JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

A. Appraisal Organizations

8. 1976

c. "Critical Review of Appraisal and Feasibility Reports in Support of Capital Funding Decisions", Princeton MAI conference, June 10, 1976

CRITICAL REVIEW OF APPRAISAL AND FEASIBILITY REPORTS
IN SUPPORT OF CAPITAL FUNDING DECISIONS

Princeton MAI Conference
Thursday, June 10, 1976

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I. An appraisal is a decision-making tool, requiring a forecast about the future under conditions of uncertainty - uncertainty producing anxiety, nervousness, and freedom of judgment - conditions from which all corporate types will flee.

A. Historical dependence on decision specialists - priests with chicken entrails, oracles, military machines, or political processes. All of these tend to gravitate toward consistency rather than truth, to static procedure applied deductively rather than dymanic interaction developed inductively, and to elaborate apprenticeships in self administered education.

B. The appraisal process and those who have designations as the high priests of real estate investor entrails have been trapped:

1. By customers who demand certainty and consistency rather than truth
2. By static procedures which characterize any cult depending for its mystique on liturgy learned by rote rather than empirical observation
3. By freedom from the consequences of error since those who rely on the appraisal do not have standing to sue for malpractice unless they paid for the report.

C. Once before in the 1930's when the appraisal process broke down, the primary users of appraisal services - financial institutions, the federal government, and investors met to organize some standards of appraisal procedure. Once again it is time for them to critically review:

1. The basic assumptions and definitions which define the real estate process.
2. The essence of a mortgage loan.
3. The purpose, structure, and assumptions of an appraisal report.
4. The relationship between the financial institution and the appraiser.

II. The real estate industry often does not understand itself because it is so sloppy in defining its terms and its viewpoints. Careful definition is the base for accurate analysis.

A. The real estate product or economic unit is always a space-time unit.

1. One markets square feet per year, apartments per month, rooms per night, tennis courts per hour, etc.
2. Surveys and structure define the unit geometry and law defines the time and use.

B. An enterprise is any organized undertaking and many enterprises are cash cycle enterprises. A real estate enterprise is any systematic approach to convert cash to a space-time product or to convert space-time units to cash.

1. All cash cycle enterprises must achieve cash breakeven or self destruct.

2. Space users, space producers, and public sector services are all cash cycle enterprises.

C. The real estate process is the interaction of producers, users, and the public infrastructure with solvency as the minimal objective and absolute constraint for all three.

1. Cash balances, not value, are the ultimate constraint on the system.
2. Equilibrium for the real estate process occurs where all three enterprises can resolve their differences about land use to achieve solvency.
3. The space-time to money-time equation is reversible and can be approached from cost to build, ability to pay, or cost of services to establish a real estate development program.

D. Some value judgments which provide further constraint on land use:

1. Land is a finite physical resource which must be used consistent with environmental safety and public priorities for food, shelter, safety, and health.
2. Equity ownership is the degree to which one can divert cash flow and benefits to its benefit.
3. The real estate enterprise is an active customer for services and the profit centers for real estate are in the outlays for services. Thus real estate can be a successful business even if economic income is zero.
4. Each enterprise attempts to relate its goal relative to space-time units to projections of its cash receipts and cash outlays.
5. The borrower and lender for a commercial real estate project ultimately seek to maximize spendable cash after taxes and/or an increase in net worth after taxes at some future time.

E. Risk is the variance between all expectations and realization, and risk management is the control of variance from static risks or dynamic ones.

1. Static risks are those contingencies which are independent, random, and unforeseeable in terms of frequency or severity.
2. Dynamic risks are those contingencies which could cause a profit or a loss, behavioral in origin, and partially controllable through motivation.
3. Objectives of risk management are first to conserve existing net worth, and then to stabilize future expectations.
4. Conservation requires reduction of maximum potential loss with the least probability.
5. Realization of expectations requires stabilizing the largest possible cushion above an acceptable cash breakeven point.
6. The tools of risk management include avoidance, better prediction through better information, shift of variance by contract, by insurance, or reduction of losses by design, motivation, limits on liability, or hedging.

