



State Tax Department
of West Virginia

Charleston 25305

FILED

1985 MAY 15 AM 9:45

OFFICE OF THE SECRETARY OF STATE

ARCH A. MOORE, JR.
GOVERNOR

May 15, 1985

The Honorable Ken Hechler
Secretary of State
State Capitol Building
Charleston, WV 25305

Dear Mr. Hechler:

On April 13, 1985, the West Virginia Legislature passed Senate Bill 399 and made it effective from passage.

This bill authorizes the State Tax Commissioner to amend and promulgate the legislative rules filed in the State Register on March 12, 1985, relating to the identification and appraisal of farmland subsequent to the base year of the statewide reappraisal for ad valorem property tax purposes. We have made the required amendments.

With this letter we submit for filing in the State Register the legislative rule promulgated in accordance with W. Va. Code §§ 64-2-11(1a)(1) [1985], 29A-3-13 (1983). As provided in W. Va. Code § 29A-3-13(b) (1983), this legislative rule takes effect on June 14, 1985, thirty (30) days after its filing in the State Register.

Very truly yours,

Michael E. Caryl
State Tax Commissioner

MEC/jms
Attachment

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

STATE TAX DEPARTMENT

Chapter 11-1A
Series IA
(1985)

Subject: Identification and Appraisal of Farmland Subsequent To
Base Year of Statewide Reappraisal.

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SENATE BILL NO. 663

(By Mr. R. Williams)

[Introduced March 25, 1985]

referred to the Committee on the Judiciary

A BILL to amend article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, by adding thereto a new section, designated section eleven (one-a) (one), relating to authorizing the state tax commissioner to promulgate legislative rules relating to identification and appraisal of farmland subsequent to the base year of statewide reappraisal; and amendments.

Be it enacted by the Legislature of West Virginia:

That article two, chapter sixty-four of the code of West Virginia, one thousand nine hundred thirty-one, as amended, be amended by adding thereto a new section, designated section eleven (one-a) (one) to read as follows:

ARTICLE 2. EXECUTIVE AGENCY AUTHORIZATION TO PROMULGATE LEGISLATIVE RULES.

§64-2-11(1a)(1). State tax commissioner.

The legislative rules filed in the state register on the

1 Page 10.3, Section 10.02(b), last sentence; following
2 the word "farmland" insert the words "and structures
3 situated thereon."

4 Page 10.8, Section 10.04(5)(B), last sentence; delete
5 the period and add "or the incapability to be adapted to
6 alternative uses."

7 Page 10.9, Section 10.04(6), first sentence; following
8 the words "land currently being used" insert the words "as
9 part of a farming operation,."

10 Page 10.9, Section 10.04(6), following the last
11 sentence; add the sentence "For the purposes of this
12 definition, 'contiguous tracts' are farmlands which are in
13 close proximity, but not necessarily adjacent: Provided,
14 That all such contiguous tracts are operated as part of the
15 same farm management plan."

16 Page 10.11, Section 10.04; delete the word "November"
17 and insert in lieu thereof the word "September." Delete the
18 period following the word "valuation" and add the words "for
19 the assessment year beginning July 1st of each year."

20 Page 10.11, Section 10.04, insert the following
21 subdivision; "(12) Application Form: The application form
22 required to be filed with the assessor on or before
23 September 1st of each year shall require certification that
24 the farm complies with criteria set forth in Section
25 10.05(c) of these regulations, and renewal applications from
26 year to year shall be sufficient upon statement certifying

1 "part of" insert the words "or appurtenant to."

2 Page 10.17, Section 10.05(b)(12)(B); following the words
3 "contiguous to" insert the words "or operated in common
4 with."

5 Page 10.18, Section 10.05(b)(12)(B); delete the
6 semicolons and the words "it was purchased at the same time
7 as the tract so used." Delete the period following the word
8 "purposes" and add the words "or any nonfarm use."

9 Page 10.19, Section 10.05(c)(2); following the words
10 "Provided, That no" delete the words "reason" and insert in
11 lieu thereof the words "individual event."

