

The Pitfalls of Physical due diligence

by Vitold F. Gromek

Introduction

The recent real estate finance debacle has starkly demonstrated the failure amongst segments of the financial markets, and more importantly, the systematic weaknesses of the market. Factors contributing to the crisis included excessive leverage, degraded lending standards, a compensation structure at financial institutions which promoted inordinate risk assumption, the lack of transparency in available market information, dubious security ratings, a confusing and inefficient regulatory structure, and the growth of increasingly complex structured securities. There appears to have been a collective inability to identify not only specific risks but also systemic risk in the real estate financial markets, including the CMBS securities market. The underlying tenets of free market theory, market discipline, and market efficiency have been severely challenged.

Due diligence has long been utilized to limit the potential liability of sponsors, financial institutions and ratings agencies against claims of fraud. It has also been used to provide the imprimatur of acceptability for securities offered to the investing public. With the growth in variety of investments offered in the public marketplace, investors often rely upon security ratings in lieu of conducting their own due diligence. The recent development of highly complex structured securities, which often defy analysis by all except the most sophisticated, has emphasized the importance of reliable security ratings and, by implication, reliable due diligence underlying those security ratings.

Although numerous market deficiencies have now been noted and debated, and “correcting” regulation and legislation have been proposed, little has been said about one underlying link in the chain of real estate due diligence – the adequacy of the physical due diligence. This link has proven to be deficient and requires correction.

Physical property evaluation has long been part of the real estate “due diligence” process. It is performed not only for the investing public but also for lenders’ internal risk management policies. As part of the CMBS process, the ratings agencies (Moody’s, Standard & Poor’s, Fitch Ratings) have required the preparation of due diligence investigations of the physical properties, often referred to as a Property Condition Assessments (PCA). The PCA confirms the soundness of the physical asset and establishes a reserve for the anticipated costs. The reserves are set up to correct deficiencies and to help maintain the property over the term of the debt instrument.

Some Examples of Failed Property Evaluations

Unfortunately, physical property due diligence, as currently practiced, often fails to provide the investing public, borrowers, financial institutions, or ratings agencies with accurate evaluations of the properties in question. The following two examples illustrate the importance of performing accurate physical due diligence:

A nationally recognized inspection firm completes a Property Condition Assessment (PCA) of a three-building office complex in Louisiana for a Wall Street lender. However, the inspection firm failed to identify critical defects (lack of adequate structural fireproofing, the

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presence of code-violating combustible material within the ceiling plenum and at the exterior wall), leading the local building department to threaten condemnation of the property and withdrawal of the certificates of occupancy. The cost to correct the defects amounts to several million dollars, which the borrower is unable to fund. The lender funds the unanticipated corrective work, significantly reducing its projected return on investment.

A nationally recognized inspection firm, recommended by the lender, conducts a PCA of a suburban California office building. The typical floor slabs suffer from excessive deflection (as much as 2 ½" to 3 1/2" at midspan) leading to awkward installation of tenant improvements. Previous attempts at corrective structural work proved ineffective. However, the inspection firm failed to identify the obvious structural defects or the attempted corrective work. After purchase, the borrower experiences difficult lease-up and claims diminished value due to the building's structural defects. The borrower institutes a claim against the lender for improper evaluation of the property and diminished value, requests a modification of the terms of the loan, and a reduction in the outstanding loan balance. A settlement is negotiated, but both lender and borrower find their return on investment adversely impacted.

These examples of failed physical property due diligence are unfortunate and needless. Why did reputable national inspection firms, accepted by the ratings agencies and regularly employed by major lenders, fail to properly evaluate the properties? Why did sophisticated financial institutions suffer unanticipated costs to correct building deficiencies and reduced returns on investments?

Property Evaluation Standards and the Limitations of ASTM E-2018

The pressure to “close the deal” can result in short cuts that cloak due diligence efforts in a false blanket of acceptability. Like recent bond ratings that failed to accurately assess the quality of the underlying debt security issue, physical due diligence often becomes an exercise in what *not to say* rather than a comprehensive exercise in identifying the risks associated with the purchased or developed property. We know of cases where anticipated costs to correct problems were intentionally minimized, and physical defects, including structural defects, were overlooked or went unreported to the lender lest a critical report prove damaging to the consummation of the deal. Indeed, rather than viewing the due diligence exercise as a common effort intended to protect all parties involved, borrowers and, sometimes, inexperienced lenders may seek out an inspection firm reputed for their lack of diligence to “make the deal” or to minimize maintenance reserve funds. We have also seen experienced investors commission detailed due diligence assessments for their sole use on a parallel but separate track from that of the less diligent “lender’s review.” In this way, the investor can ensure it discovers the property’s deficiencies without jeopardizing the deal.

