JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS
V.   INDUSTRY SEMINARS AND SPEECHES – SHORT TERM
    A.   Appraisal Organizations
        8.   1976
            b.   "New Appraisal Concepts and Methods",
                AIREA Ontario, Canada, February 20, 1976

NEW APPRAISAL METHODS

ONE DAY SEMINAR
presented by
PROFESSOR JAMES A. GRAASKAMP
sponsored by

**THE AMERICAN INSTITUTE OF REAL ESTATE APPRAISERS
ONTARIO CHAPTER #44**

All real estate practitioners are invited to attend this one day seminar that will present new concepts of appraisal theory, appraisal format and appraisal practice through an examination of the present appraisal process; its obsolescence of basic concepts and modern alternatives.

FRIDAY FEBRUARY 20th

The seminar will be held on the lower level of the Sheraton Four Seasons Hotel, 123 Queen St. W., Toronto, on this day.

Registration fee is $40.00 which includes all printed materials, lunch and coffee breaks.

LECTURER

Professor James A. Graaskamp

Professor James A. Graaskamp is currently an Associate Professor of Real Estate at the University of Wisconsin. His undergraduate work was done at Rollins College, Florida; he then attended Marquette University where he received his M.B.A., and in 1964 at the University of Wisconsin he received his Ph.D. in Urban Land Economics and Risk Management. Professional designations include the Society of Real Estate Appraisers, American Society of Real Estate Counsellors and the College of Property Underwriters.

Professor Graaskamp has research interests in the development of a variety of after-Tax flow investment simulation models for Real Estate; research of innovative Tax Assessment Techniques and recreational real estate development. In private industry he is co-founder of a general contracting firm in Madison, a land development firm in Madison, and a farm investment corporation. His work includes investment counselling in insurance companies and banks, court testimony as an expert witness and projects for various Wisconsin municipalities as well as private investors. He is also co-designer and instructor of EDUCARE teaching program for computer terminal applications in Real Estate.

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NEW APPRAISAL CONCEPTS & METHODS

A Seminar Sponsored by
The American Institute of Real Estate Appraisers Ontario Chapter #44

Sheraton Four Seasons Hotel, Toronto, Canada
Friday, February 20, 1976

Instructor: James A. Graaskamp
University of Wisconsin School of Business

I.   Urban Land Economics is moving toward fundamental redefinitions of the
     premises upon which appraisal is based and at the same time business
     enterprises are becoming more sophisticated in their understanding of
     the decision process and the need for economic forecasting.

     A. Since appraisal has its roots in urban land economics but serves
         as a tool for business decisions affecting land, it follows that
         the appraisal process must undergo some modification.

     B. Urban land economics and the appraisal framework are both decision
         models intended to structure a baffling number of variables into
         a manageable framework that leads to a conclusion. Any model is
         developed to fit the following requirements:

         1. The question to be answered
         2. The facts available
         3. The theory
         4. Credibility with the decision maker
         5. Facility of the analyst
         6. Cost benefit ratio of method

     C. A model of any decision framework has the following components:

         1. Factual input organized to identify alternative courses of action
             and to predict their consequences
         2. Factual input analyzed to generate value judgment and objectives
         3. Objectives reduced to explicit standards, criteria, or screens
             intended to reduce the alternative courses of action to that one
             plan predicted to provide the most acceptable consequences (the
             objectives)

     D. The key issue is "What is the question to be answered"?

         1. The traditional three approaches are models of a prudent man
             decision process where the objective is to maximize profits
         2. The appraiser locks himself to the model with his statement on
             the question (or purpose) "the purpose of this appraisal is to
             determine fair market value"
         3. What if value is not the central issue? What if clients ask
             other questions?

E. Urban land economics is reexamining the concept of land as a commodity and "highest and best use" as the ultimate land use decision standard or screen.

F. Business sees the investment decision as acceptance of a set of assumptions, assumptions made under conditions of uncertainty. Risk is the variance between assumptions and realizations. Thus there is an interest not only in a forecast of favorable future consequences of a decision but in the degree of probability in achieving that goal. Single point estimates rather than a range of alternative outcomes are suspect.

II. The simple concept of highest and best use (that use which would maximize value to the owner over a stated period of time) was central to land economics and the presumed decision standards for only a brief point in time.

A. Historically land use allocations reflect a social system, a consensus as to fears and aspirations, and a static state of the arts, and technology, of the population base, and the cultural structure.

B. The turmoil of the pioneer era and the industrial age destroyed the stability of population, static technology, and cultural continuity on which long term land use decisions had depended.

C. We are now in an era in which the people are attempting to redefine a consensus on land use priorities and reassert control of land use decisions.

1. The Rockefeller Land Use Commission noted a growing public consensus that land use was central to both environmental balance and social equity and therefore subject to public control first and private development second.

2. In Wisconsin the State Supreme Court in Just vs. Marinette ruled that the owner of a lake lot has no right to develop land which in its natural state is a marsh served an important function as a filter and wild life edge for the general area. The family had enjoyed camping on the tract many years prior to applying for a permit to build a cottage and the judge ruled that it served adequately as recreational property without a cottage. Said State Supreme Court Chief Justice Hallows, "The changing of wet-lands and swamps to the damage of the general public by upsetting the natural environment and the natural relationship is not a reasonable use of the land...
...nothing this court has said or held in prior cases indicates that destroying the natural character of a swamp or a wetland so as to make that location available for human habitation is a reasonable use of that land when the new use, although of a more economical value to the owner, causes a harm to the general public. ... While loss of value is to be considered in determining whether a restriction is a constructive taking, value based upon changing character of the land at the expense of harm to public rights is not an essential factor or controlling.
The land belongs to the people ... a little of it to those dead... some to those living... but most of it belongs to those yet to be born ..." 56 Wis 2d 7

3. A variety of cases in the U.S. show a declining status of property rights viz-a-viz personal rights or public rights.

D. However, there are several key readings in basic appraisal which reveal a parallel development in the concept of best use for the appraiser:

1. "Highest and Best Use," William Crouch, The Appraisal Journal, April 1966, pp. 166-176
2. "Highest and Best Use - Fact or Fancy," Paul Wendt, The Appraisal Journal, April 1972, pp. 165-174
3. "The Importance of the Highest & Best Use Analysis," Paul Tischler The Real Estate Appraiser May-June 1972.
4. "A Rational Approach to Feasibility Analysis," James A. Graaskamp The Appraisal Journal, October 1972, pp. 513-521
5. "Highest and Best Use: A New Definition, A New Opportunity," John E. Bohling, The Real Estate Appraiser, January-February 1976, pp. 33-36

E. Some key points made are:

1. Crouch - appraiser must prove effective demand and reasonable probability of political permission to use the site.
2. Wendt - the opinion of highest and best use must consider so many variables on an after tax basis that the conclusions must vary with investor type just as judgments and analytical skill must vary by appraiser.
3. Tischler - proposed use must not only consider highest income to owner but also external costs and impact on others.
4. Graaskamp - feasibility requires cash solvency of consumer, producer, and public infrastructure as well as environmental fit to the land.
5. Bohling - discusses synthesis of the above made official in ARIEA - SRA dictionary of Real Estate Appraisal Terminology See Part IV.

III. At the University of Wisconsin we are exploring a more balanced base to urban land economics and business decisions by going back to basics and providing careful definitions of each component, each decision maker, and the relationship among them.

A. Real estate is defined as artificially delineated space (cubage) with a fourth dimension of time, given a fixed reference point to the surface of the earth.

B. The real estate enterprise is any cash cycle organization concerned with the conversion of space/time to money/time or vice versa, a definition which includes the space user, the space producer, and supporting public infrastructure agencies.

1. Conversion requires specification of assumptions about the future.
2. Risk is a variance between assumptions and actual realization
3. Risk management is the control of variance for static risks (contingency which only cause loss) and dynamic risks (contingencies which may be profitable or otherwise, depending on entrepreneurial expertise).

C. <u>The real estate process</u> is the dynamic interface of all three cash cycle enterprises, the space user, the space producer, and the public infrastructure who must interact to find compromise solutions which permits all three to operate at solvency. That solution will impact on the land and must be constrained by the capacities of the land.

D. <u>Land</u> is a finite natural resource, at most a public utility and more probably a public stewardship.
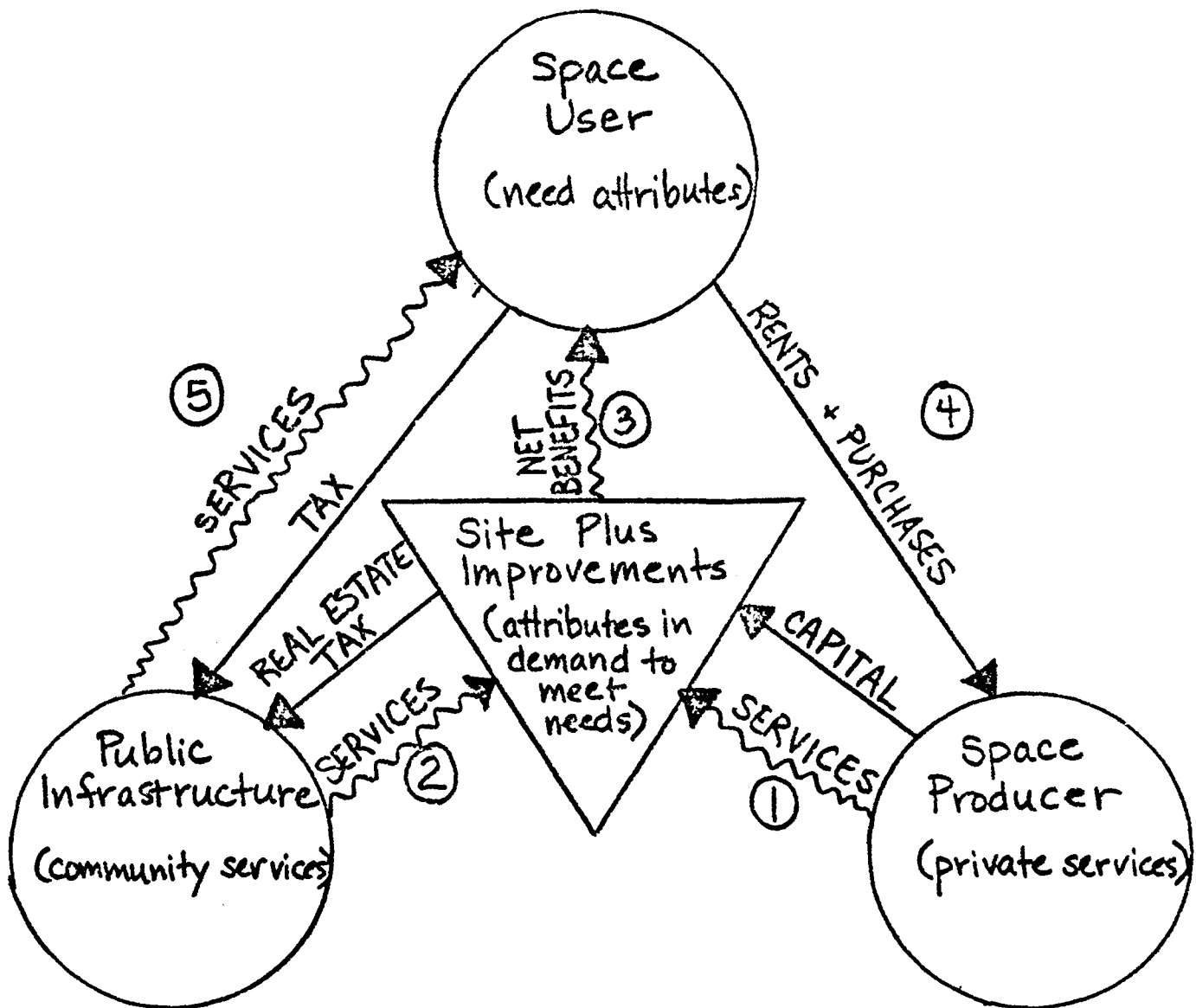
E. Basic definitions lead to several basic axioms:

1. Space/time units and money/time units are reversible equations requiring a fungible common denominator
2. Solvency of the total process, not value of the parcel is the critical issue and the means for conflict resolution.
3. The real estate process is cultural and the value judgments generated then determine land use.

4. Real estate enterprise for profit does not depend on ownership of land but on access to opportunity to provide services and expertise.
5. Equity ownership is the degree to which one can divert available cash flows to ones benefit (legally).

F. From this evolves our approach to the typical issue of feasibility: "A real estate project is 'feasible' when analysis indicates that there is a reasonable likelihood of satisfying explicit objectives and when a selected course of action is tested for fit to a context of specific constraints and limited resourses. The context defines the problem. Feasibility of a real estate project is normally related to its probable economic potential."

G. Context relates in part to assumptions which are implicit or explicit in the decision process. Consider the definition of market value and its implicit assumptions, i.e., the context in which the market value model is to work: "The price which a property will bring in a competitive market under all conditions requisite to a fair sale, which would result from negotiations between a buyer and a seller, each acting prudently, with knowledge, and without undue stimulus." (SREA, Real Estate Appraisal Principles and Terminology [Chicago, Kinnard, 1960] p. 85).

1. Competitive market conditions
2. An informed buyer and seller
3. No undue pressure on either party
4. "Rational" or prudent economic behavior by both buyer and seller
5. A reasonable turnover period
6. Payment consistent with the standards of behavior of the market
7. Market Value looks at the transaction from the point of view of the buyer

H. Giving the changing character of property rights, given the expanding numberof public and private decisions which must be made relative to land, is it reasonable to expect appraisal to determine market value within rigidly defined concepts and to arrive at a single number or "point" value.

1. Since all of the implied ocnditions rarely are true in an imperfect market or during the period of rapid public and market changes of policy and preference, value is seldom price.
2. To hedge the appraisal conclusion with a variety of limiting conditions at a time when the variables for consideration are increasing, is to produce a value conclusion that is almost fictitious.
3. Since the concept of limiting conditions must be used sparingly less the appraiser support consistency rather than accuracy, better methods must be found to introduce some tolerance for the conditions of uncertainty which surround the appraisal estimate.
4. Given all the variables a more logical appraisal format is required, at the very least.

I. A broader more realistic theoretical base is now possible as the professional societies have adapted the definition of highest and best use to be the mort probable use and Ratcliff has established the concept of most probable selling price.