12 Page 10.20, Section 10.05(c)(4)(C); following the words
13 "(1,000) minimum production value" insert the words "or the
14 small farm five hundred dollars (\$500) minimum production
15 and sale."

16 Page 10.23, Section 10.05(d)(3)(B), third sentence;
17 following the word "If" insert the words "timber from".
18 Delete the period following the word "purpose" and add the
19 words "or is being converted to farm production uses."

20 Page 10.26, Section 10.05(f)(2); following the words
21 "appraisal manual²" insert the words "as filed in the
22 state register."

23 Page 10.28, Section 10.05(f)(3)(B)(1); following the
24 words "or more of the" insert the word "usual".

25 Page 10.28, Section 10.05(f)(3)(B)(2); following the
26 words "(50%) of the" insert the word "usual".



State Tax Department
of West Virginia

ARCH A. MOORE, JR.
GOVERNOR

Charleston 25305

Promulgation History Abstract

Rule Title: Identification and Appraisal of Farmland Subsequent to
Base Year of Statewide Reappraisal

Rule Type: Legislative Rule

Filed Notice for Public Hearing: November 12, 1984

Public Hearing Held: December 6 and 7, 1984

Filed Agency Approved Rule: March 12, 1985

Filed Agency Approved Rule with LRMRC: March 12, 1985

Action by LRMRC: Transmitted to Judiciary Committees

Legislative Action: Approved with amendments

Final Rule Filed with Secretary of State: May 15, 1985

Effective Date: June 14, 1985


Michael E. Caryl
Tax Commissioner

Entered

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

STATE TAX DEPARTMENT

Chapter 11-1A
Series 1A
(1985)

Subject: Identification and Appraisal of Farmland and
of Structures Situated Thereon Subsequent to
Base Year of Statewide Reappraisal.

Filed in State Register
May 15, 1985

APPROVED

FILED

WEST VIRGINIA ADMINISTRATIVE REGULATIONS 1505 MAY 15 AM 9:45

STATE TAX DEPARTMENT

OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

LEGISLATIVE

Chapter 11-1A
Series IA
(1985)

Subject: Identification and Appraisal of Farmland and Structures
Situated Thereon Subsequent To Base Year of Statewide
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WEST VIRGINIA LEGISLATIVE REGULATIONS

STATE TAX DEPARTMENT

Chapter 11-1A
Series IA
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*Title 110
Legis. Rule
State Tax Department
Series 1A*

Section 10.01

APPROVED

FARMLAND AND STRUCTURES SITUATED THEREON

VALUATION REGULATIONS

1 General
Section ~~10.~~ Valuation of Farmland and Structures
Situated Thereon.

~~10.01 General~~

(a) Type of Regulations. -- These regulations are a "legislative rule" as defined in W. Va. Code § 29A-1-2(d) (1982).

1.1 (b) Scope. -- These regulations clarify and implement state law relating to the appraisal of farmland and structures situated thereon. See W. Va. Code §§ 11-1A-3 and 11-1A-10 (1983).

1.2 (a) Authority. -- These regulations are issued under the authority of W. Va. Code § 11-1A-1 (1983).

1.3 (a) Filing Date. -- These regulations were filed as proposed regulations in the State Register on November 2, 1984. They were approved and refiled on March 12, 1985. *May 15, 1985*

1.4 (a) Effective Date. -- These proposed regulations will not take effect until after passage of an act of the Legislature authorizing their promulgation and they are refiled in the State Register pursuant to that act. *June 14, 1985*

(f) Citation. -- These regulations may be cited
as: W. Va. Leg. Reg. 11-1A, Series IA, § 10.____, page
____ (1985).

Section 2 Reserved
3 "
4 "
5 "
6 "
7 "
8 "
9 "

Section 10 Valuation Rule

10.02. Scope, Use of Rule and Construction

10.1 Scope. -- This rule prescribes how the appraised value of farmland and structures situated thereon will be determined during the statewide reappraisal mandated by the West Virginia Constitution, Article X, § 1b. This rule does not define what property is subject to assessment for ad valorem property taxes. Second, this rule does not prescribe how the appraised values determined under it will be adjusted on account of substitutions, accretions, improvements, additions, replacements, destructions, removals, casualties, acts of God, waste or any like occurrence.^{1e} Third, this rule does not describe how the phase-in of increased valuation, if any, resulting from the first statewide reappraisal will apply to real and personal property.^{2e} Fourth, this rule does not prescribe when

¹W. Va. Code § 11-1A-14(b) required the Tax Commissioner to propose a legislative rule covering this subject on or before September 1, 1984.