There are numerous standards under which evaluations can be conducted. The American Society of Civil Engineers, the Council of American Structural Engineers, and Standard and Poor’s are a few of the organizations which publish building evaluation protocols. These standards are complemented by numerous building codes and design standards established by trade associations. However, these standards are generally not comprehensive and must be used in combination and in conjunction with considerable professional skill and experience to provide a comprehensive evaluation of a property. The American Society for Testing and Materials (ASTM) has published *ASTM E-2018 – Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process*. This guide purports to be a comprehensive standard for evaluating commercial

real estate property in transactions. But, this standard falls far short of the rigorous protocols necessary to properly inform borrowers, financial institutions, ratings agencies, and the investing public of the true nature of the physical and investment risks inherent in a particular property.

Three problems with the ASTM standard are immediately evident. First, the specified technical standards are so broad as to be nearly meaningless. This makes the quality of assessment dependent upon the varying technical expertise of the field observers. Second, the standard appears to have been crafted with extensive qualifying conditions which serve to limit the inspector's liability and increase risk for the client and third party beneficiaries, who rely upon the accuracy of the PCA report (the "PCR"). Finally, despite the numerous qualifications of service, the ASTM E-2018 standard gives the impression that a PCA is an architectural/engineering evaluation conducted by qualified, licensed architects/engineers in a comprehensive and detailed manner upon which the client and the public can rely – an impression that may or may not be true. Yet, despite its shortcomings, ASTM E-2018 has become the *de facto* standard for Wall Street in preparing due diligence property evaluations.

To see why the ASTM E-2018 standard fall shorts of its promise, a more detailed look at the requirements and limitations of the standard are required.

First, most clients would reasonably assume that the engagement of an inspection firm will yield them a complete, professional analysis of the property and the firm's report would identify material physical deficiencies (either existing or anticipated), and the anticipated cost to correct those deficiencies, thereby quantifying the risks related to investment in the subject property. However, inspection firms typically offer their clients an agreement for provision of services in accordance with ASTM E-2018. This agreement offers the client a choice of varying levels of inspection diligence "*in accordance with the expertise and risk tolerance level of the user (client).*" Clients that unwarily choose a lower level of diligence may find themselves constrained by the limitations of their own acknowledged higher risk tolerance should they wish to assert subsequent claims against the inspection firm for inadequate property evaluation.

Further, a client will reasonably assume that the employment of licensed architects and engineers, in accordance with ASTM E-2018, will provide a reliable, professional, architectural/engineering evaluation. This is not the case. ASTM E-2018 surprisingly states that the PCA is "*not a professional architecture or engineering service*" ... and "*it is not the intent of this guide that ... the consultant, the field observer or the PCR reviewer practice[e] architecture or engineering. Furthermore, it is not the intent of this guide that either the PCR reviewer or the field observer, if they are an architect or engineer, [...] sign or seal the PCR as an instrument of professional service or identify their signatures as being that of an architect or engineer.*" What then is the purpose of providing licensed inspecting architects and engineers if the client cannot rely upon their professional opinion?

Likewise, the typical contractual agreement under which a PCA is conducted is often incongruent with the limitations of the ASTM standard. Contractual obligations to identify material physical deficiencies representing significant risk are often neutered by the standard's numerous qualifying conditions. In the first example cited above, the inspection firm defended its faulty performance by pointing to the exclusion of architectural services and numerous other qualifying conditions (see below), maintaining that the PCA is intended to merely provide a non-professional, cursory, general review of the condition of property – contrary to their contractual obligations to identify material physical deficiencies representing significant risk to the client. Thus, the provision of licensed design professionals and compliance with an ASTM standard may well provide illusory comfort to the client. The cautious client should have his attorney coordinate the obligations of the Agreement with the qualifying conditions and obligations of the standard under which the PCA is conducted.

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ASTM E-2018 provides for separate field observer and reviewer functions. This separation of investigative functions appears to have been crafted for the benefit of those large volume PCA production firms in which numerous field observers submit drafts of PCR reports to a central office-bound “reviewer” who finalizes, signs and issues the report. The problem with this arrangement arises when insufficiently skilled field observers fail to properly advise the reviewer of all material deficiencies in the buildings. After all, the office-bound reviewer, some of whom conduct thousands of draft report reviews annually, can only evaluate that of which he has been informed. This was exactly one client’s experience in the first example cited above when an unknowledgeable field inspector failed to note the lack of structural fireproofing, deterioration of fire-rated ceilings, or the presence of combustible materials in numerous proscribed locations – which could well have placed the integrity of the structure at risk in the event of a major fire. To avoid problems with communication and to preserve the continuity of information, we recommend that the field observer, the report writer, and the reviewer be the same individual.