1. Probable use recognizes the need to modify profit maximization by consideration of such variables as business risk of the user, compatibility with the community, and the relative bargaining power or motivation of different types of buyers.
2. The concept of most probable price has been defined by Prof. Ratcliff:

   "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."

   a. Central tendency is the point conclusion as a mode, or median (not an average)
   b. Ranges which define standard error statistically or intuitively
   c. Highest and Best Use: 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. 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. In the context of investment value an alternative term would be most profitable use.[1]

   [1]Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975, p. 107; co-sponsored by Society of Real Estate Appraisers and American Institute of Real Estate Appraisers.

IV. An appraisal is a qualified feasibility study of a site in search of a market. It requires identification of most probable use, inference of most probable buyer type, and then analysis of that buyer's past behavior or simulation of his probable purchase logic. Exhibit B provides a suggested outline for an appraisal report based on these premises.

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

V. The appraisal outline above is really a special case of a feasibility study - the problem of a site and/or building in search of a market. Moreover, I can hear the old-timers stating that it is too detailed and too theoretical and that if the ivory tower professor had to do an appraisal like that, he would find it didn't work out at all. Anticipating that, I thought I would risk a recent appraisal which I did for the City of Madison and from which I have reproduced the main part of the report.

A. This report was selected not because it was good but because it was representative.

B. Anticipating certain litigation, it was necessary to use fair market value rather than most probable price but you will notice that the method of analysis was the same.

C. You are welcome to criticize

D. Linear regression valuation from market data will be domonstrated immediately after lunch.

E. Check lists on static and linkage attributes are provided in VI, VII, and VIII.

TABLE OF CONTENTS

I. Statement of Appraisal Purpose and Fair Market Value

   A. The purpose of this appraisal is to provide an opinion of fair market
      value for the subject property to be described in a narrative appraisal
      report to the City of Madison Real Estate Division. The appraiser has
      been instructed to regard the properties in question as a single entity
      owned by the Lake Development Monona Partnership, although title reports
      indicate three separate ownerships, and to consider highest and best
      use only as consistent with existing C-3 zoning as specified in a
      letter from M. N. Gawlik to Landmark Research, Inc., dated August 30,
      1974.

   B. For purposes of this appraisal fair market value is defined as the
      amount which can be realized on sale by an owner willing, but not
      compelled to sell, to a purchaser willing and able but not obliged
      to buy. Wis. J.I. Civil Part II 8100 P.C. Monday P.T.A. vs. Milwaukee
      City Expressway Commission 24 Wis. (2d) 107-128 NW s(3)(63) 1963.

   C. It is recognized that the subject site is currently pledged toward
      a variety of notes and mortgages but these claims upon the asset are
      not recognized in this valuation. Instead the purpose of the appraisal
      is to decide if the fair market value of the site would justify
      assumption of these notes by the buyer and since release of an obligation
      is constructive receipt of cash, the appraisal seeks the cash price
      which the seller could expect as fair market value.

II. General Description of Subject Property

   A. The general location of the property is in the 600 block of Williamson
      Street in Madison, Wisconsin on the shore of Lake Monona at the foot
      of Blount Street. Improvements include the former Crane Building
      Warehouse which is partially occupied by a used furniture shop; an
      abandoned and vandalized commercial garage building; an old railway
      spur track; and below grade rubble and footings of a demolished
      brewery. The name of the former brewery gives the site the general
      reference (identification) of the Fauerbach property.

   B. The legal description of the subject property defines it as: Part of
      lots 3 and 4 and all of lots 5,6, 7, 8, and 9 of block 126, Original
      Plat, City of Madison, Dane County, Wisconsin. (See Exhibit #1;
      for full legal description supplied by City of Madison).

   C. The tax parcel numbers include:

Parcel No.	Land Assessment	Improvement Assessment	Total Assessment
709-134-2002-5	70,200	15,200	85,400
709-234-2003-3	56,200-	26,900	83,100
709-234-2004-1	111,200	0	111,200

III. Appraisal Report Research and Organization

A. The key question in forecasting the fair market value of any property is determining what might be the most profitable use to which the property could be put by possible investors in the marketplace. Once some determination of the most probable use has been made, it is possible to identify the most probable type of buyer who would seek that site and then, discover how that buyer might determine his offering price given his identified objectives, legal and economic constraints to which the property is subject, and available alternatives. The best method for determining most probable buyer behavior is by inference from actual purchase prices paid for properties of similar use potential. Where sufficient market data is not available, it may be possible to simulate the income expectations that would result from ownership and assign some part of that investment value to the land as it presently exists. Where existing improvements play a minimal part in the calculus of possible investors, the cost approach is irrevelant, as in this case, and should not be used.

B. To identify alternative possible uses for the site, it will be first necessary to describe the various characteristics or attributes of the subject property which provide important advantages or disadvantages to the investor. These attributes can be subdivided into static attributes (inherent physical characteristics), linkages (relationship to activities and properties around it), and dynamic behavioral attributes (attitudes of various public segments to the site).

C. In this case the appraiser will test a number of different development strategies for the site consistent with C-3 zoning, and select the probable use strategy for private investment in light of site attributes and market demand as of October 1, 1974. This will lead to a general identification of the most probable type of buyer who would be interested in the site and that in turn would lead to selection of comparable sales for analysis.

D. Primary reliance will be placed upon the market comparison approach but it should be noted that current economic conditions affecting the level of effective demand, the degree of leverage, the cost of construction, and the income tax environment of real estate represent a change in conditions which require careful adjustment of sales prices occurring in the more prosperous years just passed.

E. To assist in the technical analysis of site potentials and to provide some initial sketches of alternative layouts consistent with existing zoning, this study has utilized the services of Glad, Sarko, and Associates of 418 Russell Walk, Madison, Wisconsin, land planning consultants and designers.

IV. Subject Site Static Attributes

A. The subject property presently has an irregular shape, as it lies
between a somewhat meandering shoreline of Lake Monona to the south
and a bend in the 600 block of Williamson Street--a major boulevard
arterial on the north which suffers a reduction in width from 120
feet of right-of-way to 100 feet at the west end of the subject
property. The property has approximately 425 feet of frontage on
Lake Monona, 257 feet of depth on its Blount Street frontage to the
southeast, but only approximately 310 feet on Williamson Street and
150 feet of depth on its western border which slices across Lots 3
and 4. These borders encompass about 94,470 square feet of land area.
However, this generous site area is misleading, despite its zoning
as C-3 Highway Commercial District due to the following: (See Exhibit #2 & #3)

1. A dockline is established for lake front property by the State
of Wisconsin which establishes the shoreward point beyond which
construction or substantial grade changes are not permitted.
This dockline leaves 21,200 square feet of land area between
it and the high water level which is set at 1.50 feet, City datum,
leaving approximately 73,270 square feet available for development,
if it were not for the new Madison waterfront controls.

2. The site is subject to the more restrictive waterfront development
standards as established by City of Madison, Ordinance 4664 (as
of 8-5-74), which requires the following:

a. A conditional use permit for virtually any change
in the status quo. (See 28.04(19) City Building Code.
b. Shoreline to building setback shall conform to existing
development pattern which in this case has been dictated
by the Chicago and Northwestern spur track. From discussions
between John Glad and Barney Riley of the City of Madison
Zoning Department, on September 17, 18, and 19 it was
determined that the building line would be a distance of
101 feet from the lake shore. Thus the area left for develop-
ment is approximately 49,730 square feet between the rear
yard line and Williamson Street.

3. City of Madison Ordinance 28.09 2d(3) and 28.09 4d (1) further
modify C-3 zoning. Residential use is restricted to the second
floor and above, and to 50% of the total building floor area
unless a conditional use permit for greater residential area is
obtained. Recent decisions of City Council suggest flexibility on
area limit but reluctance to permit residential on first floor.

B. The dominant positive feature of the site is its 425 feet of southeast
shoreline exposure on Lake Monona, providing an opportunity for a
pleasing view and excellent solar orientation. The site has a gradual
slope of 4% from Williamson Street down to the lakeshore.

C. The physical character of site improvements is mixed and negative,
generally representing clearance costs before vacant site could be
utilized. Lots 8 & 9 are essentially leveled with fill and rubble
from a former brewery and the condition of underground footings and

basement floors which remain below the backfill is not known but could pose additional expense for new construction. On Lot 7 is a one and two story building with concrete foundations, a partial basement for a boiler room, and brick mill construction. Outside walls are masonry and building tile with steel industrial windows. Interior of building is a medium strength wood beam and second floor loft system spanned by large wood arch trusses which feature some skylights and a front section of office-display space. The arches, skylights and fair condition of the building would seem to indicate that it has some potential for restoration and reuse.

The remainder of the parcel of Lots 4, 5, and 6 are covered by a one-story garage building, with a small partial basement, a few minor structural additions, and a paved concrete apron on Williamson Street which once served as a Sinclair Filling Station. The wooden roof, supported on light steel trusses has rotted away and would need to be replaced. The balance of the building has been vandalized to the extent there are no windows remaining, wall board has been ripped away, and interiro fittings stolen or burned (by unknown occupants to keep warm)? The obsolete layout and vandalism lead to the conclusion that this building should be razed. To the rear of the building is a side track coming from the Blair Street side which has been officially released by the Northwestern Railroad and could be removed.

Approximately 100 feet of land between Lake Monona and the existing building is unimproved except for cinder and gravel surfacing and some industrial fencing. There is a concrete alley between lots 6 and 7 to provide access. At the foot of Blount Street, to the southeast corner of the site, is a popular fishing pier. A nearby culvert dumps hot water from the Madison Gas & Electric generator plant into the lake so that the lake never freezes in this immediate vicinity.

At the southwest corner of the site is an easement approximately ten feet in width and an inoperative pumping station which have been the property of Madison Gas & Electric Company since 1899. There is no indication that this interest has been abandoned or released as was the case with the side track.

D. Utilities available on the Williamson Street frontage include 8" sewer collector, 8" city water line, 6" Madison Gas & Electric gas line, and full electric service. Sewer may be inadequate for extensive apartment development on subject site depending on current load. Madison Gas & Electric may be able to supply steam or hot water for heating from its generator plants two blocks away as it currently supplies several downtown Madison office buildings.

E. Because of the heavy traffic on Williamson and the boulevard median strip, future development of the subject site will probably be limited to one access point on Williamson and one on Blount Street. Parking will impose a major constraint on the extent of permissable commercial floor area development since City Building Code requires one parking

stall for each 300 square feet of commercial area. For residential purposes the limiting factor for development of the subject site is the required lot area per dwelling unit

Type	Land Area Required	Open Space/DU
Efficiency	700	160
1-bedroom	1000	160
2-bedrooms	1300	320

Development alternatives will be considered after key site linkages and behavior attributes have been identified in Sections V & VI.

V. Subject Site Linkages

Site linkages refer to the relationship of the subject property to off-site activities and to other sites; which might facilitate an exchange of people, goods, and services and therefore contribute to the usefulness of the property. Reference to the district zoning map indicates the subject site is at the foot of a major industrial (M-1) zone for the City of Madison. It is also at the gateway to the near east side residential area commonly referred to as the Marquette neighborhood, which is generally zoned R-5 or R-4A. The Williamson Street commercial zone is a relatively low grade retailing area with no cluster of ancillary service or convenience retail stores in immediate proximity to the subject site.

A. On the northeast side of the subject property, across Blount Street, is located the new and well furbished Elks Club Building, which is the scene of a variety of civic and commercial activities and functions. That is the only civilizing amenity, contiguous to the site. At the northwest corner of the Blount Street intersection is a day care center in a converted, small commercial building, for children of eastside families who are dropped off by parents on their way to work in downtown Madison via public transit.

B. The northwest site exposure across Williamson Street is dominated by a one-story truck garage and truck pool lot, which is leased on a long term basis to the U.S. Post Office. At the foot of Williamson Street facing Blair is an old filling station converted to a used car lot. The subject site also has a view down Williamson Street to the west, toward an old hotel and several bars along a strip of Wilson Street primarily known for a variety of recent crimes of violence.

C. The visibility of the subject site from the direction of the Wilson and Williamson Street access points to the west and from John Nolan Drive and Law Park to the southwest, is blocked by an old two-story building on the western half of block 126 in which the subject is located. This building presently houses an annex of the U.S. Post Office and a number of auto parts and applicance wholesalers. Since the federal government is presently considering construction of

EXHIBIT #3

Source: Glad, Sarko & Associates

SITE PLAN .... SCALE : 1" = 60'

NORTH

LAKE MONONA

MG + E EASEMENT

AVE. 101'