²W. Va. Code § 11-1A-22 relates to determination of the phase-in, application and limitations.

Section 10.02(a)

appraised values determined under it will first be used. *el*

10.2 ~~10.1~~ Use of Rule. -- This rule shall be followed by all persons valuing farmland and structures situated thereon in all counties in which such property is located or has a tax situs. This is necessary in order to meet the requirement in the West Virginia Constitution, Article X, §§ 1 and 1b, that ad valorem property taxation be equal and uniform throughout the State. Consequently, once this rule is finally promulgated, it shall be binding upon the Tax Commissioner and his employees, county assessors and their employees, county commissions, sitting as boards of equalization and review and as administrative appraisal review boards, and the Board of Public Works, until amended or repealed by the Tax Commissioner in the manner prescribed by law, or abrogated by statutory amendment, or decision of the West Virginia Supreme Court of Appeals. See W. Va. Code § 11-1A-24 (1983). The objective of these regulations is the appraisal of all real property

³W. Va. Code § 11-1A-14(c) prohibits use of the first statewide reappraisal until the Legislature directs their use. *el*

Section 10.02(c)

used as farmland and structures situated thereon at its value for farm purposes.

10.3 (e) Construction. -- This rule shall be applied, and interpreted in case of any ambiguity, in conformity with the West Virginia Constitution, Article X, §§ 1, 1a and 1b, and the several provisions of the West Virginia Code relating to the definition and determination of appraised value for purposes of ad valorem property taxation. In no event shall this rule be construed as requiring any property to be appraised in excess of its market value, or as subjecting to tax any property that is exempt from ad valorem property taxation under laws of the United States or this State.

^{10.4}
~~10.03.~~ Annual Updating.

This rule shall be reviewed annually and amended as necessary in accordance with the provisions and requirements of W. Va. Code § 29A-3-1 et seq., in order to properly reflect any future changes in statutory or case law, to clarify application(s) of existing laws or legislative regulations and to amend policies and procedures of the State Tax Department adopted by procedural or interpretive regulations to implement such laws or regulations. Whenever this rule requires the Tax Commissioner to annually determine factors such as capitalization rates, acreage classification, etc., notice of his determinations shall be given to the public by filing notice thereof in the State Register; and by sending a copy of the notice to each assessor.

10.6
~~10.04~~. Definitions.

The following definitions of terms as used in these regulations shall apply, unless the context clearly requires a different meaning.

A ~~(18)~~ Agriculture. -- The term "agriculture" shall mean cultivation of the soil, including the planting and harvesting of crops and the breeding and management of livestock. See W. Va. Code § 11-5-3. Unless the context requires a more limited meaning, the term "agriculture" includes "horticulture" and "grazing." In this context, the term "agriculture" shall mean the production of food, fiber, and ornamental woodland products, by means of cultivation, tillage of the soil and by the conduct of farm animal, livestock, dairy, apiary, equine or poultry husbandry, and the practice of horticulture, or any other plant or farm animal production and all farm practices related, usual or incidental thereto, including storage, packing, shipping and marketing, but not including any manufacturing, ~~milling or processing of such products~~ by persons other than the producer thereof. See W. Va. Code § 19-19-2(a). Agriculture shall

Section 10.04

not include commercial forestry or the growing of timber for commercial purposes: Provided, that the growing of Christmas trees, orchards and nursery stock shall not be deemed to be commercial forestry or the growing of timber for commercial purposes. See W. Va. Code § 11-1A-3(f) and (g), definitions "farm" and "farming purposes."

B (28) Agricultural. -- The term "agricultural" shall mean of or relating to agriculture.