In addition to coordination problems between field observer and office-bound reviewer, it is not uncommon to find that the review of architectural, structural, MEP (mechanical, electrical, plumbing) and vertical transportation systems are often out-sourced and evaluated independently of each other by the professionals involved, with minimal or no overall coordination amongst the various disciplines. As a consequence, the full impact of inter-related issues involving several disciplines can be missed. It is therefore critical that the various disciplines coordinate their efforts through the extent of plan review, field observation, preparation of report and cost projections and final review.

Further, the professional qualifications of the field observer and the office-bound reviewer are surprisingly limited. The field observer is defined to be “*a single individual having a general, well-rounded knowledge of pertinent building systems and components, however, a single individual will seldom have comprehensive knowledge, expertise or experience with all building codes, building systems and asset types, ...*” That is, the field observer need not be an architect, engineer, contractor, or even licensed/certified in any manner. These nebulous standards for the field observer’s professional qualifications are likely to decrease the quality of the assessment and increase risk for the unwary client.

The requirements for the office draft report reviewer are likewise indistinct: “*Generally, professional architecture or engineering licensure/registration and/or certification, education, or appropriate construction experience related to these disciplines are recognized as acceptable qualifications for reviewing PCRs.*” “*It is recommended that the user consider a PCA (report) reviewer who possess a professional designation in architecture or engineering.*” However, these recommendations for professional qualification are noted as “*non-mandatory guidance*”. As previously noted, given the lack of detailed technical standards, the integrity of the property assessment relies primarily upon the expertise of the field observer. In our experience, contractors are often insufficiently knowledgeable regarding design, codes, and industry standards to direct an evaluation effort, although contractors’ assistance can indeed be valuable for evaluating the constructability of alternative corrective solutions or calculating the cost to correct. In our opinion, both field observers and reviewers need be licensed architects or structural engineers having a minimum of 15 years of professional practice in the U.S. not only in the design of buildings but also in their evaluation

The ASTM standard goes on to note that “*Time, hindsight, ...enhanced visibility as a result of improved weather or site conditions ... and other factors influence the PCA and opinions contained in the PCR*”, and further notes the PCA is not “*technically exhaustive*”, that “*representative observations*” will be made, and that “*uncertainty is not eliminated.*” Further, the ASTM standard limits observation to assemblies, components or equipment that are “*readily accessible*”, meaning those areas which “*are promptly made available for observation ... and do not require the removal of materials or personal property...*”. The strict exercise of

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this last qualifying condition will result in the exclusion of many critical building systems from review – thereby diminishing the comprehensive nature of the PCA. In the first example cited above, the nationally-recognized inspection firm claimed the presence of a lay-in acoustic tile ceiling made the ceiling plenum, the structure and HVAC systems “inaccessible” and un-viewable - even though a step ladder was made available to the field observer for viewing the ceiling plenum. Nor did their PCA report acknowledge the inspection firm’s supposed failure to observe the structure, ceiling plenum or HVAC systems. The net effect of these numerous qualifying conditions is to offset risk from the inspector to the client and their third party beneficiaries and to diminish the utility of the property condition assessment. The cautious investor would be well advised to have his attorney carefully review the Agreement’s exculpatory language and qualifying conditions.

ASTM E-2018 goes on to note that *“the review of drawings of the subject property is not a requirement of this guide.”* In our experience, when building plans are available they must, without question, be reviewed in order to properly evaluate the property. A plan review can often provide valuable information which may not be discernable from a site inspection, such as the building’s original design criteria or the existence, nature or limitations of materials or assemblies which are not evident during field observation. Indeed, plan review and site observation are often complementary and mutually beneficial. In the examples noted above, failure to adequately review the plans prevented identification of numerous critical deficiencies which could have been subsequently confirmed with field observation, leading to unanticipated risk and cost for both the investor and lender.

The ASTM standard further notes that *“The consultant is not required to provide opinions of probable costs to remedy physical deficiencies ... unless user and consultant have agreed to such an expansion of the scope of work.”* In practice, however, Opinion of Probable Costs to Correct noted building deficiencies serve many purposes. First, the probable cost helps to quantify the extent of a deficiency and the extent of risk for a non-technically versed investor. Second, an Opinion of Probable Costs to Correct is often used to negotiate an adjustment of purchase price to reflect the noted deficiencies. Third, the Opinion of Probable Costs to Correct is often used to establish a reserve intended to secure the lender’s interest in assuring required corrective work will be completed. Thus, it is unclear why such a common and necessary service has been excluded from the basic services of the ASTM standard.