F. Mortgage lending process is risk management of assumptions.

1. Closing process
2. Forecasting process
3. Static risks well handled
4. Dynamic risks ignored or left as indiscriminate variables
5. Pleasure, pain, and bail-out theory of a loan

6. Real estate as a business enterprise should be financed on cash cycle - not on value as a going concern.
7. Loan ratio is irrelevant compared to pay-back and default point.
8. Capacity for surprise measured by sensitivity analysis.

G. Sophisticated lenders make commercial loans based on pain, bail-out, and then on cash flows - require appraisals only for the file drawer.

H. A feasibility report by a generalist provides a set of assumptions which would have a reasonable probability of working in a given situation. However, feasibility confirmation by specialists will need to establish these assumptions as fact (as is done in the closing process of a mortgage loan).

I. A real estate project is "feasible" when the real estate analyst determines that there is a reasonable likelihood of satisfying explicit objectives when a selected course of action is tested for fit to a context of specific constraints and limited resources.

J. An appraisal report like a feasibility report is a model of the decision process but sharply qualified to represent a generalized investor, most recently termed "probable buyer" attempting to maximize economic surplus from a single parcel of real estate enterprise and expecting to purchase all services outside his own organization - a non-integrated, passive capital rather than an entrepreneur with multiple profit centers.

III. Solutions to complex problems are both discovered and communicated by means of simplifying models. An appraisal report is a comminication model which should reflect that an appraisal is a feasibility study from a fictitious scenario, seen from the viewpoint of a presumed investor group (such as a prudent man, a mortgage investor, etc.).

A. A real difficulty in understanding and critiquing an appraisal report is the subtle shift of viewpoint that takes place as you change from appraisal theory to appraisal practice,and as you move from one appraisal approach to value, to another.

1. The traditional view of economic income, cost to replace, and justified investment is the economist view of asset management.
2. The Ellwood approach which is the sum of claims against income and reversion, is the banker view of leverage, i.e. liability management.
3. The market for commercial projects and credit analysis represents a business viewpoint of cash management in the short run.

B. As a result, the long run goals of maximizing the assets are being modified and the reality of variance in the short run, of external factors to the real estate, and of compatability to community goals are entering into appraisal estimates - appraisal estimates which recognize the possibility of error.

1. Compare the official definitions of "highest and best use" in the old and new terminology handbooks (see EXHIBIT A).
2. At the University of Wisconsin we talk of "most fitting use" as we find the old term arrogant and a remnant of the time when land was thought of as a commodity.

C. Feasibility analysis is concerned with three alternative problems:

HIGHEST AND BEST USE, PRINCIPLE OF - Real Estate Appraisal Principles and Terminology, by SRA, Second Edition 1971

A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is most profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements; and another that recognizes the presence of the improvements.

HIGHEST AND BEST USE - Real Estate Appraisal Terminology, by Boyce, for MAI-SRA, 1975.

That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal.

Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value.

The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. See Interim Use.

Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners.

Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. See Most Probable Use, Most Profitable Use.

1. Site in search of a market
2. Market in search of a site
3. Investor in search of a real estate opportunity

D. An appraisal always involves a site in search of a market.

1. A vacant site searching for its most profitable alternative.
2. An improved site seeking its most profitable alternative use.
3. Thus an appraisal is a feasibility study.
4. Thus appraisal requires definition of a problem, a viewpoint, and a context of limiting assumptions.

E. Since it always begins with a site, a viewpoint, and a problem requiring a decision, an appraisal is inductive - moving from the specific to the more general context.

1. Traditionally the appraisal report moves from the general to the particular.
2. Since the best use premise is an opinion, the conclusion contains an element of uncertainty or variance.

F. A report format following these premises is provided in EXHIBIT B and provides a base for appropriate content in an appraisal report.

G. A useful test of an appraisal conclusion as to value or market rent is a simple <u>frontdoor</u> (cost to required rent)-<u>backdoor</u> (market rent to justified cost), (see EXHIBIT C).