C (38) Agricultural Land. -- The term "agricultural land" shall mean:

1. (A) Not less than five acres of land and the improvements thereupon, used or usable in the production of agricultural or farm products having an annual value of one thousand dollars (\$1,000), or more, by the conduct of the business of agriculture, as defined in paragraph (1) of this section. See W. Va. Code § 19-19-2(b), or

2. (B) Less than five (5) acres of land, part or all of which is used to produce agricultural or farm products for sale, if annual gross proceeds from such sales are five hundred dollars (\$500) or more.

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[Note: agricultural land is not automatically eligible for farm use appraisal. See Sections 10.06(c) and 10.06(d) for qualifications.]

B (4) Capitalization Rate. -- The term "capitalization rate" shall mean a rate used to convert an estimate of income to an estimate of market value.

E (5) Depreciation. -- The term "depreciation" means the loss in value of an object, relative to its replacement cost, and is divided into three types: physical deterioration; functional obsolescence; and economic obsolescence.

1. (A) Economic obsolescence. -- A loss in value of a property arising from "outside forces" such as changes in use, legislation that restricts or impairs property rights, or changes in supply and demand relationships.

2. (B) Functional obsolescence. -- The loss of value due to factors such as excess capacity, changes in technology, flow of material, seasonal use, part-time use or other like factors. The inability to perform adequately the functions for which an item was designed or the incapability to be adapted to alternative uses.

Section 10.04

3 (c) Physical deterioration. -- A loss in value due to wear and tear.

4 (d) Replacement cost. -- The cost of constructing a building or improvement having the same utility, but using modern materials, design and workmanship.

F (e) Farm. -- The term "farm" shall mean a tract or contiguous tracts of land currently being used as part of a farming operation, primarily for farming purposes, whether by the owner thereof, or by a tenant, and which has been so used at least seasonally during the year immediately preceding the then current tax year (unless it qualifies for one of the exceptions in § 10.03(c) of these regulations), but shall not include lands used primarily in commercial forestry or the growing of timber for commercial purposes: Provided, that the growing of Christmas trees or orchards and nursery stock shall not be deemed to be commercial forestry or the growing of timber for commercial purposes. See W. Va. Code § 11-1A-3(f) and (g) defining "farm" and "farming purposes" and § 11-4-3, defining "farm." For the purposes of this definition, "contiguous tracts" are farmlands

Section 10.04

which are in close proximity, but not necessarily adjacent: Provided, That all such contiguous tracts are operated as part of the same farm management plan.

G (S) Farm Animal. -- The term "farm animal" shall mean and include any animal commonly found on a farm except that wildlife shall not be considered or deemed to be a farm animal unless intentionally and legally nurtured or raised and is intended for farm work, consumption as food or other commercial activity. This would include, but not be limited to, catfish, rabbits, buffalo, mink, foxes and otters.

H (S) Farm Buildings. -- The term "farm buildings" shall mean structures which directly contribute to the operation of the farm, and shall include tenant houses and quarters furnished farm employees without rent as part of the terms of their employment.

I (S) Farm Purposes. -- The term "farm purposes" shall mean the utilization of land to produce for sale, consumption or use, any agricultural products, including, but not limited to, livestock, poultry, fruit, vegetables, grains or hays or any of the products derived from any of the foregoing,

Section 10.04

tobacco, syrups, honey, and any and all horticultural and nursery stock, Christmas trees, all sizes of ornamental trees, sod, seed and any and all similar commodities or products including farm wood lots and the parts of a farm which are lands lying fallow or in timber or in wastelands. See W. Va. Code § 11-1A-3(g).

J ~~(10)~~ Farm Rent. -- The term "farm rent" shall mean the consideration paid by a lessee to lease land used for farming purposes. Such consideration may be in cash or in kind, or a combination thereof.

K ~~(11)~~ Farm Use Application. -- The term "farm use application" means the application form designed by the Tax Commissioner which the land owner must complete and file with the county assessor on or before September 1st of each year in order to claim and obtain farm use valuation for the assessment year beginning July 1st of each year.

L ~~(12)~~ Application Form. -- The application form required to be filed with the assessor on or before September 1st of each year shall require certification that the farm complies with criteria set forth in Section 10.03(c) of these regulations, and renewal applications from year to year shall be sufficient upon statement certifying

that no change has been made in the use of farm property which would disqualify "farm use" classification for assessment purposes.

