendations will guide the project engineering.

Highway/Street Widening Consult the Major Thoroughfare and Freeway Plan (MTFP) of the City of Houston. Meet with the Planning Department. Ask the agencies having jurisdiction over abutting public roads about their plans for construction and/or right-of-way widening. Negotiate land price based on the net real estate.

Jurisdictions In some cases, jurisdictions may abut, or even overlap, adding risk for the Developer.

Land Dedications Determine land dedications (corner cuts, right-of-way strips, easements, ROWs) that will be required. Meet with the City Planning Department for projects inside City limits or in their extraterritorial jurisdiction. Negotiate the land price based on the net real estate.

Permitting Developers with experience in this market may be comfortable with no permitting research. Other Developers may want to identify the codes to be followed, permits and fees required, the estimate of time to obtain permits, and changes in codes or requirements that are pending with the agencies. Certain Developers will insist on having building permits in hand before closing.

Platting If platting is required, the Developer will typically not be able to pull building permits until the plat is recorded. If the Developer is willing to close on the land transaction before permits are in hand, then it might be wise to submit the plat to understand the plat conditions and requirements.

Prior Acts Do some research into the history of the property (such as prior zoning attempts or prior neighborhood interactions).

Property Condition Assessment When existing structures, buildings or facilities are involved, a property condition assessment may be needed.

Public Involvement and Politics Early communication with the county commissioner, city council person or mayor, neighborhood associations and individuals affected by the project is recommended.

Risk Tolerance and Risk Management The Developer is responsible for establishing their tolerance for risk. It is the role of the professional consultant team to help the Developer identify and manage risk. Managing risk involves identifying risks and shifting, reducing or eliminating risk whenever possible. Risk decisions are Developer decisions. Above all, the Developer makes the final decision to close on a real estate purchase or to proceed with a real estate development project.

Selection of the Professional Team Developers should select professionals who have relevant project experience. The five cardinal rules of engagement for professional services are:

1. Match the right firm (principal, project manager) to the project or task
2. Select based on mutual respect and trust
3. Fully communicate and focus on expectations and desired outcomes
4. Communicate dissatisfaction promptly
5. Reward excellent performance

Setbacks Setbacks may be created by code, by zoning ordinance, by deed restrictions, by plat, by landscape buffers, by proximity to utility lines, by fire lanes or by the fire rating of the building construction. Setbacks may control buildings, parking, signs or other features.

Signs Determine if the sign code, deed restrictions and other constraints on signage will allow the Developer to have the signage that they want.

Site Visit Always have an agenda when visiting the project site. Strive to make every site visit either answer or raise important questions about the project.

Special (Extraordinary) Costs Identify special cost factors (such as special architectural requirements, unusual site preparation requirements, underground detention, underground primary power service, off-site utilities, landscape requirements, trees to be preserved, traffic impact mitigation measures needed, etc.). Estimate costs for the extraordinary items.

Subsurface Utility Engineering (SUE) Underground utility conflicts are a risk factor on every project. Be aware that the location of existing underground features, such as utilities, will typically be based on available information only (maps, surveys, surface observations). The Developer may want to consider further SUE measures to reduce this risk.

Surveys Land surveys are critical to understanding the site's physical and political constraints. As early as possible in the process, engage a qualified land surveyor to prepare a boundary, topographic and utility survey meeting the title company's requirements and the civil engineer's specifications. Read and understand every survey note.

Taps The City (or utility district) will specify where water and sewer taps are to be made. Proposed taps should be reviewed by the civil engineer to determine if a clear path is available for construction of the services and that the tap can be made. The civil engineer can sometimes negotiate an alternative tap location that is more favorable to the Developer.

Title Work Title work is critical to the discovery and understanding of political constraints. Even if no real estate title transfer is included in the project, it is still necessary to review the instruments listed in the title report and take note of how the information is depicted on the land survey in order to assess the constraints on development.

Traffic Impact Analysis (TIA) Engage a qualified traffic engineering consultant if a TIA is needed.

Visibility Be aware that the visual impact of the entire package of buildings, signs and landscaping is almost always of high importance to our clients. Some clients, like retailers, need excellent visibility. Others, like industries, may favor screening to reduce visibility. Determine the kind of visibility that is needed. Then, the visibility of the entire project, including signs, can be effectively considered as part of due diligence.

Water/Sewer Utilities Do not assume that a water or sewer line can be tapped just because it is located conveniently. Obtain a formal utility capacity commitment.

Zoning While not a factor in Houston proper, or in the unincorporated areas of Harris County, zoning is enforced in many municipalities around the Houston metropolitan area. Re-zonings and conditional or special use permits are time-consuming tasks. The process is sometimes politicized, increasing Developer risk.

Conclusions:

Due diligence is a process and not an event. In many cases there are issues that are discovered in the due diligence process that survive the Developer's decision to close on the land deal or proceed with the development project. These open issues are then worked out in the design, permitting and subsequent development of the project.

This checklist is organized in alphabetical order rather than in order of priority. The reason is that any of these issues can be a deal-killer depending on the project and the risk tolerance of the Developer. Until the research is done, all of them need to be treated with respect.

The services that Brewer Engineering provides will be based upon the assignment of tasks by the Developer to Brewer Engineering.

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