DOCK LINE
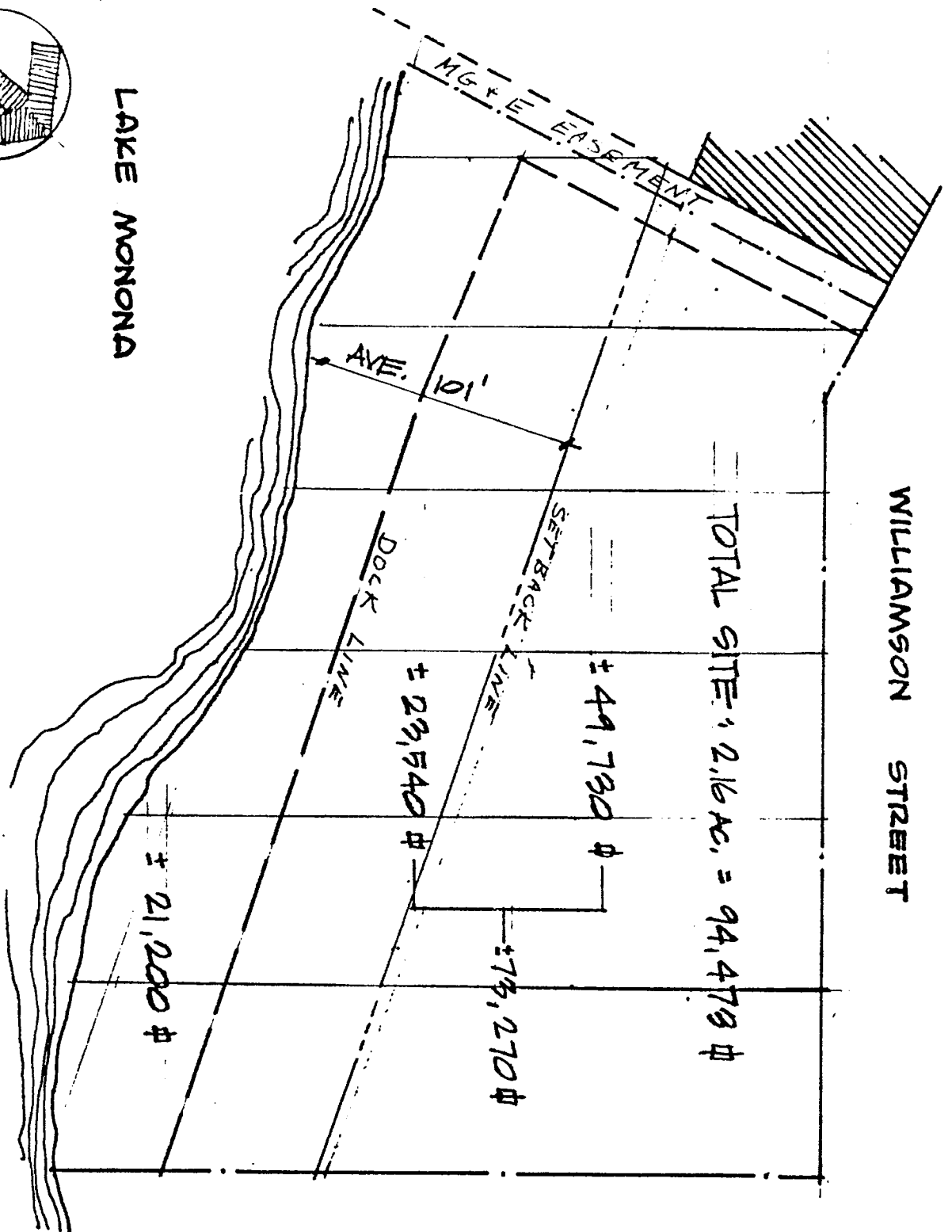
SET BACK LINE

TOTAL SITE : 2.16 AC. = 94,479 ❑

± 49,730 ❑

± 23,540 ❑

± 73,270 ❑

± 21,200 ❑

WILLIAMSON STREET

S. BLOUNT STREET
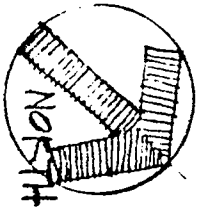
consolidated post office operation on the far east side of Madison,
it is possible that leases on the garage building and the annex will
be terminated within the next few years. As it would be speculative
to assume that better neighbors than the U.S. Post Office might be
found for these buildings, the compatibility and stability their use
must be considered suspect.

D. Just beyond the immediate contiguous environment of the subject site
are a number of adverse influences. East of Blount Street is the
major coal-fired generator plant of Madison Gas & Electric, with
five tall smoke stacks and a variety of coal unloading and lifting
machinery systems. Any building on the subject site would need to
be carefully designed to screen out a view of the plant and to avoid
undesirable accumulations of soot and noise. At one time there was
a major railway station for the Chicago & Northwestern Railroad at
the corner of Wilson and Blair. The station has been converted into
MG & E offices but switching yards remain east of Patterson Street.
Two major rail tracks cross Williamson Street at the Blair-Wilson
Street intersection to create a significant psychological and physical
barrier between the subject site and the Madison Square six blocks
away.

E. The street linkages of the site are in a significant state of flux.
The City Planning and Traffic Engineering Departments are considering
two alternative plans to relieve the congestion of the four corner,
angular intersection of Williamson, John Nolan Drive, Wilson and
Blair Streets, which is further complicated by the Northwestern Rail-
road corssing through the center of the intersection.

1. One plan would make Blair Street one way from East Washington
to John Nolan Drive in order to divert north-south through traffic
around the congested Madison Square via John Nolan Drive. At
the same time Blount Street would be made one way to East Washington
to handle traffic traveling east on John Nolan Drive. Left turns
from Williamson to Blount would require a stop light at that
intersection. Various measures are also under consideration to
reduce vehicle through traffic in the Marquette neighborhood by
a modification of Spaight and Jenifer Streets at the Livingston
Street intersection.

2. An alternative plan--which is apparently the preferred plan--
would convert Blair Street into a wider two way arterial connecting
John Nolan Drive on the Lake Monona side of the isthmus to East
Washington and to Gorham Street on the Lake Mendota side. When
considered with the Regent Street improvements already completed
at the west end of John Nolan Drive, the Blair Street project
would provide an outer loop around downtown Madison. The demol-
itions required for that street improvement plus those which
continue as part of the State Office Building project between
Webster and Franklin would eventually lead to a significant
renewal of the area between the subject site and the Capitol
Square area.

3. Further development of John Nolan Drive and the Blair-Blount
    connectors together with a reduction of traffic through the
    Marquette neighborhood, will lead to increasing traffic volumes
    on Williamson Street. This in turn will create traffic levels
    which could be unacceptable for FHA residential environmental
    noise specifications for residential construction and which
    would constitute a barrier to pedestrian access to the Square.
    Final traffic plans might also make the automobile route from
    the subject site to the Square even more circuitous than is
    presently the case with the median strip preventing left turns
    toward the Square from the Williamson Street access points of
    the subject site.

VI. Dynamic Site Attributes

Dynamic site attributes are concerned with the attitudes of people as
they relate to the subject property or the behavior of the consumer
as he evaluates the utility of the property for his own purposes. It
has already been suggested that the high intensity intersection at
Williamson and Blair would intimidate the pedestrian and may in the
future be designed to divert the motorist in directions less than
convenient to the subject property. It is a classic case where proximity
(to downtown Madison, to Law Park, and to the services on East Washington
Avenue) is nevertheless not accessibility with convenience and safety
for the occupant of the subject site.

A. The Madison resident typically associates the site area with the
    rail yard and tracks, the power plant, and the saloons and bowery
    atmosphere of Williamson Street between Butler and Blair. While
    the subject property is on the lakeshore, it is not given a prestige
    rating.

B. In several market surveys (Stewart '69, DeLisle '73, and Ibach '74),
    the subject property has been presented as one of a number of alter-
    native lake view sites which could be selected by prospective luxury
    apartment or condominium tenants. These reports showed that Lake
    Mendota in the Mansion Hill area was regarded as the prestige area,
    and that several alternative sites on the Lake Monona side were all
    greatly preferred to the subject site, which the Madison consumer
    does not presently consider residential in character.

C. The subject site would benefit greatly from a physical and visual
    connection with Law Park to the southwest and the amenities at the
    Clark Park beach one and a half blocks to the east. However, the
    old warehouse building occupied by the Post Office Annex blocks the
    view from and to Law Park. It would seem desirable to assemble
    all of block 126 in order to create visual impact for the better
    on traffic approaching from John Nolan Drive and from Blair Street.
    Without such assembly, the subject property is cut off from those
    elements which otherwise might enhance its market recognition.

D. The marketability of a site depends in part on the attitudes created by the approach zone for pedestrians and motorists. This attitude is a function of the stress and anxiety created by the intensity of traffic, the attractiveness of the visual surroundings, and the sense of safety of the pedestrian who is conditioned to shy from unsavory saloons and lonely industrial night-time zones. All of these negative elements are present to a large degree at the subject site and it would be speculative at best to anticipate any improvement or change in current land uses during the next 3 to 5 years.

VII. Alternative Redevelopment Strategies for Subject Site

With the assistance of Glad, Sarko and Associates and Bernard Riley, City Zoning Administrator, a variety of development alternatives were explored to establish allowable gross building areas, building config- urations, and required parking facilities. Exhibit #4 summarizes all of the alternatives considered. Each of these alternatives was then evaluated in light of current Madison market requirements, consumer acceptability, and floor area ratio intensity of use.

A. For residential uses a major constraint on development intensity is the land area per dwelling unit, while for commercial uses the required parking index quickly puts a limit on maximum size of development. Given existing ground water conditions, it is assumed there can be only one level of parking below the grade of Williamson Street. Parking ramp construction costs   about $4800 a car stall at today's prices, a factor which drives up building costs faster than off-setting rental rates. Above grade ramps would be economically unfeasible for commercial and would preclude total development of permissable site floor area ratios.

B. Lot area setback requirements would be most favorable for a two- story building:

1. Minimum setbacks for residential development:

   Lake Side-Average 101 ft. from shoreline
   Williamson Street - 20 feet
   South Blount Street - 10 feet
   Easement (pump house alley) - 10 feet

2. Minimum setbacks for commercial use:

   Easement (pump house alley) - 10 feet
   Lake Shore - 101 feet from shore
   All Other Sides - none

C. Exhibit #4 provides a summary of nine different potential combinations of residential and commercial development which might be considered on the subject site. Only three of these appear to be viable for consideration as of this date. The other alternatives have been eliminated from consideration not only because of zoning change required but for additional reasons as follows:

EXHIBIT #4

Faurbach Site Development Options

Options	Use	Building ₽ Area	No. of Stories	Parking Stalls	Location	Primary Constraint	FR.	S	Zoning Change
A.	Res.	75,000	3	89	AG	* LA/DU	20'	10'	Yes-pkg
B.	Res.	75,000	3	89	BG	LA/DU	20'	10'	No
C.	Comm.	90,000	3	200	BG	Parking	-	-	Yes-pkg
				100	AG				
D.	Comm.	60,000	2	200	BG	Parking	-	-	No
E.	Comm.	33,000	1	111	BG	Parking	-	-	Yes-pkg
	Res.	75,000	3	89	BG	LA/DU	20'	10'	Yes-ORD
F.	Comm.	48,000	2	111	BG	Parking	-	-	Yes-ORD
				50	AG				
	Res.	75,000	3	89	BG	LA/DU	10'	10'	
G.	Comm.	60,000	2	111	BG	Parking	-	-	Yes-ORD
				92	AG				
	Res.	75,000	3	89	BG	LA/DU	20'	10'	
H.	Comm.	208,400	8	696	AG (4-level ramp)	Bldg. Ht.	-	10'	101
	Res.	78,000	3	89	BG	Set Backs	20'	10'	Yes-PUD
	Ramp		4						
I.	Old Comm.	14,200	2	32	AG	Parking	-	10'	No
	Res.	65,000	6	55	BG	LA/DU	20'	10'	
				37	AG				

* Land Area per Dwelling Unit

Sketch #4

2 PARCEL CONCEPT: COMMERCIAL @ CRANE BLDG.
75 NEW RESIDENTIAL UNITS

OCTOBER 10, '74

SITE PLAN .... SCALE : 1" = 60'

NORTH

LAKE MONONA

AVE. 101'

41 STALLS ±

LOADING DOCK

COMMERCIAL

EXIST. CRANE BLDG.

4'0" DECK

RESTAURANT

WILLIAMSON STREET

5 STORIES

24 STALLS

75 UNITS RESIDENTIAL

SERVICE CORE

55 STALLS UNDERGROUND

S. BLOUNT STREET
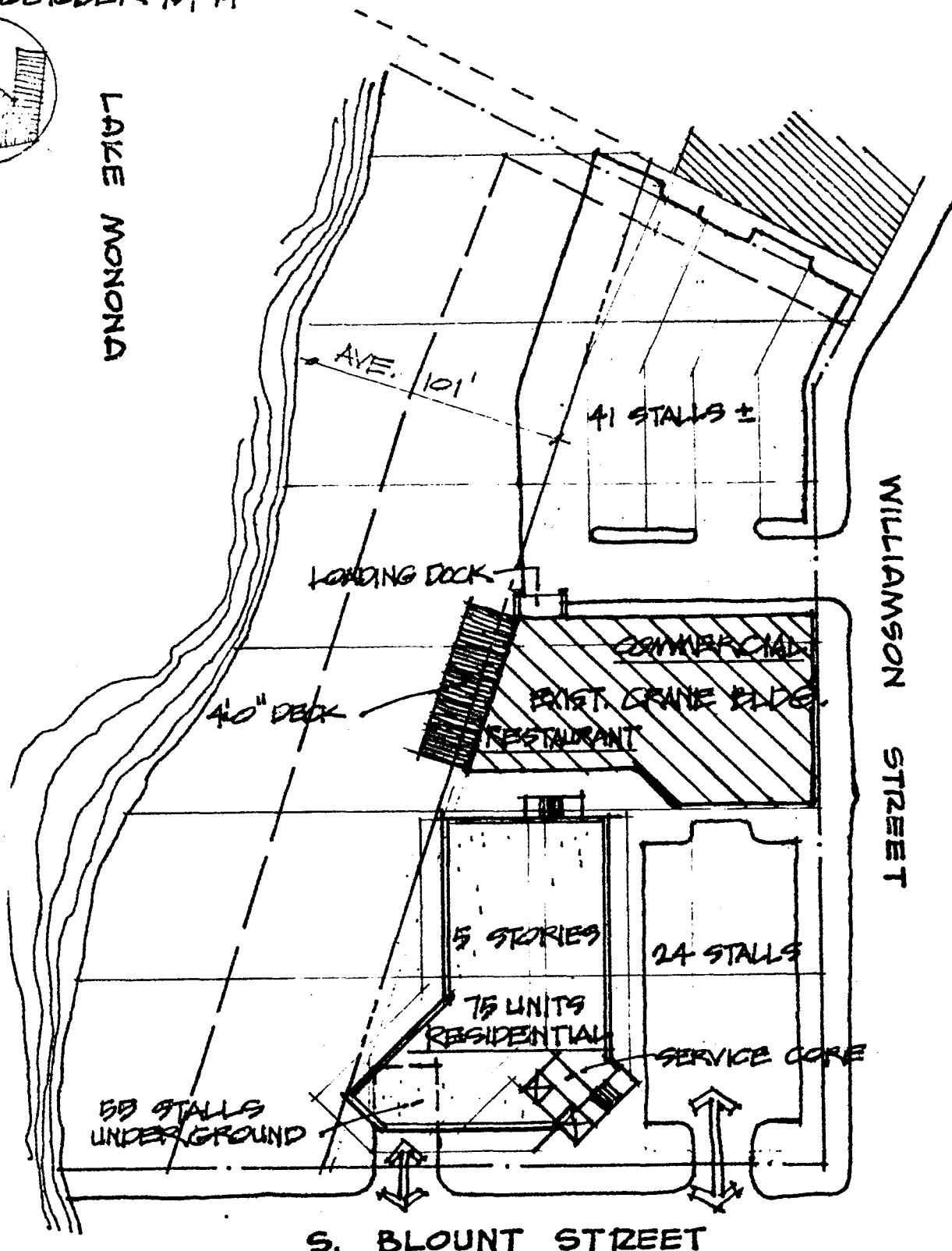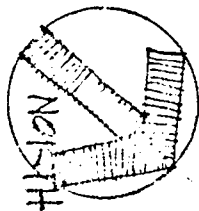
1. Option A with above grade parking (See Sketch #1) would produce a very cluttered appearance for what would be marketed as a luxury apartment location. It would put cars between the building line and lake, a feature probably unacceptable to City Hall. Indeed above grade parking would represent a security problem and a marketing deterrent in subject site neighborhood.