M (13) Farm Use Valuation. -- The term "farm use valuation" shall mean a value estimated by capitalizing the fair and reasonable income which farm property might be expected to earn in the locality where situated, if rented.

N (14) Filing Date. -- The term "filing date" shall mean the date by which the annual application for farm use must be received by the assessor of the county wherein the property is situated. This application for farm use must be annually filed and received by the assessor on or before September 1st following the July 1st assessment date.

O (15) Grazing. -- The term "grazing" shall mean the use of land for pasturage. See W. Va. Code § 11-5-3.

P (16) Horticulture. -- The term "horticulture" shall mean plant production of every character except forestry and plants not legally grown. See W. Va. Code § 11-5-3.

Q (17) Horticultural. -- The term "horticultural" shall mean of or relating to horticulture.

Section 10.04

R (18) Management Rate. -- The term "management rate" shall mean a rate reflecting a return to an investor for the management of similar investment portfolios.

S (19) Natural Resource. -- The term "natural resource" shall mean and include the coal, oil, gas, ore, limestone, fireclay or other mineral or mineral substance(s) in and under the surface of the land, and the timber thereon.

T (20) Non-Liquidity Rate. -- The term "non-liquidity rate" shall mean a rate reflecting a return to an investor representing the loss of interest on an investment arising from the time required to sell the investment.

V (21) Normal Gross Rent. -- The term "normal gross rent" shall mean the rental amount which a property would attain in the open market at the time of appraisal, whether it is higher, lower or the same as the actual contract rent.

V (22) Nursery. -- The term "nursery" shall mean and include any ground or premises on or in which plants are grown for sale or distribution and transplanting. This may include any place where nursery stock is being treated, packed or stored in preparation for sale, if such place is leased to or owned by the same person (including a firm

Section 10.04

or corporation) who owns the plants while they are growing in the same nursery.

W (23) Nursery Stock. -- The term "nursery stock" shall mean all trees, shrubs and woody vines, including ornamentals, bush fruits, grapevines, fruit trees and nut trees, whether cultivated, native or wild, and all buds, grafts, scions, fruit pits and cuttings from such plants. It also shall mean sod, including sod plugs and sod producing plants, and herbaceous plants, including strawberry plants, narcissus plants and narcissus bulbs. Florists' or greenhouse plants for inside culture or use shall not be considered nursery stock, except that all woody plants, whether greenhouse or field grown, if for outside planting, are hereby defined as "nursery stock." See W. Va. Code § 19-12-2(g). No plant shall be considered nursery stock unless it is situated in an actual "nursery," as defined in paragraph (21) of this Section.

X (24) Plant and Plant Products. -- The terms "plant" and "plant products" shall mean trees, shrubs, vines; forage, fiber, cereal plants and all other plants; cuttings, grafts, scions, buds and all other parts of plants; and fruit, vege-

tables, roots, bulbs, seeds and all other parts of plants and plant products. See W. Va. Code.

§ 19-12-2(i).

Y (25) Property Tax Component. -- The term "property tax component" shall mean a rate reflecting a provision for returning to an investor a sum of money equal to property taxes paid over the life of the investment.

Z (26) Risk Rate. -- The term "risk rate" shall mean a rate reflecting a return to an investor necessary to attract capital to an investment containing a possible loss of principal or interest, or both.

AA (27) Safe Rate. -- The term "safe rate" shall mean a rate reflecting a return to an investor on an investment which has little, if any, likelihood of loss of principal or anticipated return on investment.

BB (28) Wood Lot. -- The term "wood lot" shall mean that portion of a farm in timber but shall not include land used primarily for the growing of timber for commercial purposes except that Christmas trees, nursery stock and woodland products, such as nuts or fruits harvested for human consumption, shall be considered farm products and

Section 10.04

not timber products.

u (28) Woodland Products. -- The term "woodland products" shall mean cut trees, firewood, posts, rails, splints, logs, limbs and similar wood products and hickory nuts, walnuts, beechnuts, butternuts and similar edible nuts or fruits of woody plants and maple sap used in making syrup and maple sugar.