From a practical point of view, the provision of projected probable costs is often problematic. Common industry practice for securitization requires the establishment of a 10 year projection of operating and capital reserves, adjusted for inflation and for anticipated remedial maintenance, repair and replacement costs. We find the typical ten year projection of probable costs to be of questionable accuracy and limited utility. The ability to accurately project both construction costs and inflation values ten years into the future is questionable. Often, this sort of “reserves study” is relegated to a schedule of costs based upon published “useful life” standards – regardless of actual in-service condition and use. In addition, projected costs are typically derived from nationally published cost reference manuals which often fail to recognize regional or local variances or current market conditions. We have seen numerous Schedules of Probable Cost which are widely at variance with actual costs. The investor who projects his operations and maintenance budgets based upon these ten year projections may well find his reserves inadequate over the long term.

Further, the ASTM standard excludes opinions of probable costs *“for building renovation program or tenant finishes; ... enhancements to reposition the subject property in the marketplace.”* In our experience, many, if not most, purchases of real estate are made with the intention of capitalizing upon the hidden value perceived by the prospective purchaser. The typical purchaser indeed anticipates some amount of capital expenditure, often tied to a repositioning of the building in the marketplace, a change of use, an addition to the building, or an upgrade of the building “class.” Frequently, such improvements will trigger

additional costs related to compliance with current code requirements or current industry standards in excess of code requirements. To the extent that a comprehensive evaluation of the potential for investment in a particular property is desired, we differ with the ASTM standard and we recommend the property evaluation consider not only the “as currently operated” costs to correct but also the purchaser’s anticipated goals and intended future use of the building and incorporate them into the property assessment and schedule of probable costs. Indeed, an effective PCA with associated Schedule of Probable Costs can well serve as an effective outline for a capital improvements program and budget for a proposed building renovation.

The ASTM standard goes on to describe the required extent of technical review of building systems and components. Without resorting to technical detail, let us note that the ASTM standard’s requirements for technical review are so broad as to be essentially meaningless. By way of example, specified review of a property’s structural system simply requires identification and observation of the type of structure, substructure and roof framing (which a high school student could do) and building envelope, without no requirement for identification of structural deterioration, corrosion, displacement, excessive deflection, rotation, distortion, rupture, cracking, misalignment, sagging, heave, excessive vertical or lateral movement, settlement, undermining, rot, lack of fireproofing or other deficiencies. Similarly, nebulous technical requirements are provided for the review of other building systems. For example, the integrity of fire-rated assemblies, critical to the safety of both occupants and property, is deemed “out of scope” of basic services and need not be evaluated under the ASTM standard. With such a lack of detailed technical protocol, the client becomes primarily dependent upon the technical expertise of the field observer – whose qualifications, as we have seen, are ill-defined. In the second example cited above, although the field observer failed to identify excessive structural deflection and extensive corrective work, the inspection firm surprisingly still claimed compliance with ASTM E-2018 and fulfillment of their contractual obligations. We recommend that the client have their attorney carefully review the inspection firm’s obligation toward technical expertise, degree of care and obligation to identify material property deficiencies.

Thus, in summary, it can be seen that while the ASTM E-2018 standard provides the appearance of a rigorous professional evaluation of a property, it is replete with numerous qualifying conditions, restrictions, scope limitations and exculpatory language making the PCA little better than a cursory, limited overview of a property which is unlikely to identify the full extent of material building deficiencies or the full extent of risk associated with property investment. These numerous qualifying conditions serve to limit the usefulness of the PCA, offset risk to the client, and insulate the inspecting firm from liability. We have seen numerous clients (both lenders and owners) who feel they had been misled by inadequate property condition assessments, suffered considerable additional unanticipated costs to correct unidentified deficiencies and wish to seek recourse against the inspection firm. For the prospective purchaser who seeks to fully inform himself of the risks inherent in purchasing a particular property, ASTM E-2018 may well not suffice as a standard for diligent property assessment.

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Recommendations for Structuring a Property Condition Assessment Agreement

For prospective investors who wish to protect themselves against inadequate property assessments, consider the following recommendations:

1. Except in the instance of a simple refinancing of an existing-owned property where the attributes of the asset are already known, clients would do well

to insist upon the most rigorous level of diligence offered by the inspection firm. The Agreement should provide that material deficiencies representing significant risk to the client, in terms of property operation, management or investment, be identified. Also, the required degree of professional care should be carefully defined.