2. Option C has been eliminated because there is no room for 100 above grade parking units and no market for speculative commercial office space in Madison. The City already has a significant surplus of A and B grade office space vacant in the downtown area due to construction of new bank office buildings, several speculative office buildings such as VIP, several remodeled office buildings such as the Hovde Tower and Cantwell Building, and another bank building on the boards.

3. E, F and G (See Sketches #1 & #2) would require an additional conditional use permit from the City Council since the residential development greatly exceeds the maximum of 50% of gross building area permissable under C-3. Indeed a zoning change to PUD or ORD would probably be required and is assumed to be unavoidable. There is also little market for high rent commercial space which is combined with residential on the upper floors. A survey done for Investment Services, Inc. in 1974 (Ibach study) indicated considerable objection by both prospective commercial and higher income residential tenants to such a combination in the same building in Madison. Both F and G require additional above grade parking which means either that part of the first floor of the building must be parking (which hurts its commercial space marketability) or surface parking must be permitted in the lakeshore strip between rear building line and open space which is probably not acceptable to the City according to zoning administrator Bernard Riley.

4. Alternative H represents the extreme building envelope which could be put on this site were it developed to downtown Chicago standards. It would require one level of underground parking plus four levels of ramp parking before reaching eight stories of commercial space and three stories of residential. That general scheme may be appropriate to the John Hancock Building, but it would be extremely speculative for Madison on any site. There would be no market for 208,000 gross feet of office space in central downtown Madison, let alone in a fringe downtown area. At least the sky is not the limit, as the 15-story height reaches the foot of elevation on the Capitol dome columns.

D. Three alternative development options (B, D, and I) remain to be explored as the most probable use for the subject site. A preliminary estimate of site value for each of these uses provides an initial indicator of the probability of such uses as seen by a prospective purchaser:

EXHIBIT #5

Preliminary Market Estimates
For Three Alternative Use Strategies
Of Subject Parcel to Determine Most Profitable Use
(Highest & Best Use)

Option	Use	Formula	Total
#1	Residential 3-story	+ Units x % one-bd. x 2.5 rms/1-bd x land price/rm	
		+ 89 x .80 x 2.5 x 1500	$267,000
	(See VII, D(1)		
	& Appendix III)	+ 89 x .20 x 1.5 x 1500	40,050
		Total Possible Sales Price	307,050
		Present Value Factor	
		Time on Market - 24 months, cost of money 15%	x .756144
		Total present value of possible sales price	$230,000
#2	Home Office	Gross Sq. ft. of Buildable area (within dock line)	
	(See VII D(2)	73,000 x $4.80 Total possible sales price	$350,000
	& Appendix III)		
		Present Value Factor	
		Time on Market - 36 month, cost of money 15%	x .657516
		Total present value of possible sales price	$230,130
#3	Residential Tower	+ 40 efficiency x 1.5 x 1500	90,000
		+ 35 1-bedroom x 2.5 x 1500	131,250
			221,250
	(See VII D(3)	Time on market - 24 months, cost of money 15%	x .756144
	& Sketch #4)		$167,297
		14,200 sq. ft. Crane Building x $5/sq. ft. =	71,000
		26,000 sq. ft. commercial land x $2.40 =	62,400
		Total for commercial parcel	133,400
		Present value factor	
		Time on market - 12 months	x .869565
			115,999
			$283,296
		Total Present Value of Possible Sales Price rounded to	$285,000

1. Option 1(B) is exclusively a three-story residential building with 89 below grade parking stalls for 89 apartment units, 80% one-bedroom and 20% two-bedroom and could be built with a building area of 75,000 sq. ft. A possible configuration is suggested in Sketch #1, Option A, with the surface parking omitted and parking placed below the building. The number of stories is limited by the need to use the lowest cost construction method available and remain competitive with the large number of efficiencies and one-bedrooms recently built near the Square.

2. Option 2(D) would be exclusively a 60,000 sq. ft. commercial building, intended primarily as a home office building for a Madison firm. It would offer 200 parking stalls below grade. The 20,000 sq. ft. first floor would cover less than 50% of ground area, leaving guest parking on the surface and good views of lake from Williamson Street.

3. Option 3(I) is a mixed use alternative (See Sketch #4) and makes use of the existing Crane Building with its interesting wood beam roof and truss interior. The latter offers opportunity for small specialty shops and a restaurant looking over the lake, in the style but not the scale of Toronto's Boardwalk, San Francisco's Ghiardelli Square, or Rochester's River Front Square. The present Sinclair garage building would be demolished to provide 32 parking stalls for the restaurant in the Crane Building. Only 20 stalls would be required since this would be a renovation of an existing structure and would therefore avoid the requirement of one parking stall for each 300 sq. ft. of commercial according to the opinion of Zoning Administrator, Bernard Riley. A residential tower six stories high with 75 apartments on five floors could be built at the Blount Street side of the site to maximize views of the lake and the Capitol and simultaneously to avoid views of the power plant. This building would have no commercial area on the first floor, no enclosed space other than the lobby, no less than 20 surface parking spaces, and 55 underground parking stalls. Residential amenities would not only include the broad lake-front strip but also the adjacent restaurant and miscellaneous specialty shops in the Crane Building.

E. To select a most probable use from the three alternatives above, it is necessary to make a reasonable preliminary estimate of a sales price consistent with recent transactions in the Madison market and to adjust price for the time required under current conditions to market and convey the existing site to an investor likely to develop the uses proposed. These comparative sales estimates adjusted for the present value of money over the assumed marketing period are summarized in Exhibit #5 where a preliminary pricing formula for each of the three options is displayed. The assumptions for each alternative follow:

1. Option 1(B) assumed development of the site with a low-rise
    residential structure. The neighborhood south and east of the
    Square experienced heavy building of efficiencies and small
    one-bedroom apartments as indicated by building permit study
    for Madison in Appendix I. These units recently have had
    high overall vacancies. The land acquisition prices suggest
    a relatively low cost of land per apartment unit because the
    efficiency units have such small lot area per dwelling unit
    and open space requirements. The majority of the new buildings
    are in R-6 zones which require less land per unit than the
    subject site C-3 zoning, which follows C-1 standards. The
    subject site attempts to avoid direct competition with these
    by providing an assumed 80% mix of large one-bedroom and 20%
    generous efficiency units but this change from the approximate
    80-90% efficiency to 10-20% one-bedroom mix of the recent
    developments argues for land cost comparison on a per room
    rather than per apartment basis. Analysis of recent downtown
    apartment land sales is provided in Exhibit #6. To determine
    the present value of sale for residential purposes only, it
    was assumed that both the surplus of units downtown and the
    economic crisis for 1975 would discourage residential construc-
    tion in this area for at least 24 months. Also during this time
    the Williamson-Blair Street intersection plan would be resolved
    as well as future uses for contiguous post office property.
    The cost of money at 15% compounded, suggests a present value
    of possible sales price under Option #1(B) of about $230,000.
    (See Exhibit #5)

2. Option 2(D) assumed use of the site for a prestige home office
    structure. A very careful comparative analysis was made of
    recent site purchases by Madison firms for major office
    structures including lakeshore property for the Continental
    Mortgage Insurance (CMI) Building, lake view property for James
    Wilson Plaza (VIP), the recent listing of extensive frontage on
    Lake Monona by Wisconsin Physicians Service (WPS-1), the new
    home office site of WPS on E. Broadway (WPS-2), the IBM site
    on the Beltline near the Arboreteum and the 1973 negotiations for
    the sale of the Doty School property on West Wilson Street
    (Doty School). Of all these decisions, it should be noted that
    IBM conducted one of the few truly thorough searches for a site
    in downtown Madison, a search marked by rational selection
    criteria, and chose the Beltline location at the lowest cost
    per sq. ft. of gross land. The IBM building will depend on
    surface parking as subsurface contains rock formations necess-
    itating expensive excavation costs. The second lowest price
    was paid by the speculative builder of James Wilson Plaza (VIP)
    while the higher prices were paid on more prestiguous sites on Lake
    Mendota. Site assemblages by banks and utility companies and
    institutions near the Square are not considered comparable sales
    due to the fact that buyers were locked into existing locations
    and specific parcels.

Virtually a full appraisal of the home office option is provided
in Appendix II. A linear regression comparison suggests a value
of $4.80 on the average for the subject property when compared
to recent home office site purchases. The total possible sales
price for the office use would require as long as three years to
realize. Economic conditions in 1974 and the recent surge in
office building construction, both for use and for speculation
resulting in a softening of the for-use market and an over-satur-
ation of the for-rent market; coupled with the decreased market-
ability of the subject site resulting from uncertainty of the
future utilization of the Reynolds Building (Post Office Annex)
site which will have a direct impact on the visibility of the
subject site from the John Nolan Drive approach, argue for this
extended 36 month market exposure. Thus, with the cost of capital
at 15% compounded, the discounted present value of Option 2(D)
indicates a possible sales price of approximately $230,000.

3. Option 3(I) is a combination of a restaurant-specialty commercial
    use rehabilitation of the existing Crane Building and a high rise
    75 unit residential tower as opposed to a long three-story
    89-unit apartment building in Option #1(B) at the Blount Street
    end of the subject site. Land for the residential tower has been
    initially estimated on the same per room value as in Option 1(B)
    for purposes of best use comparison. Note that Option 3(1)
    anticipates sale of the total parcel in two sections, with the
    residential sale probably not occurring for at least 24 months
    consistent with Option 1(B). There are a number of restaurants
    both with existing establishments in Madison and from out-of-town
    who are currently searching for a site, with attributes not unlike
    the Crane Building site given additional parking. Thus, the
    smaller commercial parcel presumably could be sold within 12 months.
    For these purposes it was assumed that rent structures for commercial
    and restaurant space would limit the total structural budget to $25
    a sq. ft. of gross area. Assuming that at least $20/sq. ft.
    would be required to renovate the building to a point ready for
    tenant improvement and furnishings the building shell was valued
    at $5 a sq. ft. of gross building area. The commercial land to
    accompany the building cannot exceed 30,000 sq.ft. with the land
    area per dwelling unit requirements of the C-3 zoning. However,
    this 30,000 sq. ft. is sufficient to include the land occupied by
    the existing Crane Building and provide additional parking on the
    existing Sinclair station parcel. A minimal amount of land is
    included beyond the existing building line since it falls in the
    101 foot setback open space zone required for a rear yard. The
    commercial land was given a preliminary value of $2.40 per sq. ft.
    based on recent suburban Madison restaurant sales but it should
    be noted that such a land area would provide little more than
    30 restaurant parking stalls on grade which is definitely marginal.
    These values are discounted for one year of marketing exposure
    until closing. The combined present compounded values at 15%
    cost of money for the residential portion of the site, the shell
    of the Crane Building and the commercial land approach $285,000.

F. A preliminary valuation of alternative options for reuse of the
subject site clearly ranks the mixed commercial use renovation and
new construction residential tower Option 3(I) at $285,000 first
compared to the low rise residential option in #1(B) at $230,000,
or purchase of the site for use with a home office building Option 3(I)
at $230,000. It should be noted that these preliminary comparisons
should not be considered the appraisal valuation as no adjustments
have been made either for removal of existing improvements or for
current trends in construction costs, and are based on a cursory
analysis of probable effective demand as of October 1.

HOWEVER, BASED ON THESE VALUATIONS IT IS POSSIBLE TO CONCLUDE THAT
OPTION #3 IS THE MOST PROFITABLE, PROBABLE (HIGHEST AND BEST) USE
FOR THE SITE: NAMELY, THAT USE WHICH WOULD BE LEGAL, PRUDENT, AND
POSSIBLE IN THE CURRENT MARKET WHICH PRODUCES THE HIGHEST PRESENT
VALUE FOR A STATED TERM OF TIME. THEREFORE, THE REMAINDER OF THIS
APPRAISAL VALUATION IS BASED ON THE ASSUMPTION THAT THE MOST PROBABLE
USE WOULD BE SUCH A MIXED RESIDENTIAL-COMMERCIAL USE PROJECT, PHASED
OVER SEVERAL YEARS BY POSSIBLY TWO INVESTOR-DEVELOPERS.

VIII. The Most Probable Buyer-Investor

A. Given the assumed most probable use of the property, it is possible
to anticipate that not one but several purchasers would be potential
investors in specific components of the subject site package. The
most immediate prospect would be the commercial property development
specialist who is interested in retail specialty centers and in
buildings to suit specific clients such as franchise restaurants.
This type of developer typically avoids residential development of
any type and often negotiates purchase of a site simultaneously with
lease of the finished product to one or more anchor tenants. It is
therefore assumed that the shell of the Crane Building and the land
presently covered by the vandalized Sinclair garage building would
be sold to this type of buyer, and a separate buyer would be necessary
for the residential portion of the package.

B. The residential tower site is a speculative acquisition and requires
equity investment of such scale that the small local investor of 8-unit
buildings and the like is out of the running. The rich professional
man seeking tax shelter lacks the technical expertise necessary to
execute the construction and merchandising plan required. Therefore,
the most probable buyer would be the realtor-packager who could build
and manage the proposed six-story tower building while selling off
limited partnerships in the venture to a number of local investors.
In the current market that possibility is unlikely because the interest
rates required on mortgages and the cash return required on equity
dollars leads to a capitalization rate and building value lower than
the cost to construct plus the profit spread required by the packager.

As mentioned earlier in discussion of dynamic attributes of the site, the present neighborhood has a negative public image due to lack of residential amenities and surrounding adverse land uses. This has been reflected repeatedly in market surveys conducted for potential developers of residential projects in downtown Madison.