10.6
~~10.05~~ Valuation Procedure.

~~(a)~~ General. -- This rule prescribes valuation methodologies to be employed in the appraisal of farm real estate (including the natural resources present) and the method of assessment of lands or minerals owned by domestic or foreign corporations where the surface land is used for farm purposes: Provided, That the true and actual value of all farms used, occupied and cultivated by their owners or bona fide tenants shall be arrived at according to the fair and reasonable value of the property for the purpose for which it is actually used regardless of what the value of the property would be if used for some other purpose; and that the true and actual value shall be arrived at by giving consideration to the fair and reasonable income which the same might be expected to earn under normal conditions in the locality wherein situated, if rented: Provided, however, That nothing herein shall alter the method of assessment of lands or minerals owned by domestic or foreign corporation.

(6) ~~(b)~~ Criteria. -- The following factors shall be indicative of but not conclusive in determining whether lands which appear to be actively devoted to farm or agricultural use are in fact bona fide farms:

Section 10.05(b)

- (1) Present and past use of the land, in particular, the use during the year immediately preceding the then current tax year.
- (2) Participation in governmental or private agricultural programs such as soil conservation, farmland preservation or federal farm lending agencies.
- (3) Extent of production for sale of plants, livestock and food for human and animal consumption.
- (4) Size of the parcel or parcels farmed. In particular, whether such size is economically compatible with the agricultural use to which the the land is purportedly devoted.
- (5) The amount of acreage in crops, pasture and woodland.
- (6) The amount of livestock or poultry maintained thereon.
- (7) Whether or not the farmer practices "custom farming" on the land in question.
- (8) The inventory of farm equipment and the condition thereof.
- (9) The number, type, utility and condition of farm buildings.

Section 10.05(c)

(10) The ratio of farm or agricultural use of the land to other uses of the land.

(11) The occurrence of multiple sales for nonfarm uses of parcels out of a tract. The marketing of land as evidenced by such sales shall be strong, but not conclusive, evidence that the property is not a bona fide farm.

(12) Woodland shall be considered land of a bona fide farm only if:

(A) It is part of or appurtenant to a tract of land which is determined by the Tax Commissioner to be actively devoted to farm or agricultural use; or

(B) It is contiguous to or operated in common a tract of land in the same ownership which has been determined by the Tax Commissioner to be actively devoted to agricultural use, and such woodland is not used primarily in commercial forestry or the growing of timber for commercial purposes or any nonfarm use.

Q (S) Qualification. -- Qualifying farmland and the structures situated thereon shall be subject to farm use valuation, with primary consideration being given to the income which the property might be expected to earn, in the locality wherein situated, if rented.

Section 10.05(c)

However, for land to qualify for farm use valuation, all of the following criteria must be met:

- (1) The property must be classified as a "farm," as defined in Section 10.0⁵~~4~~ of these regulations.
- (2) The property must be agricultural land used for "farm purposes," as defined in Section 10.0⁵~~4~~ of these regulations, at least seasonally during the year immediately preceding the then current tax year, except that property which because of a change in management, natural disaster or other good reason was temporarily out of production, or temporarily operated at less than full production, and did not produce a sufficient crop in the immediately preceding year will nevertheless qualify if it otherwise meets the requirements: Provided, That no individual event shall be considered adequate to allow exemption under this paragraph for more than two consecutive years. See W. Va. Code §§ 11-1A-3(f) and 11-1A-3(g).
- (3) The property must, in total, comprise not less than five (5) acres of land, except that property comprising less than five (5) acres, which otherwise qualifies, may nevertheless qualify if it meets the income test set forth in Section 10.0²⁶~~5~~(c)(4)(B), (C), or (D) below.