IV. Reform of the appraiser-financial institution relationship involves a variety of factors:

A. The loan ratio as a regulatory device on commercial properties should be abandoned.

1. It is irrelevant to risk when it is not based on actual cash cost (to protect net worth) and inappropriate to future default which will be a function of cash flows. It produces a desired debt coverage ratio only when interest rates are constant so it conceals increasing risk of insolvency as mortgage constants rise.
2. Loan ratio leads to pressure to value properties to secure desired loan by including non-cash items in value and concealing timing of cash receipts by lumping them into a present value number.
3. Since the lender analyzes the deal one way (cash flow) but must legalize the loan with an appraisal methodology which is obsolete, he transfers his disdain for the methodology to the appraiser.
4. LTV is a prime example of the counter productive character of over-simplified regulations intended to measure safety of the loan.

B. The default ratio is immediately sensitive to changes in utilities, interest expense, real estate tax, due to inflation while value is distorted by changing expectations of future reversions. Banking commissions and accountants should regulate by cash breakeven points if a simple-minded definition of a legal loan is required.

EXHIBIT B

SUGGESTED OUTLINE OF A BASIC APPRAISAL REPORT

I. Letter of Transmittal

II. Table of Contents

III. Salient facts and conclusions (optional and relevant to purpose of appraisal)

IV. Statement of context for which appraisal is required:

   A. Brief statement of the issue for which the appraisal will serve as a decision benchmark.

   B. Special problems implicit in the property which specify definition of value or modify appraisal methodology.

   C. Special instructions or assumptions provided by others and approved by client (for example, a request to appraise current use rather than best use, or a request for investment value rather than probable sales price, etc., or special assumptions required for cash flow projections by state securities commission).

V. Definition of the legal interests to be appraised

   A. Specify legal description and source

   B. Specify fixtures or personalty to be included

   C. Specify typical operating assets excluded (such as furniture when doing a motel structure for a real estate tax).

VI. Definition of value to be objective of appraisal

   A. State selected definition (for example the R.U. Ratcliff definition of probable price):

   "The most probable price is that selling price which is most likely to emerge from a transaction involving the subject property if it were to be exposed for sale in the current market for a reasonable time at terms of sale which are currently predominant for properties of the subject type."

   B. Indicate source of definition and applicability to purpose of appraisal

   C. Indicate implicit conditions of the definition. (For example, the conditions of a fair sale presumed by fair market value or the implication of the range of error around most probable price implied by the Ratcliff definition).

Exhibit B continued

VII. Productivity or potential use analysis of subject property

A. Site analysis

1. Physical (static) site attributes including location, size, shape, slope, soils, etc.
2. Legal constraints on use of site including zoning, easements, or those implied by purpose of appraisal (purpose for use as a bank drive-in teller facility must be a specified distance from main bank building).
3. Linkages of site to neighborhood and community (visual and physical relationships to flows of people, traffic, goods, or activity centers.
4. Dynamic attributes of site (behavioral responses of people to site in terms of anxiety, special attractions of water, view, etc., visibility, prestige, etc.

B. Improvement analysis

1. Physical (static) attributes of improvements listed by type, construction, layout, condition, etc.
2. Legal-political constraints on use of improvements (including problems of non-conformity, building code violations, zoning, etc.
3. Current uses and tenancies, if any
4. Linkages of current uses to neighborhood and community
5. Potential linkages or attributes which could be marketed (feasibility problem of a property in search of a market)
6. Dynamic attributes of improvement (behavioral responses of people to building style, bulk, sentimental history, historical values, etc.

C. Identification of significant and physically appropriate uses for subject property

D. Comparative analysis to select most probable use as of valuation date considering:

1. Effective market demand
2. Competitive supply of alternatives
3. Legality and political compatibility
4. Financial feasibility
5. Risk sensitivity

VIII. Specification of most probable buyer type implied by most probable use of subject property.

A. Alternative buyer types and motivations and selection of most probable buyer profile.

B. Specification of essential site, improvement, financial, or other key decision criteria of probable buyer type.

C. Explanation of appraisal methodology for prediction of probable purchase price range consistent for most probable buyer.

1. Preferred method - to infer buyer behavior from actual market transaction and market data available.
2. In the absense of adequate market sales data, the alternative method selected for simulation of probable buyer decision process
3. The text proposed to indicate the fit of property and probable price prediction to be made to the criteria of the probable buyer profile.