To offset the present negative residential character of the site, it would be hoped that the successful renovation of the Crane commercial building would provide some supplemental residential amenities, and greater street safety that comes with more heterogeneity of legitimate activities over more hours of the day. Remodeling of Williamson-Blair intersection and possible removal of surplus post office and miscellaneous commercial uses in the immediate block should improve visual and audio environmental quality for residential uses. Certainly further development at Law Park and a trail and bike path system extended to Clark Park would strengthen the residential quality of the site.

C. A third possible buyer which might indirectly contribute additional sales dollars to the seller would be the City of Madison which could purchase a portion of the lake frontage right-of-way from the residential developer after that developer has concluded construction of the building. Although Option 3(1) requires ownership of all the backyard open space to meet land area per dwelling unit requirements for 75 units, it is conceivable that following residential development of the site at a density level negotiated with the City, the land beyond the dock line and land within the dock line sufficient to permit construction of a lighted bicycle and/or pedestrian path could be sold to the City, thus increasing the future benefit package to the buyer resulting in a higher present value. So long as the permissable number of residential units was not reduced below 75, the difference in value would be negligible since property income would be unaffected or increased slightly due to presence of contiguous city park. Maintenance expense would drop slightly although access to a boat dock or similar facility would be lost.

D. The assumption of this report is to assume separate sales of the commercial portion of Option 3(1) and the residential tower portion of the site to professional developers as described above.

IX. Most Probable Sales Price For Subject Property

To forecast the probable sales price or fair market value of the subject property it is necessary to analyze sales for two types of land purchase, multi-family apartment land in the downtown Madison area in 1972-73 purchased by packagers for a syndication, and retail sites for restaurants in the Madison area during the same general market period. However, it is necessary to modify past sales for the impact of current economic conditions which will adversely affect the sale of the subject site. The amount which any developer/packager can pay for land is at best the difference between the present value of the income from a completed rental project and the cost to construct the improvement. High interest rates in excess of 11% and high cash returns currently available on federal securities, tax free municipals, real estate equity trusts, etc.

make high risk investment in real estate--despite tax shelter advantages--
relatively unattractive, unless future benefits or returns to equity are
discounted sharply at 18-25%, thus compensating investors for this higher
risk investment. Consequently the price investors are willing to pay for the
present value of those equity benefits   income property has fallen
unless sellers provide very favorable terms. At the same time construction
costs have risen at an accelerating rate. The current economic conditions
also decrease the ability of the market to pay these increasing fixed
charges so that today few projects are economically feasible when costs
to construct are matched against market value, unless land has been
acquired at an extremely favorable price. Therefore current market
conditions must lead to declining prices for the land component.

A. Details on five vacant land purchases for multi-family uses are provided
   in Exhibit #6 and analyzed in Exhibit #7. Since most of these sales
   anticipated intense use of the site by construction of a high proportion
   of small efficiencies to one-bedroom apartments, comparison has been
   related to the total number of rooms built. Assuming 1 1/2 rooms
   per efficiency and 2 1/2 rooms for a one-bedroom unit the land sales
   price per room was calculated. These sales were unadjusted for time,
   demolition, or slight differences of location as the average sales
   price per room of $1288 had an unadjusted standard deviation of only
   $43. Thus a price range of $1245 to $1331 per room would cover 67%
   of the sales in this market and a range of $1202 to $1374 would cover
   96% of all sales prices per room for this type of property in downtown
   Madison 1972-73. Assuming an average of two rooms per apartment
   this compares with the realtors rule of thumb that $2400-2750 per
   apartment in the Square area.

B. It is our opinion that the same type of site east of the Square under
   current market conditions would sell at the lower end of the range
   of two standard deviations from the mean price per room or $1200 per
   room. However an upward adjustment is required for presence of the
   lake view and contiguous city park facilities that would be unique
   to the subject property. An excessive adjustment is not appropriate
   to the subject site, however, because of the nearby industrial uses
   and truck traffic on Williamson Street. The residential character
   and suitability of the site depends on successful renovation of the
   Crane Building as a restaurant and retail specialty area and some
   upgrading of neighboring land uses once present post office facilities
   are consolidated at the proposed Milwaukee Street post office site.
   Therefore as October 1, 1974 an upward adjustment of the mean of land
   per room of 20% is appropriate suggesting an adjusted price of $1440.

C. The maximum number of dwelling units which could be placed on the
   subject site and still provide at least 30,000 sq. ft. of land for
   the commercial restaurant portion of the development package would
   be most constrained by the land area per dwelling unit requirements
   of the C-3 zoning, applicable to the entire site.

   Given the existing residential rental market in central Madison,
   characterized by an over-saturation of efficiency units, the
   recommended mix of efficiency to one-bedroom units of

50:50 is recommended. Assuming a total site area of some 63,000 sq. ft. more-or-less (Total Site Area--94,473 sq. ft. -- less 30,000 sq. ft. to commercial) the maximum number of dwelling units which could be placed on the site would be:

Type DU	Land Area/DU	Total # Units	# Rms/DU	Total Rms	Total Required Land Area
Efficiency	700	38	1.5	57	27,000
One-bedroom	1000	37	*3	111	37,000
		75		168	64,000

* Reflecting larger units and full kitchen a room count of 3 is used for these one-bedroom apartments as opposed to bedroom units in comparable sales.

The 75 apartment units would be distributed on five floors with 15 units per floor not ot exceed 12,000 gross sq. ft. per floor. The first floor level would contain the lobby entrance and 20 parking stalls, with the remaining 55 stalls below grade.

D. Using the adjusted market value of land per room (See B above) and the total rooms indicated (Item C above), it is possible to forecast the probable sales price of the 63,400 sq. ft. of residential land component of the site:

$1,440 per room x 168 rooms = $241,900 or rounded to the nearest 1% = $240,000.

E. The balance of the site, the specialty-commercial restaurant area, would comprise some 30,000 sq. ft. of land, more or less. This area would include the existing Crane Building which covers approximately 8600 sq. ft. of ground area. The shell of the building is valued separately from the land area to determine most probable market price for the commercial area package.

1. It is assumed that the total cost of renovation should produce a price of $25 a sq. ft. of gross building area before tenant improvements for display, kitchens, etc. For these purposes it was assumed that $20 a sq. ft. of gross building area, providing a building budget of $284,000 (8600 sq. ft. for the ground floor plus 5600 sq. ft. mezzanine). This budget would include demolition of Sinclair station and resurfacing required for parking.

2. The balance of the budget of $5 a sq. ft. is used to represent a value of the existing building shell.

$5 per gross sq. ft. x 14,200 = $71,000 for Crane Building

F. To value the commercial land it was decided that Madison sales to middle priced restaurants would be most comparable to the uses proposed for the Crane Building. Such restaurants are looking for sites on

a high traffic artery, with 30-45,000 sq. ft. of land area, good visibility, convenient access and good linkages to traffic generating land uses such as neighborhood shopping and multi-family residential for family business, nearby businesses for luncheon volume and possible convenience for travelers and motel visitors. Since this type of site differs widely from one side of town to the other, a simple average of sales prices is inappropriate. Instead each comparable sale is analyzed and compared with the subject property on a point scale for selected attributes and these point scales are weighted to reflect the relative importance of these items to the type of buyer seeking the restaurant site. The selected comparable sales are described in Exhibit #8, analyzed for attribute points and weightings in Exhibit #9 and then converted to a simple linear regression formula to compute value in Exhibit #10.

G. Reference to Exhibit #9 will indicate that the subject property scored as well or better than the comparables in terms of shape, site preparation required and access to a frontage road but scored poorly in the percent of usable area because of the setback improvement line, visibility, and the inability to make a left turn from williamson onto the site. In terms of linkages the subject site is average in terms of traffic volume but poor in terms of proximity of retailing attractions such as shopping centers and other drive-ins. It also ranked very poorly in terms of the drawing power of development activities and its related implications for growth of market and for positive consumer attitudes relative to its address. The linear regression formula that results from this analysis is:

Price = a + b (weighted points scored by subject site)(See Ex.#10)
$1.80/per sq. ft. = $.76 + .00087 (1190)

H. The $1.80/sq. ft. of land represents a type of average estimate for which a standard deviaiton of 15¢ has been calculated, adjusted for the small sample. The coefficient correlation indicates that this estimating formula explains about   % of the value differences between the various sales prices selected. By increasing the mean price of $1.80 per sq. ft. by two standard deviations (2 x .15 or 30¢) it is possible to conclude that 95% of alternative offering prices would be $2.10 a sq. ft. of land or less under current market conditions and assuming that differences around the mean due to negotiations and other influences will be randomly distributed. Therefore it is concluded in this case that:

30,000 sq. ft. of commercial land x $2.10 = $63,000

I. The fair market price of the subject property is then estimated by combining the most probable prices for each of the three components analyzed above:

Residential parcel component =	$240,000	(64,400 sq. ft. of land)
Crane Building structure as is =	71,000	--
Commercial land portion of site =	63,000	30,000 sq. ft.
	374,000	94,400

Rounded to: $375,000

VALUE CONCLUSION

Based on the assumptions, limiting conditions, and property analysis above, it is the opinion of the appraiser that the fair Market Value of the subject property herein described as of October 1, 1974 is:

THREE HUNDRED SEVENTY-FIVE THOUSAND DOLLARS

($375,000)

APPENDIX I

Multi-Family Residential Building Permits 1971-1974
Central Business District Area

Year	Date	Address	No. of Units	Total per Year
1971	March 22	22 N. Franklin	12	
	April 27	523 W. Wilson	24	
	April 2	134 E. Johnson	24	
	Nov. 17	130 N. Hancock	22	
	Dec. 28	424 W. Dayton	57	
				139
1972	Jan. 28	22 N. Hancock	24	
	April 18	22 Langdon	72	
	April 18	219 N. Frances	24	
	May 17	507 W. Wilson	49	
	May 11	102 N. Franklin	43	
	June 14	140 Iota Ct.	36	
	June 21	111 S. Bassett	24	
	June 28	434 W. Mifflin	73	
	July 14	738 E. Dayton	16	
	July 25	512-18 W. Wilson	40	
	Aug. 17	511 W. Johnson	64	
	Aug. 28	427-31 W. Main	24,42,43	
	Sept. 8	526-30 W. Wilson	24	
	Nov. 28	307-15 E. Johnson	22	
	Nov. 14	15 N. Hancock	32	
				652
1973	Jan. 4	544 W. Johnson	12	
	Feb. 2	409 W. Doty	11	
	Feb. 28	420 W. Wilson	43	
	March 30	415 W. Johnson	68	
	May 8	22 Langdon	Add'l Fee	
	May 31	422 W. Johnson	28	
	June 14	454 W. Dayton	55	
	June 15	511 W. Main	19	
				236
1974	Mar. 20	528-30 E. Washington	8	
	to Oct. 10	-----	-	
				8

EXHIBIT # 7(a)

Vacant Land Market Comparison
Residential Use Land Price: Mean

Comparable Sales

Factors	420 W. Wilson No. 1	219 N. Frances No. 2	102 N. Franklin N. 3	434 W. Mifflin N. 4	427-31 W.Main No. 5	Mean (X) 1-5
Sales Price	$84950	$48000	$86900	$160000	$53000	$432850
Date of Sale	'73	'72	'72	'72	'72	
Land Area (sq.ft.)	13068	7920	15246	26400	8712	71346
No. of Dwelling Units Built	43	24	43	73	24	207
Total Gross Bldg.	20070	12670	24364	43040	10900	111044
Total # Rms Blt.	65.5	38	65.5	130.5	40	339.5

Mean Land Price - $/per:

1. Square Ft. of Land	$6.50	$6.06	$5.60	$6.06	$6.08	$6.06
2. Dwelling Unit Blt.	$1976	$2000	$2020	$2192	$2208	$2079
3. Total Gross Bldg. Floor Area	$4.23	$3.79	$3.79	$3.72	$4.86	$4.08
4. Total # Rms Blt.	1297	1263	1327	1226	1325	1288

NEW APPRAISAL CONCEPTS & METHODS
A Seminar Sponsored by
The American Institute of Real Estate Appraisers Ontario Chapter #44
Sheraton Four Seasons Hotel, Toronto, Canada
Friday, February 20, 1976

AFTERNOON SESSION

Instructor: Professor James A. Graaskamp
University of Wisconsin School of Business

I. This afternoon our first objective is to continue the land appraisal
   case problem of this morning by demonstrating the application of a linear
   regression system of averaging market prices for very different comparables
   by the use of a point system for comparison of property features and a
   weighting system to reflect how a certain group of buyers make their
   preference decision. The result is a prediction of the most probable
   sales price and a statement about the range of alternative outcome for
   a transaction price relative to the estimated probable price.

   A. The technique employed was first suggested by Prof. R. U. Ratcliff
      in Chapter 6 & 7 of his recent book VALUATION FOR REAL ESTATE DECISIONS
      (available from Democrat Press, P.O. Box 984, Santa Cruz, California
      94060). His example is for single family homes but it is an example
      of more modeling than is necessary to make a typical family home
      appraisal. It might be more useful for mansions but in any event it
      is a thorough demonstration.

   B. Exhibits 8, 9, and 10 show the data and the analysis of six high
      grade fanchise restaurant-sandwich deals in Madison.
      1. One reason for comparing on a point scale is the hope that the
         analyst may make many small offsetting errors rather than a
         few major biased mistakes.
      2. The weights are determined by talking to buyers and then testing
         the resulting regression line for fit. If we have a very high
         standard error after looking at similar buyer sales, we will
         begin to analyze and modify the weights until we have a good
         regression fit.
      3. The regression coefficients generated are then used to estimate
         sales price of subject site.
      4. The standard deviation of the estimate is also calculated to
         provide the appraiser with a base for possible adjustments of
         the initial estimate to determine the final probable price.

   C. Another example is provided in Appendix II which summarized the
      determination of value for home office building sites in Madison.

   D. Statistical format may vary slightly between textbooks. We recommend
      pages 238-242 of GENERAL APPLIED STATISTICS by Fadil Zwayliff, published
      by Addison Wesley.

   E. A step by step example is furnished in Exhibit E & F for a hypothetical
      land valuation problem. Prices are expressed per acre after adjustments
      for time and terms.