Section 10.05(c)

6

(4) Unless excepted under Section 10.05⁶(c)(2),
the land must be utilized to produce as follows:

(A) General rule. -- The farm must produce for sale, consumption or use agricultural products (as listed in the definition of Farm Purposes in Section 10.04⁶ of these regulations) having a fair market value to the producer of at least one thousand dollars (\$1,000), including any government subsidies or payments for farm products and including the value of any products which may be given away: or

(B) Small farm rule. -- If the farm has a total area of less than five (5) acres, then it must produce and sell at least five hundred dollars (\$500) worth of agricultural products (as listed in the definition of Farm Purposes in Section 10.04⁶ of these regulations): or

(C) Biennial harvests. -- If the property would qualify for farm use appraisal, except that it produced little or no harvest in the preceding tax year because it is substantially being used to produce a farm product which does not normally produce a harvest

Section 10.05(c)

every year, this property shall be classified as farm property even during the years when there is no harvest and required to meet the one thousand dollars (\$1,000) minimum production value, or the small farm five hundred dollars (\$500) minimum production and sale, only during those years when there is an actual harvest: or

(D) Pre-production rule. -- If the property qualifies for farm use appraisal except for meeting the one thousand dollars (\$1,000) annual farm production test, then, if the failure is due to the farm product being in the growing or development stage (which by its very nature requires more than one year to mature) the property is eligible for farm use appraisal: Provided, That

(1) the crop must have been planted (in whole or in part) on or before the July first assessment day for which farm use value is sought; or

(2) the livestock must have been acquired (in whole or in part) on or before the July first assessment day for which farm use value is sought.

Section 10.05(c)

Additionally, a farm development plan must be attached to the application, outlining by year the plan for development of a productive farm. Within ten (10) years thereafter (including the first year for which farm use value is sought), the value of farm production must reach an annual wholesale value of one thousand dollars (\$1,000) or more. Otherwise, farm use value is lost for the next tax year.

(5) The annual wholesale value of such farm commodities or products must be fifty percent (50%) or more of the annual gross income derived from surface land use of the property.

(6) The application for farm use value must be submitted as required in Section 10.08 of these regulations, and explain the basis for the applicant's estimate of value of farm commodities or products produced from the property for which farm use is sought.

(7) Farm property producing income from natural resources, mineral income, or property from which the mineral estate has been severed, shall be treated in accordance with the provisions of Section 10.05²⁶(f)(3) of these regulations.

Section 10.05(d)

~~(d)~~ (d) Disqualifications. -- The following land is not eligible for farm land valuation:

(1) Land not used at least seasonally during the year immediately preceding the current year for farming purposes, unless it qualifies under Section 10.05(c)(2) of these regulations as land temporarily out of production or under Section 10.05(c)(4)(C) as land producing crops which do not produce an annual harvest or under Section 10.05(c)(4)(D) as land being developed to produce agricultural products.

(2) Land consisting of a single tract of less than five (5) acres, [or contiguous tracts of land, the combined acreage of which is less than five (5) acres] unless it qualifies as a small farm under Section 10.05(c)(4)(B).

(3)

(A) Land used primarily in commercial forestry or the growing of timber for commercial purposes except that Christmas trees, ornamental plants and woodland products grown for human consumption are farm products and not timber or forestry products.

(B) Occasional casual sales of other wood or woodland products in relatively small quanti-

Section 10.05(d)

ties, or sales of wood or woodland products incidental to, and a normal part of, the operation of a farm shall not constitute commercial forestry or the sale of timber for commercial purposes. Such sales may be counted toward the annual determination of the value of farm commodities on products under Section 10.05⁸⁶(c)(4) of these regulations. If timber from a portion of a farm is sold for commercial timber, and the proceeds from the sale are greater than the value of the agricultural crops produced by the land, the timber area (only) shall be appraised as commercial timberland until and unless it is used for some other purpose or is being converted to farm production uses.

Example. -- Sales by orchardists or Christmas tree growers of trees, logs, limbs or similar wood products as a result of the clearing of old trees and planting of new trees in accordance with good farming practice, or as a result of periodic pruning or the trimming or removal of damaged or deceased trees is incidental to, and a normal part of, the operation of orchards, and shall not constitute commercial forestry or the sale of timber

Section 10.05(e)

for commercial purposes.

(4) Land owned by a corporation that is not primarily engaged in the business of farming. In the event that the controlling stock interest in such corporation is owned by another corporation, that corporation owning the controlling interest must also be primarily engaged in the business of farming.