2. If ASTM E-2018 is to be the basis for the property evaluation, have your attorney excise exculpatory or liability-limiting language. The standards for assessment and the terms of the Agreement need be coordinated carefully so as to avoid conflicting limitations of liability and terms of service. The PCA report should be a product of professional service, and the report should be signed by the licensed individual preparing the report. The field observer, writer and the reviewer should be one individual, and should be a licensed architect or structural engineer with a minimum of fifteen years of professional practice in the U.S. in both the design of buildings and in building evaluation.
3. The inspection firm should coordinate its efforts not only among its various disciplinary teams but also with the remainder of the client's due diligence team, including attorney, broker and appraiser. The inspection firm should confirm that the property/development meets the intent of the appraisal's findings. For example, will the property in question, upon renovation, be a Class "A" office building as per the intent of the Appraisal?
4. The inspecting firm should be instructed as to the purchaser's goals and intended use of the property, including anticipated upgrades, renovations, capital expenditures, or efforts to reposition the building in the marketplace so that they may incorporate those goals into the assessment and cost projections.
5. A Request for Information should be issued to the seller/owner, identifying all information required for the evaluation. The PCA report should indicate which items were received and which were not. The PCA report should indicate which areas, systems or components were not viewed or not evaluated and which areas, systems or components require further investigation. The need for additional specialty consultants or special testing should be identified. A review of plans, if available, should be required.
6. The basis for evaluation with respect to code and regulatory compliance should be identified: original building code, current code or current industry standards. Nonconforming "grandfathered" assemblies should be noted. While a detailed code compliance study is usually beyond the scope of a one to two day property condition assessment, the Agreement should require the inspection firm to identify major building code violations, especially those relating to means of egress, fire resistant assemblies, or life safety provisions.
7. Quality of maintenance and extent of use can radically alter the anticipated useful life of building equipment or assemblies. Evaluation of building equipment (HVAC, sprinkler, fire pump, fire alarm, elevator, etc.) should be based upon in-service condition, and not only upon published useful life standards only, which can be misleading.
8. The PCA should include review of tenant-owned equipment (currently not required by the ASTM standard) or, in the case of triple net leased properties, the review of equipment maintained by tenant but owned by management. The condition of all such equipment should be evaluated and the adverse impact of potential repair/replacement upon base building operations budgets need be noted (should the tenant default upon their obligations to maintain the equipment). Additionally, tenant purchase of base building services (off-hours cooling, purchase of chilled water or emergency generator power, etc.) should

- be noted, and the adequacy of remaining available base building capacity should be verified.
9. Most architects and engineers are ill equipped to estimate the cost to correct building deficiencies. If the costs to correct are anticipated to be considerable, consider engaging a qualified professional estimator or contractor who is fully acquainted with current local market conditions.
 10. For a more complete cost projection, probable costs to correct should include the cost of construction management fees, general conditions, project special conditions, permits, A/E design fees, insurance, bonding, and contingency as they may apply (ASTM E-2018 excludes such costs).
 11. Many multi-family residential projects were not designed to comply with the Federal Fair Housing Act. An effort is currently underway in New York City to pursue legal action against developers/owners who failed to comply with the FFHA. Compliance with FFHA standards should be confirmed.
 12. In older urban areas, contamination of soils due to past industrial activities is not uncommon. Carefully review the potential for adjacent properties and their historic activities to adversely impact your proposed acquisition. The environmental assessment should be coordinated with the PCA so that inter-related issues are not missed. Environmental insurance should include coverage for the soft costs associated with remediation.

Summary

A comprehensive due diligence physical assessment of a property can be an effective and proactive tool for management of the risks associated with real estate investment. Physical due diligence as currently practiced in the real estate marketplace has numerous pitfalls for the unwary prospective investor. For the lender, borrower or developer who wishes to be fully informed and desires to obtain a comprehensive architectural/engineering evaluation of the property, the ASTM E-2018 standard likely will not suffice. Although ASTM E-2018 appears to provide a comprehensive and detailed physical evaluation, it fails to do so in many respects. Exculpatory language, limitations on liability, exclusions to scope, and limitations to the evaluation of the property serve to increase risk for the prospective investor, be they owner, developer, lender or the general public. Correspondingly, these same qualifying conditions serve to limit liability and risk borne by the inspecting firm. Where more than a cursory, general descriptive review of a property is required, the use of standards other than ASTM E-2018 may be well advised. Regardless of the standard employed for the physical evaluation of a property, the prospective investor would be well advised to consider the recommendations outlined above when engaging an inspection firm for purposes of a comprehensive due diligence property condition assessment upon which they can rely.

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