COFFEE BREAK

EXHIBIT #8

Basic Information on Restaurant-Commercial Land Sale Comparables

	Barnaby's East	Barnaby's West	Bud's West	Pigs Ear East	Marc's Big Boy South	Marc's Big Boy East
Sales Price	$92,000*	$89,000	$75,700	$91,000	$87,500	$85,000
Sales Date	10-6-70	6-30-70	6-29-71	5-20-72	9-3-69	3-15-68
Type of Deed	Lease with Option	WD	WD	WD	WD	WD
Volume & Page	209-455	184-75	264-173	344-385	130-463	15-108
Grantee	Barnaby's Inc.	Barnaby's Inc.	Clyde Chamberlain	Poole, Inc.	B & G Realty	B & G Realty
Area	38,211	32,900	45,236	141,570	38,327	30,237
Zoning	C-2	C-3-L	C-3-L	M-1	C-2	C-2
Principal Business Frontage	E. Washington Ave.	Mineral Point & Grand Canyon Roads	Odana Rd.	Cottage Grove Road & Atlas Avenue	S. Park Street	E. Washington Ave.
Position on Block	Inside lot	Corner lot	Inside lot	Corner lot	Corner lot	Inside lot

All have city services, Pigs Ear did not have curb and gutter
No adjustment of time required as restaurant economics would not permit inflation of land prices.

EXHIBIT #9

Attribute Point and Weight Comparison
Of Restaurant-Commercial Land Sales and Subject Property

(See Exhibit #8)	Barnaby's East		Barnaby's West	Bud's West	Pigs Ear East	Marc's Big Boy South	Marc's Big Boy East	Subject
	Points	Wgt'd Pts						
30 *Site								
Shape	5		1	5	3	5	3	5
% Usable	3		3	5	5	5	5	1
Site Preparation	3		1	5	5	5	5	5
Visibility	3		5	5	3	5	3	3
Access								
Left & Right Turn	5		5	5	3	3	3	1
Frontage Road	3		5	5	1	5	5	5
Total	18		20	25	20	28	24	20
Weight		540	600	750	600	840	720	600
50								
Linkages								
Traffic Volume	5		5	3	3	5	5	3
Supportive Retail/Serv.	5		5	3	1	1	3	1
Proximity to Multi- Family Residential	1		5	5	1	3	3	3
Proximity to Employm.	3		3	3	1	1	5	3
**Interstate-Beltline	2		1	1	3	2	2	1
Total	15		18	15	9	12	18	11
Weight								
Image								
Development Activity	5		5	3	1	1	3	1
Prestige of Street Address	5		5	3	1	3	5	1
Total	10		10	6	2	4	8	2
		200	200	120	40	80	160	40
*Scale 1,3,5 Except **		1490	1700	1620	1090	1520	1780	1190

Exhibit #10

Determination of Linear Regression
Weighted Mean Value of Land/sf
Commercial-Restaurant

Comparable	1 Land $/sf YI	2 Total Wgtd. Pts. XI	3 (Land $/sf)^2 YI^2	4 (Wgtd.Pts)^2 XI^2	5 (3 x 4) XIYI
1	$2.40	1490	5.76	2220100	3575
2	2.73	1700	7.45	2890000	4641
3	1.67	1620	2.79	2624000	2705
4	.64	1090	.41	1881000	698
5	2.28	1520	5.20	2310400	3466
6	2.81	1780	7.90	3168400	5002
TOTAL	$12.53	9200	29.51	15093000	20087
Mean	(Y)=$2.09	(X)=1533			

Calculations of Mean, Standard Deviation

$$\text{Sum } y^2 = Y^2 - n(Y)^2$$

$$= (29.51)^2 - 6(2.09)^2$$

$$= 845$$

$$\text{Sum } x^2 = X^2 - n(X)^2$$

$$= 1509300 - 6(1533)^2$$

$$= 993366$$

$$\text{Sum } xy = XY - n(x)(Y)$$

$$= 20087 - 6(1533)(2.09)$$

$$= 863$$

$$Y' = a + bX_{subject}$$

$$b = \frac{\text{Sum } xy}{\text{Sum } x^2} = \frac{863}{993366} = .00087$$

$$a = (Y) - b(X) = \$2.09 - .00087(1533)$$

SALES PRICE/SUBJECT SITE

$$Y' = a + bX_{subject}$$

$$= -\$.76 = .00087(1190) = \$1.80$$

STANDARD DEVIATION

$$s_{xy} = \frac{\text{Sum } y^2 - b(\text{Sum } xy)}{n-2}$$

$$= \$ \ .15$$

Vacant Land Market Comparison
Office Use
Subject - Fauerbach Property

Weight Total / Sub Total	Factor	CMI Wgt	Wgt*	VIP Wgt	Wgt*	Doty School Wgt	Wgt*	WPS-1 Wgt	Wgt*	IBM Wgt	Wgt*	WPS-2 Wgt	Wgt*	Subject Wgt	Wgt*
30	**Site**														
10**	Intensity of Land Use	8	80	10	100	6	60	4	40	2	20	2	20	6	60
10**	Topography	10	100	8	80	6	60	4	40	1	10	4	40	6	60
10**	Views	8	80	6	60	4	40	8	80	4	40	4	40	6	60
25	**Image**														
10**	Lineal Ft Lake/Park	10	100	4	40	4	40	8	80	6	60	1	10	8	80
5	Lake Exposure	5	25	3	15	3	15	3	15	1	5	1	5	3	15
10**	Community Recognition	10	100	8	80	8	80	6	60	4	40	2	20	2	20
35	**Linkages**														
15**	Downtown	8	120	10	150	8	120	4	60	1	15	1	15	4	60
5	Auto Approach Zone	5	25	3	15	3	25	2	10	2	10	1	5	3	15
5	Ancillary Uses	3	15	5	25	3	15	3	15	1	5	2	10	1	5
5	Employee--Housing & Transportation	3	15	3	15	3	15	1	5	3	15	3	15	3	15
5	Protection from adverse Contiguous Uses	5	25	4	20	3	15	3	15	4	20	2	10	1	5
10	**Construction Suitability**														
5	Depth to Ground water/ Soils	5	25	5	25	3	15	1	5	1	5	2	10	3	15
5	Drainage	5	25	5	25	3	15	3	15	1	5	3	10	3	15
100	**Totals**		735		650		515		440		225		210		425

* Weight x Scale
** 10 Point Scale

$$b = \frac{\text{Sum } xy}{\text{Sum } x^2} = .0249 \qquad a = Y - bX = -\$5.75$$

$$Y' = a + bX_{subject}$$

$$= -\$5.75 + .0249(425)$$

$$= \underline{\$4.83} \text{ per sq. ft.} \pm \$.08 \text{ (standard deviation)}$$

VACANT LAND MARKET COMPARISON

USING WEIGHTED SCALE

Feature	Scale	Subject	A	B	C	D	Weight	Subject	A	B	C	D
Suitability (40)												
Soils	5	5	2	5	3	3	10	50	20	50	30	30
Shape	5	4	3	5	3	4	10	40	30	50	30	40
Vegetation	10	6	5	2	3	5	10	60	50	20	30	50
Water	10	0	8	5	3	2	10	0	80	50	30	20
Capacity (15)												
Public Infrastructure	5	3	1	5	5	0	9	27	9	45	45	0
Economic Scale	5	2	1	5	2	3	3	6	3	15	6	9
Area Growth	5	5	2	3	0	3	3	15	6	9	0	9
Comparability (15)												
Social	5	5	5	3	3	4	5	25	25	15	15	20
Physical	10	3	3	5	6	4	10	30	30	50	60	40
Impact (30)												
Fiscal	10	10	6	8	6	7	15	150	90	120	90	105
Environmental	10	6	3	10	4	8	15	90	45	150	60	120
TOTALS							100%	493	388	574	396	443

Gross Price per Acre   1500 2500 1700 1900

Least Squares Method of
Appraising Vacant Land

$$Y = a - bX$$

where Y = estimated land

X = weighted points for subject site

a = intercept   b = slope of line

Step I: Construct 5 columns to record actual values of Y (price) and X (points),
their squares and their crossproducts.

Comp	Y	X	Y^2	X^2	XY
A	1500	388	225	150544	582000
B	2500	574	625	329476	1435000
C	1700	396	289	156816	673200
D	1900	443	361	196249	841700

$\Sigma = 76$ $\Sigma = 1801$ $\Sigma = 1500$ $\Sigma = 833085$ $\Sigma = 3531900$

Step II: Compute the mean of Y and the mean of X

$$\bar{Y} = \frac{\Sigma Y}{n} = \frac{76}{4} = 19$$

$$\bar{X} = \text{Sum of } \frac{X}{n} = \frac{1801}{4} = 450$$

Step III: Compute Σy^2, Σx^2, and Σxy (Note that we use lower-case letters
for these terms which are completely different from the terms denoted
by upper-case letters that we computed previously). Use the following
these equations:

$$\Sigma y^2 = \Sigma Y^2 - n(\bar{Y})^2$$
$$= 1500 - 4(19)^2 = 56$$
$$\Sigma x^2 = \Sigma X^2 - n(\bar{X})^2$$
$$= 833085 - 4(450)^2 = 23085$$
$$\Sigma xy = \Sigma XY - n\bar{X}\bar{Y}$$
$$= 35,31900 - 4(450)19 = 3297700$$
$$= 1119$$

Step IV: Compute the regression coefficient b:

$$b = \frac{\Sigma xy}{\Sigma x^2} = \frac{1119}{23085}$$

$$= .0485$$

Step V: Compute the regression coefficient a:

$$a = \bar{Y} - b\bar{X}$$
$$= 19 - .0485(450)$$
$$= -2.83$$

Hence the regression equation is

$$y' = -2.83 + .0485 (493)$$

Subject Price Equals $= -283 + 23.91 \times 100 = 2108$ or 2100

Step VI: Compute the Standard error of the estimate.

$$Syx = \sqrt{\frac{\Sigma y^2 - b\Sigma xy}{n-2}}$$

$$= \sqrt{\frac{56 - .048(1119)}{4-2}}$$

$$= \sqrt{\frac{2.29}{2}} \qquad = \sqrt{1.146}$$

$$\approx (1.07)(100) = 107$$

Step VII: Compute the Correlation Coefficient

$$r = \frac{\Sigma xy}{\sqrt{\Sigma x^2 \Sigma y^2}}$$

$$= \frac{1119}{\sqrt{23085(56)}}$$

$$= \frac{1119}{\sqrt{1292760}} \approx \frac{1119}{1137} = .98$$

EXHIBIT E

Weighted Point Scale for Comparable Lands Tracts
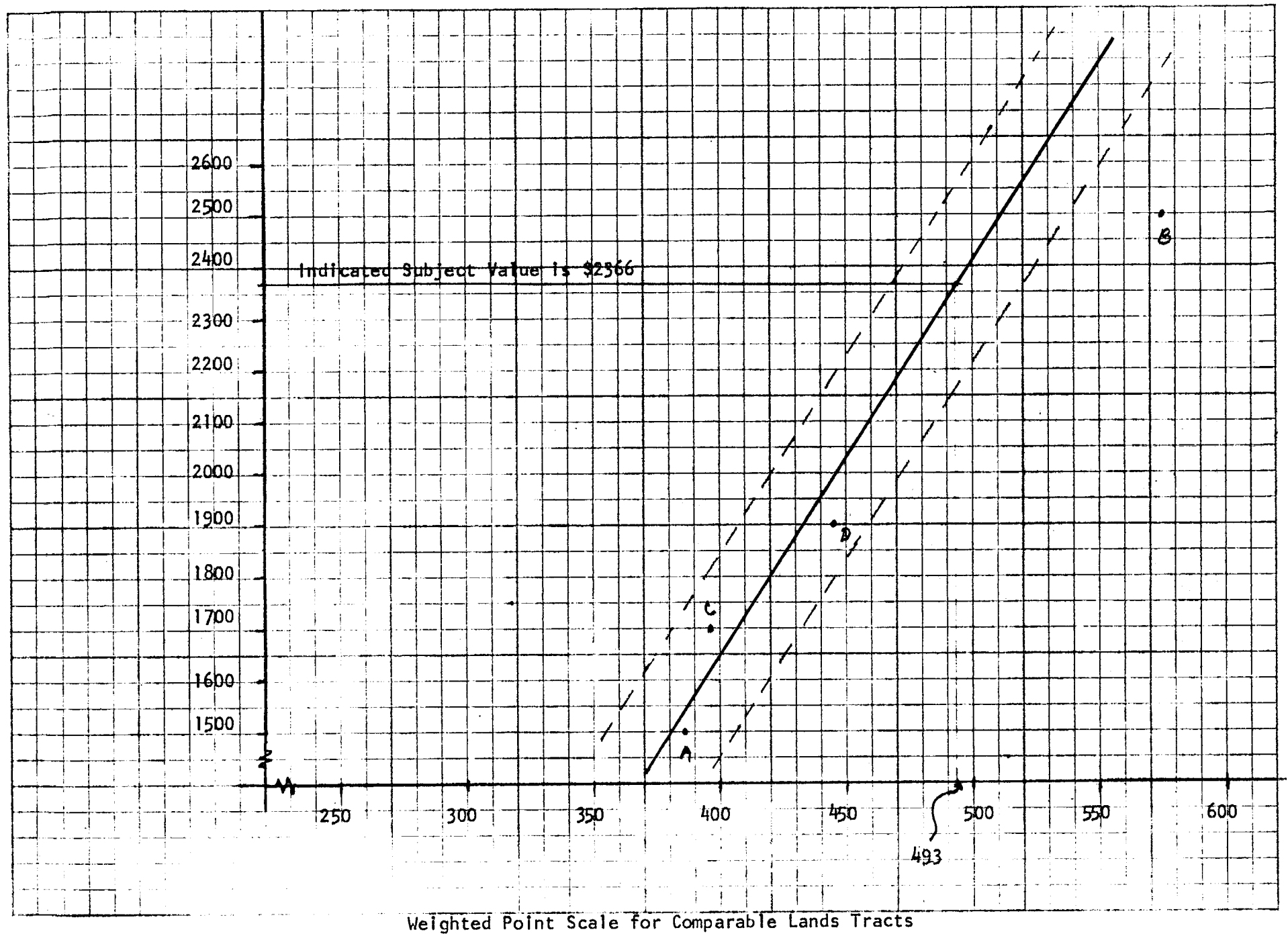
II. A major area of appraisal opportunity today is the appeal of tax assessments.

   A. Assessors may appraise the building both during construction and upon its completion primarily as a percent of cost to construct.

   B. The Wisconsin law states that the assessment should be at the highest price at which a building would sell to another owner. Thus special buildings can be sharply discounted for special owner-occupant features which have little or no market value.