Exhibit B continued

IX. Initial estimate of appraised value

A. Inference from market transactions of similar buyers

1. Search and data collection method
2. Definition of basis for comparison
3. Adjustments and supporting evidence
4. Extrapolating comparative sales to subject property
5. Estimate of central tendency of value and standard error prior to adjustments for external of changing condition

B. Simulation of possible or probable buyer logic in establishing his offer price

1. Justification for using simulation rather than market comparison
2. Justification for simulation methods selected
3. Description of the basic simulation approach
4. Development of data required for simulation
5. Estimate of most probable simulation value
6. Identification of "softest" assumptions to which value is sensitive
7. Pessimistic and optimistic assumption sets to establish range of alternative values

X. Identification of significant external conditions, economic, political, or otherwise, not considered by past market transactions or investment simulation based on empirical evidence.

A.. Identify neighborhood, community, regional, or national factors which would bear directly on marketability of such a property and which were not present in market comparison or simulation assumptions.

B. Identify possible political or other contingent factors which might foreseeably occur to upset normal appraisal assumptions.

C. Specify any violation of conditions in the appraisal methodology of the definition of value.

D. Adjust initial value estimate in IX or indicate no adjustment is necessary.

XI. Demonstrate with test previously indicated how predicted transaction price would permit investor to achieve objectives attributed to him in definition of most probable buyer profile.