      1. Case law states that in the absence of market or investment data, only then can the cost approach be used but with due consideration to economic obsolescence.

      2. Recently several American court cases have recognized the present value of after tax income valuation as the relevant appraisal method. One of the courts suggested it was easier to "buy" that particular set of assumptions than the more conventional appraisal set of assumptions before taxes.

   C. A useful test for a appraisal conclusion or a valuation assessment is the basic back door-front door approach (See Exhibit F)

   D. One strategy in tax valuation is always to accept the assessor's methodology and push it to its logical conclusion, i.e., the correct technical application. Thus if the assessor uses the cost approach but fails to deduct for economic obsolescence, it is useful to take his value conclusion and the actual income stream of the property in order to:

      1. Demonstrate the yield to the equity position assuming the assessors purchase price to be correct
      2. Test the yield to equity at successively lower prices to arrive at a minimum accessible before or after tax return.
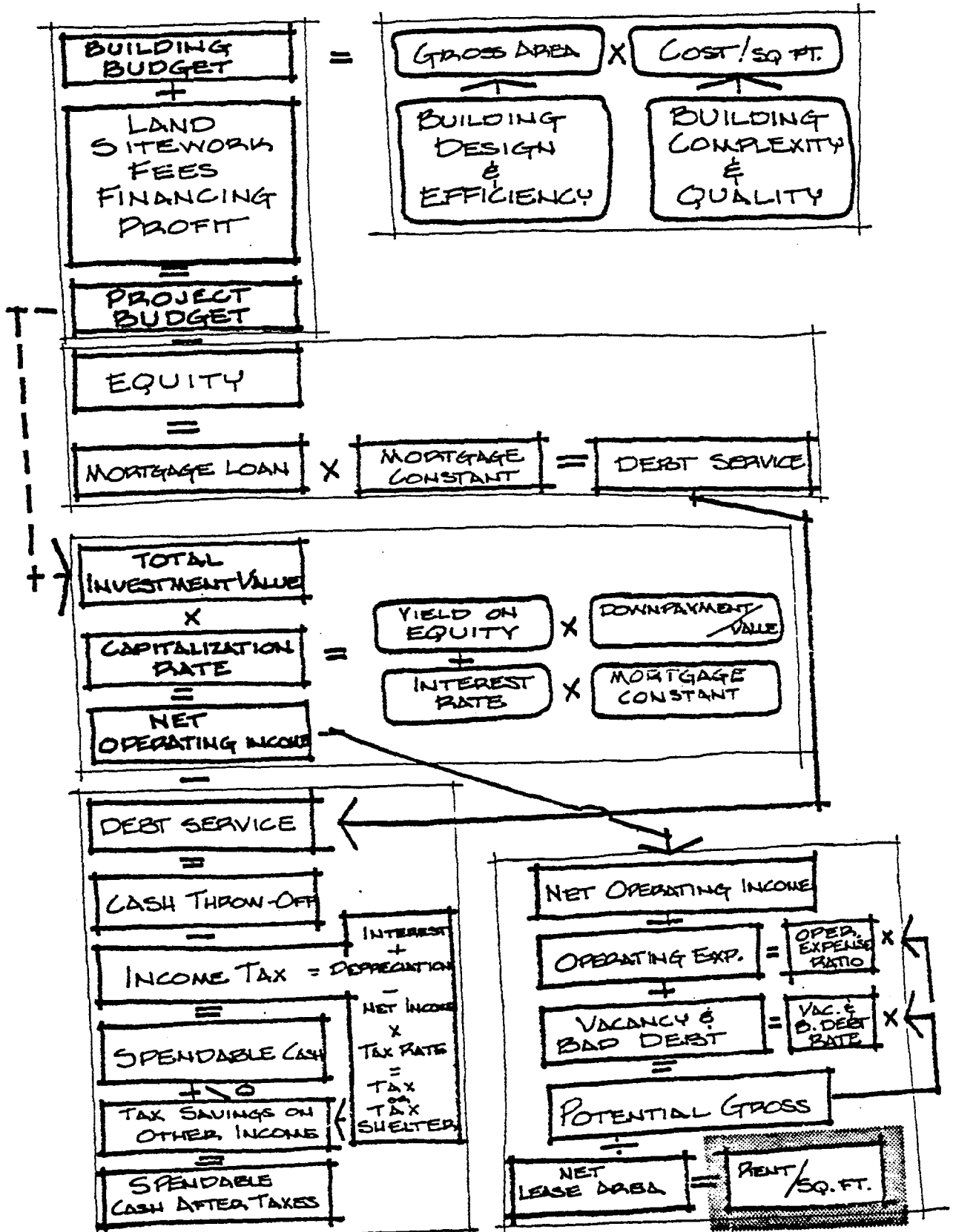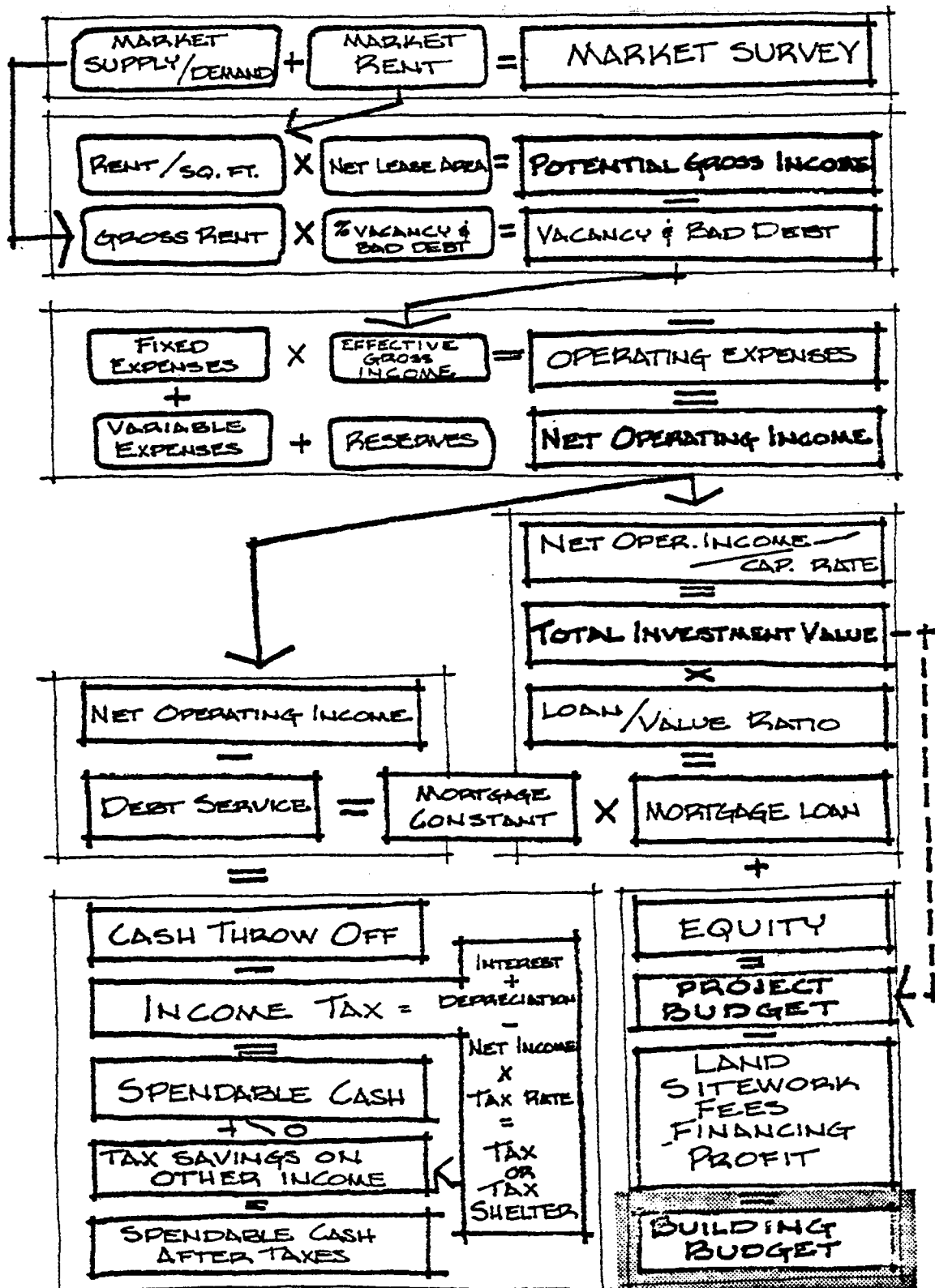   3. Establish the difference between cost to replace ala the assessor and maximum price to permit satisfactory return as a measure of economic obsolescence which should have been factored into the assessors cost approach.

   E. There are computer approache which permit both valuation or determination of yield given the purchase price. Exhibit G will provide an example of appraisal of a hotel in an overbuilt hotel market using a program called IMV, developed for EDUCARE by Thomas Prince.

   F. Two recent significant court cases relating value to after tax income or cash flow:

      1. In Michigan the court defined conomic income to be cash income and accepted a cash flow valuation. C.A.F. INVESTMENT COMPANY, a Michigan partnership, Plaintiff-Appellant, v. MICHIGAN STATE TAX COMMISSION and Township of Saginaw, Defendants-Appellees. No. 6. Supreme Court of Michigan. Sept. 6, 1974. 533 Michigan. 221 NORTH WESTER REPORTER, 2d SERIES

FRONT DOOR APPROACH

MARKET SUPPLY/DEMAND + MARKET RENT = MARKET SURVEY

RENT/SQ. FT. × NET LEASE AREA = POTENTIAL GROSS INCOME

GROSS RENT × % VACANCY & BAD DEBT = VACANCY & BAD DEBT

FIXED EXPENSES × EFFECTIVE GROSS INCOME = OPERATING EXPENSES

VARIABLE EXPENSES + RESERVES = NET OPERATING INCOME

$$\frac{\text{NET OPER. INCOME}}{\text{CAP. RATE}}$$

= TOTAL INVESTMENT VALUE

× LOAN/VALUE RATIO

NET OPERATING INCOME

DEBT SERVICE = MORTGAGE CONSTANT × MORTGAGE LOAN

CASH THROW OFF

INCOME TAX = INTEREST + DEPRECIATION − NET INCOME × TAX RATE = TAX OR TAX SHELTER

SPENDABLE CASH

TAX SAVINGS ON OTHER INCOME

SPENDABLE CASH AFTER TAXES

EQUITY

PROJECT BUDGET

LAND
SITEWORK
FEES
FINANCING
PROFIT

BUILDING BUDGET

BACK DOOR APPROACH

$4,653,662. = 150,000 SQ.FT. × $31.0244

LAND:
787,500.
SITEWORK:
210,000.
FEES:
315,000.
FINANCING:
420,000. ($2,362,500)
PROFIT:
630,000.

7,016,162.

1,403,232.

5,612,930. × 9.5% INT. 10.09 = 566,359

7,016,162.
× 10.47% = | 12.0% × 20% |
             | 10.09% × 80% |
= 734,592.

566,359.
=
168,233.
=
NONE
=
168,233
+/0
51,121.
==
$219,354 = 15.63% YIELD ON EQUITY

533,228
+ 99,123.
734,592
-102,244.
× .50
-51,121.

734,592.
+
587,674. = .40 ×
+
146,918. = .10 ×
=
$1,469,184.
÷
150,000 SQ.FT. = $9.7946

FRONT DOOR APPROACH

$8.50 sq.ft.

$8.50 X 150,000 sq.ft. = $1,275,000.

1,275,000. X 10.0% = 127,500.

20.0% X 1,147,500. = 459,000

15.0% + 5.0% = 688,500.

10.47% EQUITY: 12% x 20% MORTGAGE 10.09% x 80%

6,575,931.

X

$688,500.

80.0%

530,809 = 10.09% X $5,260,745.

157,691.

NONE

157,691.

49,492.

$207,183. = 15.75% YIELD ON EQUITY

499,770.
+ 89,746
− 688,500
−98,984
x .50
$ 49,492

1,315,186.

6,575,931.

LAND:
787,500.
SITEWORK:
210,000.
FEES:
315,000.
FINANCING
PROFIT:
630,000.

$4,213,431.

($28.0895/sq ft.)

BACK DOOR APPROACH

Howard Johnson – DT Madison
Schedule of Projected Income and Expenses
For the Years Commencing May 1, 1974-78

Period	1974-75	1975-76	1976-77	1977-78	1978-79
Occupancy (163 rooms)	68%	70%	71%	72%	73%
Revenue:					
Available Rooms	59,463	59,400	59,400	59,400	59,400
Occupied Rooms	40,463	41,580	42,174	42,768	43,362
Rate Average[1]	18.89	19.00	19.50	20.00	20.50
Room Revenue	764,450	790,020	822,390	855,360	888,920
Public Room Rental[2]	7,116	7,200	7,200	7,200	7,200
Restaurant Rental[3]	31,500	31,500	31,500	31,500	31,500
Telephone[4]	(14,345)	(14,795)	(15,375)	(15,960)	(16,560)
Other Income[5]	6,113	6,165	6,405	6,650	6,900
Room Service Commissions[6]	1,635	1,850	1,920	1,995	2,070
Total Revenue	796,468	821,940	854,040	886,745	920,030
Operating Expenses:					
Payroll[7]	166,180	164,390	170,808	177,349	184,006
Housekeeping[8]	33,160	33,700	34,200	34,700	35,200
Adm. & Gen.[9]	83,150	85,890	89,250	92,665	96,145
Adv. & Promotion[10]	82,250	82,735	84,704	86,352	88,030
Utilities[11]	66,500	76,030	79,000	82,025	85,100
Repairs & Maintenance[12]	16,550	13,500	13,500	13,500	13,500
Total Operating Expenses	447,790	456,245	471,462	486,591	501,981
House Profit	348,678	365,695	382,578	400,154	418,049
Misc. Interest Income	720	720	720	720	720
Gross Profit	349,398	366,415	383,298	400,874	418,769
Less: Insurance	10,314	9,926	9,926	9,926	9,926
Land Rental[13]	7,680	7,680	7,680	7,680	7,680
Income to Furnishing[14]	64,000	64,000	64,000	64,000	64,000
Income before RE Taxes and Debt Service to Land and Buildings	267,404	284,809	301,692	319,268	337,163

EXHIBIT G

PROJECT IDENTIFICATION

Maximum 70 characters per line

100 ___Howard Johnson Motor Inn___

101 ___Johnson and Marion Street___

102 ___Madison, Wis - May, 1974___

TYPE OF ANALYSIS

	Code	Value
Investment Market Value:		
Based on specific after-tax yield	A	After-tax yield
Based on specific before-tax yield	B	Before-tax yield
Project Feasibility:	I	Market value or cost

Code   Value

103 ___B___ , ___.27___

.314   Second Run.
.20

RESALE VALUE

Alternatives	Code	Value
Reversionary	RV	$ Amount
Mortgage Balance	MB	Additional $ (±) if any
Appreciation/Depreciation	AD	$ or % (neg = depr.)