XII. Provide value conclusion and certification of appraisal

XIII. Provide statement of limiting conditions which establish:

A. Contributions of other professionals on which report relies

B. Facts and forecasting under conditions of uncertainty

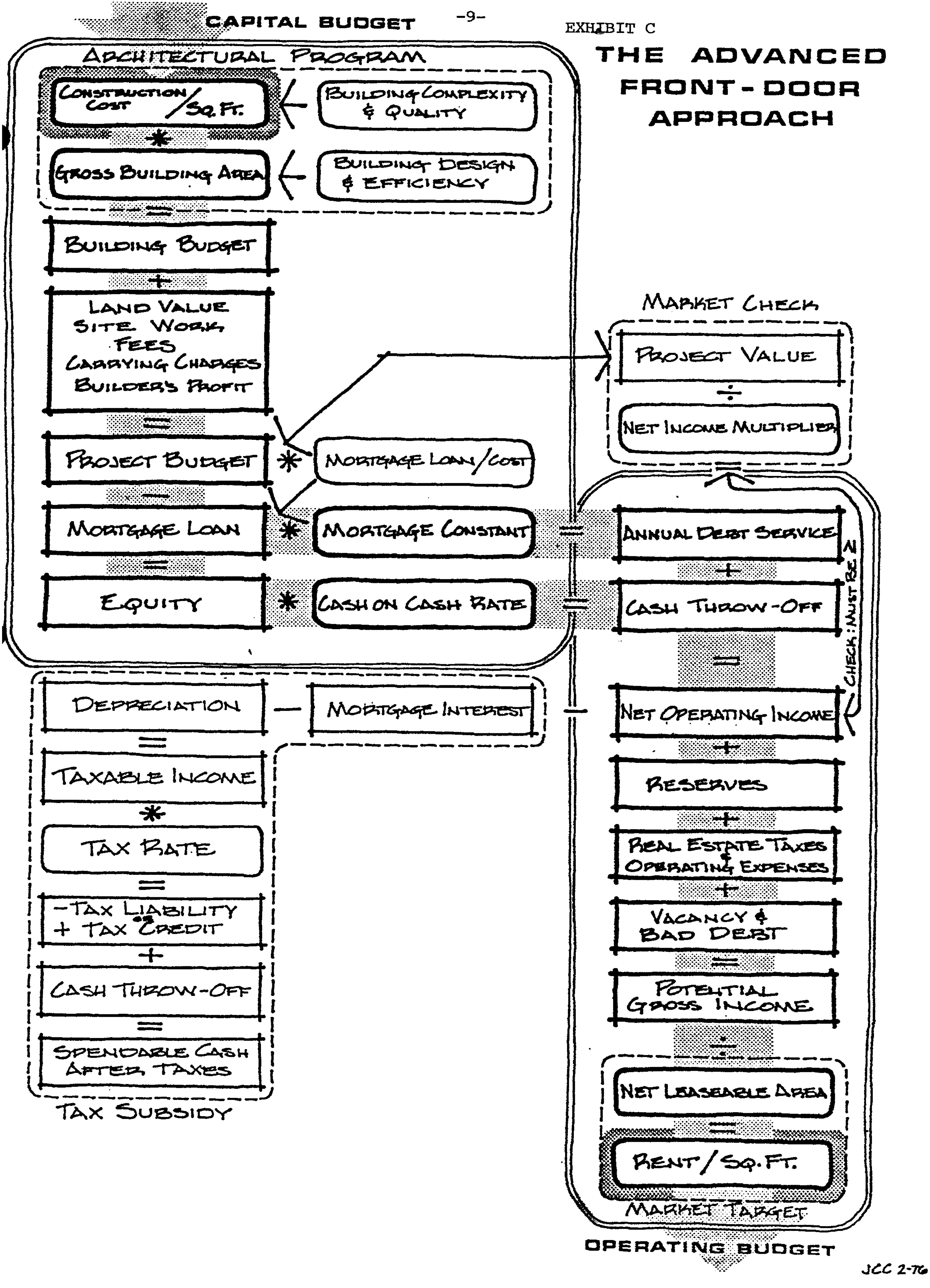
C. Assumptions provided by the client

C. Controls on use of appraisal imposed by the appraiser

XIV. Appendices and Professional Credentials

EXHIBIT C

THE ADVANCED FRONT-DOOR APPROACH



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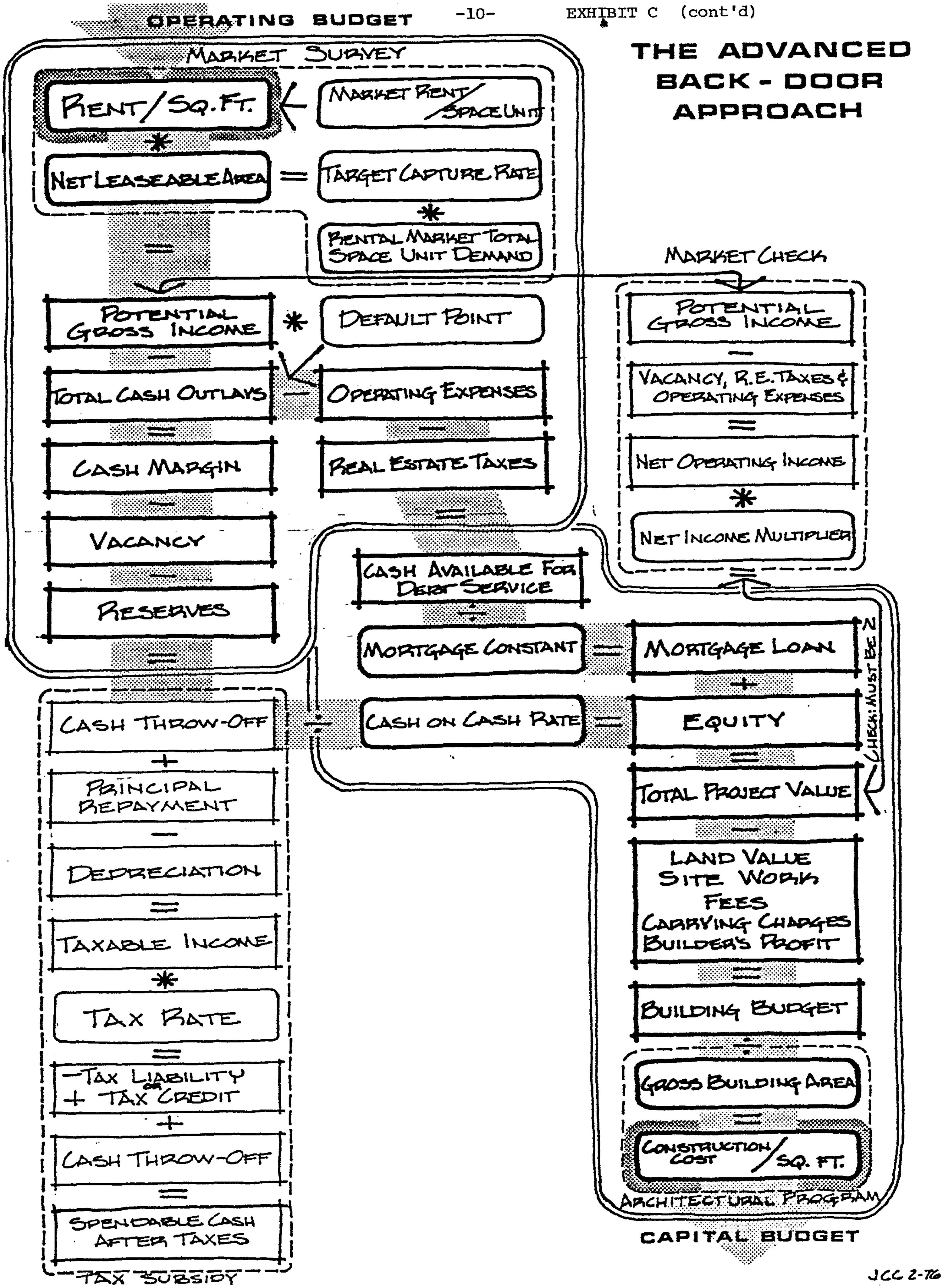
OPERATING BUDGET
THE ADVANCED BACK-DOOR APPROACH
MARKET SURVEY
RENT/SQ.FT.
MARKET RENT/SPACE UNIT
NET LEASEABLE AREA
TARGET CAPTURE RATE
RENTAL MARKET TOTAL SPACE UNIT DEMAND
MARKET CHECK
POTENTIAL GROSS INCOME
DEFAULT POINT
TOTAL CASH OUTLAYS
OPERATING EXPENSES
CASH MARGIN
REAL ESTATE TAXES
VACANCY
RESERVES
POTENTIAL GROSS INCOME
VACANCY, R.E.TAXES & OPERATING EXPENSES
NET OPERATING INCOME
NET INCOME MULTIPLIER
CASH AVAILABLE FOR DEBT SERVICE
MORTGAGE CONSTANT
MORTGAGE LOAN
CHECK: MUST BE =
CASH THROW-OFF
CASH ON CASH RATE
EQUITY
TOTAL PROJECT VALUE
PRINCIPAL REPAYMENT
DEPRECIATION
LAND VALUE
SITE WORK
FEES
CARRYING CHARGES
BUILDER'S PROFIT
TAXABLE INCOME
TAX RATE
BUILDING BUDGET
GROSS BUILDING AREA
-TAX LIABILITY OR + TAX CREDIT
CONSTRUCTION COST/SQ. FT.
CASH THROW-OFF
ARCHITECTURAL PROGRAM
SPENDABLE CASH AFTER TAXES
TAX SUBSIDY
CAPITAL BUDGET

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C. Appraisal boiler plate leads to mass production prices for a task which is a custom fitting of factors for each unique situation. Appraisal is a handcrafted art form.

1. If the lender requires 2% be spent on insurance in case the project should burn down, why not at least 1% to see if it will rent up?
2. Handcraftsmanship does not have to price itself at mass production prices.

D. Feasibility definition may be done by a single generalist but confirmation of critical assumptions must be done by specialists so that appraisal has become a team effort.

1. Appraiser should be prime contractor because he has less of a vested interest in a "go" decision.
2. Appraiser should be protected from pressure that a "stop" decision means he doesn't get paid.

E. Selection and payment of the appraiser should be by the mortgage lender, funded from the application fee.

1. Converts advocacy character of the American business attitude to the benefit of the lender.
2. Payment should be 50% down and balance on delivery with the appraiser financing his subcontractors, the architect, engineer, environmentalist, etc.
3. Financial institutions can insist on cash flow analysis by the appraiser and new formats for the appraisal report which provide critical information in a format appropriate to the lending decision rather than the useless vageries of fair market value.
4. Lenders obtain and should pursue the right to sue for negligence.

V. Seminars advancing these views:

A. MAI Seminar on Feasibility (Boston, Denver, Dallas).

B. EDUCARE (folders available at desk).

C. University of Wisconsin,July One-Week Seminar on Contemporary Appraisal Methods (folders available at desk).