Code	Value	Resale Year (1 to 25 yrs.)	Sales Commission (% or $)
104 ___AD___ , ___0___ , ___5___ , ___.02___

NET INCOME

Last value entered is assumed for balance of project life.

1	2	3	4	5
105 | 267404 | 284809 | 301692 | 319268 | 337163 |

6	7	8	9	10
106 | | | | | |

11	12	13	14	15
107 | | | | | |

16	17	18	19	20
108 | | | | | |

21	22	23	24	25
109 | | | | | |

FINANCING

Mortgage Code:

Standard Mortgage:

1 - Mortgage value is a $ amount or a % of IMV. (Enter $ or % in Mortgage Amount Column).

The following two options cannot be used simultaneously:

2 - Mortgage value is the difference between IMV and the sum of known amounts for equity cash and other mortgages. (Enter the $ amount for cash equity in the Mortgage Amount column).

3 - Mortgage amount is the difference between a total mortgage ratio and the sum of other mortgages of known amounts. (Enter the total mortgage ratio (%) in the Mortgage Amount column).

NOTE: Place a minus sign (-) in front of the Mortgage Code for any mortgage (except those for refinancing) that should not be included in the calculation of the <u>original equity cash</u> i.e. a future mortgage for capital improvement.

Refinancing:

4 - Refinancing value is the balance remaining on the loans to be refinanced plus or minus a $ amount. (Enter the additional $ amount in the Mortgage Amount column).

5 - Refinancing value is a specific $ amount. (Enter the $ amount in the Mortgage Amount column).

In using Mortgage Codes 4 and 5, loans to be refinanced are indicated by entering their number (the number that corresponds to their line position relative to the other loans) immediately after refinancing Mortgage Code number --- i.e. if using refinancing code #4 to refinance loans #1,2,4 and 5 enter 41245 in the Mortgage Code column. If the resulting refinancing value is greater or less than loans balances being refinanced, that difference automatically becomes an adjustment against equity and is reflected in both the before-tax and after-tax cashflows.

Term and Annual Constant:

For each mortgage <u>either</u> the Term <u>or</u> the Annual Constant must be provided except in the case of <u>balloon</u> or <u>interest only mortgages</u> for which <u>both</u> must be provided. Enter a zero for the Term or the Annual Constant, whichever is unknown.

	Mortgage Code	Mortgage Amount($ or %)	Interest Rate	Term (Months)	Annual Constant	Start Month (1 is std.,no neg.)
122	1	.75	.105	240	0	1
123			.095			
124						
125						
126						
127						
128						
129						
130						
131						

OWNERSHIP FORM

Ownership code:

Corp.   Non-Corp.

1   5   Operating losses applied to other investments.
2   6   Operating losses carried back/carried forward.
3   7   Taxable income offset by losses from other investments.
4   Corporation set up solely for this investment.

Ownership Code	Federal tax rate (.48 is std. for corp.)	State tax rate	State capital gains rate
110	2,	.35,	O,	O

DEPRECIABLE CAPITAL ASSETS

Excess Depreciation Recapture Code:

1 - No recapture
2 - FHA 221 (d) (3) or 236 before 1975 (After 20 months declines 1% per month)
3 - All other residential rentals (After 100 months declines 1% per month)
4 - All non-residential - 100% recapture

Land Value:

Use only when land value is known and asset amounts are entered as a % of total depreciable value. Land value is automatically subtracted from total project cost or value before Asset Value % is applied.

Excess Depreciation Recapture Code	Land Value ($) (0 if not known)
111	4,	O

Depreciation Method:

1 - Straight line   4 - 200%
2 - 125%   5 - SOYD
3 - 150%

	Asset Value ($ or %)	Depreciation Method	Life (yrs.)	Salvage Value ($ or %)	Starting Month (1 is std.,no neg.)
112	.90,	1,	35,	.20,	1
113	,	,	,	,	
114	,	,	,	,	
115	,	,	,	,	
116	,	,	,	,	
117	,	,	,	,	
118	,	,	,	,	
119	,	,	,	,	
120	,	,	,	,	
121	,	,	,	,	

IMV   15:02CST   10/27/75

WHAT IS YOUR DATA FILE NAME?MAX1

IMV   : $ 1877227
AFTER TAX YIELD(IRR) : 22.47%
BEFORE TAX YIELD(IRR): 31.40%
DO YOU WANT DETAIL (0=NO,1=YES)?1

INVESTMENT MARKET VALUE ANALYSIS   15:03CST 10/27/75

HOWARD JOHNSON MOTOR INN
JOHNSON AND MARION STREET
MADISON, WIS.------MAY,1974

****
AFTER TAX YIELD(IRR) : 22.47%
BEFORE TAX YIELD(IRR): 31.40%

INVESTMENT MARKET VALUE: $ 1877227
****

FINANCING:

    MORTGAGES:
    1.   1ST MONTH   9.500% 20 YRS 0 MONS $ 1407920

    EQUITY CASH: $ 469307

RESALE OF INVESTMENT IN 5 YEARS:

              ESTIMATED RESALE PRICE $ 1877227

              LESS: MORTGAGE BAL.   1256790
                    SALES COMMISSION   37545

              CASH REVERSION BEFORE TAXES $ 582892

              LESS: CAPITAL GAINS TAX(STD.)   42236
                    TAX ON RECAPTURED DEPR.   0
                    TAX PREFERENCE TAX   0

              CASH REVERSION AFTER TAXES $ 540656

YR	NET INCOME	MORTGAGE INTEREST	BOOK DEPR.	TAXABLE INCOME	INCOME TAX	CASH FLOW BEFORE TAX	CASH FLOW AFTER TAX
1	267404	132691	48271	86442	30254	109921	79667
2	284809	130231	48271	106307	37207	127326	90119
3	301692	127526	48271	125895	44063	144209	100146
4	319268	124553	48271	146444	51255	161785	110530
5	337163	121284	48271	167608	58662	179680	121018

```
100 HOWARD JOHNSON MOTOR INN
101 JOHNSON AND MARION STREET
102 MADISON, WIS.------MAY,1974
103 B,.314
104 AD,0,5,.02
105 267404,284809,301692,319268,337163
110 5,.35,0,0
111 4,0
112 .90,1,35,.20,1
122 1,.75,.095,240,0,1
```

IMV   15:12CST   10/27/75

WHAT IS YOUR DATA FILE NAME?MAX2

IMV   : $ 1918142
AFTER TAX YIELD(IRR) : 14.80%
BEFORE TAX YIELD(IRR): 20.00%
DO YOU WANT DETAIL (0=NO,1=YES)?1

INVESTMENT MARKET VALUE ANALYSIS   15:12CST 10/27/75

HOWARD JOHNSON MOTOR INN
JOHNSON AND MARION STREET
MADISON, WIS.------MAY,1974

****
AFTER TAX YIELD(IRR) : 14.80%
BEFORE TAX YIELD(IRR): 20.00%

INVESTMENT MARKET VALUE: $ 1918142
****

FINANCING:

   MORTGAGES:
   1.   1ST MONTH   9.500% 20 YRS 0 MONS $ 1438606

   EQUITY CASH: $ .479536

RESALE OF INVESTMENT IN 5 YEARS:

              ESTIMATED RESALE PRICE $ 1918142

              LESS: MORTGAGE BAL.   1284178
                    SALES COMMISSION   38363

              CASH REVERSION BEFORE TAXES $ 595601

              LESS: CAPITAL GAINS TAX(STD.)   43157
                    TAX ON RECAPTURED DEPR.   0
                    TAX PREFERENCE TAX   1150

              CASH REVERSION AFTER TAXES $ 551294

YR	NET INCOME	MORTGAGE INTEREST	BOOK DEPR.	TAXABLE INCOME	INCOME TAX	CASH FLOW BEFORE TAX	CASH FLOW AFTER TAX
1	213903	135583	49323	28997	10148	52987	42839
2	231308	133069	49323	48916	17120	70392	53272
3	248191	130305	49323	68563	23997	87275	63278
4	265767	127267	49323	89177	31211	104851	73640
5	283662	123928	49323	110411	38643	122746	84103

```
100 HOWARD JOHNSON MOTOR INN
101 JOHNSON AND MARION STREET
102 MADISON, WIS.------MAY,1974
103 5,.20
104 AD,0,5,.02
105 213903,231308,248191,265767,283662
110 5,.35,0,0
111 4,0
112 .90,1,35,.20,1
122 1,.75,.095,240,0,1
```

2. In Los Angeles in DTM Investment Company, et al, plaintiffs vs Palm-Larrabee, et al, defendents (Ring Brothers Development Co.) The Superior Court ruled in July 26, 1974 that after tax investment value was acceptable and accurate for income property valuation and that it was an acceptable procedure to value limited partnership interest as opposed to valuing the entire property. In that case, the developer had sued for partition and was attempting to buy out the limited partners at an apparently advantageous price.

G. Computer based income valuation models also provide two useful approaches to establishing a range of alternative prices or alternative assumptions about the marketplace.

1. Sensitivity models will reflect the variations which must occur in one or more assumptions in order to affect some other variables such as total value, cash throwoff, etc. One example is DAP, a program on EDUCARE developed by John Nabors. (See Exhibit H)

2. At the universities they are developing density models or probability models. These models will produce a hundred alternative net incomes and reversion prices for a given project given a certain range of variance possible for each critical assumption. The product is a frequency distribution value of alternative values and a standard error of the estimate.

JOHN H. NABORS, JR.

EXHIBIT H

SENSITIVITY TABLE

150,000 SQ FT BUILDING - 6.333 AC SITE

CONSTRUCTION COST OF $ 30 PER SQ FT

FIXED PARAMETERS   PAGE   3 OF 4

SITE :	275865 SQUARE FEET	DATE 8-28-1974
BUILDING :	150000 SQUARE FEET	BLDG 6001
EFFICIENCY:	85.00 PCT OF GROSS	
LOAN RATIO:	80.00 PCT OF $ 7070897	
EQUITY :	$ 1414179	
FINANCING :	30 YEARS 9.50 PCT	
REVENUE :	$ 3.50 PER SQ FT	
VACANCY :	10.00 PCT OF LEASEABLE	
OTR INCOME:	$ 0 ANNUALLY	RUN 1
EXPENSES :	$ 2.50 PER SQ FT	

CONSTRUCTION AND LAND COST   7070897
CONSTRUCTION INTERIM RATE   12.000 PCT
CONSTRUCTION PERIOD   13 MONTHS
LAND INTERIM RATE IS 12.00 PCT

EFFECT OF UNIT CHANGES IN FIXED PARAMETERS

PARAMETER CHANGE	INCREASE IN CASH FLOW	EFFECT ON CONSTRUCTION
DECREASE CONSTRUCTION COST $ 100,000	$ 12015	$ -119078
DECREASE CONSTRUCTION $ 1.00 PER SQ FT	18023	-178617
INCREASE CONSTRUCTION PERIOD 1 MONTH	-6542	64836
DECREASE CONST AND LAND INTERIM 1 PCT	4805	-47625
INCREASE BUILDING EFFICIENCY 1 PCT	7725	
INCREASE RENTAL RATE $ .10 PER SQ FT	11475	
DECREASE VACANCY RATE 1 PCT	10838	
DECREASE OPERATING RATE $ .10 PER SQ FT	12750	
DECREASE PERMANENT RATE .25 PCT	12340	
DECREASE PERMANENT LOAN TERM BY 1 YEAR	-3541	
DECREASE PERMANENT LOAN TERM BY 5 YEARS	-22294	
DECREASE THE LOAN RATIO BY 5 PERCENT	35674	

EQUIVALENT EFFECTS TO YIELD
A $ 10000 INCREASE IN ANNUAL CASH FLOW

DECREASE CONSTRUCTION COST BY	$ .55	PER SQ FT
DECREASE CONSTRUCTION PERIOD BY	1.5	MONTHS
DECREASE INTERIM INTEREST BY	2.08	PCT
INCREASE BUILDING EFFICIENCY BY	1.29	PCT
INCREASE RENT RATE BY	$ .09	PER SQ FT
DECREASE VACANCY BY	.92	PCT
DECREASE EXPENSE RATE BY	$ .08	PER SQ FT
DECREASE PERMANENT RATE BY	.20	PCT
INCREASE PERMANENT LOAN TERM BY	2.2	YEARS
DECREASE LOAN RATIO BY	1.4	PERCENT

CASH FLOW PRO FORMA USING PARAMETER NORMS

150,000 SQ FT BUILDING - 6.333 AC SITE

CONSTRUCTION COST OF $ 30 PER SQ FT

DATE: 8/28/1974
BLDG: 6001
RUN :   1

GROSS SQUARE FEET IN BUILDING: 150000
BUILDING EFFICIENCY   :   85 PCT
NET LEASEABLE SQUARE FOOTAGE :   127500

LAND AND CONSTRUCTION COST : $ 7070897
LOAN TO COST RATIO   :   80.0 PCT
ORIGINAL LOAN AMOUNT   : $ 5656718

EQUITY REQUIREMENT   : $ 1414179

PERMANENT INTEREST RATE   :   9.50 PCT
TERM OF LOAN   30 YEARS

ANNUAL DEBT SERVICE   : $ 570777

                                                    ANNUAL DOLLARS

     GROSS INCOME :   127500 SQ FT AT $ 8.50   1083750
       LESS: VACANCY ALLOWANCE OF 10.00 PCT   108375

     GROSS EFFECTIVE INCOME   975375

     OPERATING EXPENSES: 127500 SQ FT AT $ 2.50   318750

     NET OPERATING INCOME   656625

     DEBT SERVICE (10.09 PCT CONSTANT)   570777

          PRO FORMA CASH FLOW   85848

          RETURN ON EQUITY   6.07 PERCENT