(e) Method. -- Real property that is used primarily for farming purposes under these regulations shall be valued by giving primary consideration to the fair and reasonable income which the property might be expected to earn in the locality, where situated, if rented. To accomplish this valuation the following procedures shall be employed.

(1) Rental information on a cash or share basis for pasture, tillable and wood lot land shall be collected and verified by the Tax Commissioner, or his agent in each county. Provided, That where rental information is not available or is deemed insufficient by the Tax Commissioner in any given locale the rental information from similar neighboring locales, may be considered in order to determine the rent attributable to each classified acre of farmland. If that information is also

Section 10.05(f)

deemed by the Commissioner to be insufficient, he may use the best rental information available to him.

(2) Rental rates shall be established annually by the Tax Commissioner after a review of identifiable, willing seller-willing buyer arms-length farmland leases that have occurred in the State of West Virginia) during the eight (8) years (W. Va. Code § 11-1A-3) prior to the appraisal date and through review of any other appropriate information. The review shall give primary emphasis to the information and leases transacted during the most recent years.

(f) Valuation.

(1) Farmland. -- Farmland shall be classified based upon its actual farm use in the categories illustrated in Appendix 1. Rental amounts by class shall be assigned to each class of land on a per acre basis. The per acre rental value shall be capitalized to yield an appraised value per acre. The appraised value per acre thus determined shall be multiplied by the number of farm surface acres to yield the appraised value of farmland. This value shall be the farm use value as required by W. Va. Code § 11-1A-10.

Section 10.05(f)

(2) Farm Buildings. -- Rental value of farm buildings and other improvements on the farmland, shall be valued by determining the replacement cost of the building or structure by usual farm construction practices, and farm labor standards and subtracting therefrom depreciation.^{1e} Both of these determinations shall be made in accordance with the Tax Department's real property appraisal manual² as filed in the State Register in accordance with Chapter 29A of the Code of West Virginia, 1931, as amended, and as it relates to agricultural buildings and structures. One (1) acre of land shall be assigned to all buildings as

¹See Definition of depreciation in section 10.04 of these regulations.

²The Tax Commissioner was required by W. Va. Code § 11-1A-24 to develop appraisal manuals for all species of property, including farm property, for use in making the statewide reappraisal.

These appraisal manuals were reviewed by a subcommittee of six (6) assessors appointed by the West Virginia Appraisal Control and Review Commission and approved by the subcommittee in a report dated January 18, 1984. The West Virginia Appraisal Review and Control Commission accepted the subcommittee's report on January 18, 1984. This commission consists of sixteen citizen members appointed by the Governor, four each from the State's four Congressional Districts, from names submitted to him by the county commissions of the counties within each region. See W. Va. Code § 11-1A-27.

Section 10.05(f)

a unit situate on the property, regardless of the actual acreage occupied by such buildings and shall be appraised at its farm-use valuation based on the highest class of farmland present on the farm.

(3) Timber & Other Natural Resources. - Minerals, timber and other natural resources on or under farmland subject to farm use valuation will (except for woodlots) be valued based upon the following circumstances, except that timber managed in accordance with § 10.05⁶(d)(3)(B) shall be subject to farm use appraisal only.

(A) Fee estates which include natural resources, where income is not derived from such natural resource(s), shall be subject to farm use valuation only. Such natural resource(s) as may underlie or be present on such fee estates shall not be valued so long as income is not derived therefrom.

(B) Fee estates which include natural resources, where income is derived from such natural resource(s), shall be valued as follows:

(1) Fee estates where the annual wholesale value of farm commodities or pro-

Section 10.05(f)

ducts, as enumerated in Section 10.04²⁵ of these regulations is fifty percent (50%) or more of the usual annual gross income from all uses of the property, shall be subject to farm use valuation.

(2) Fee estates where the annual wholesale value of farm commodities or products as enumerated in Section 10.04²⁵ of these regulations is less than fifty percent (50%) of the usual annual gross income from all uses of the property, shall be valued by adding to the surface farm use value, the applicable natural resource value as provided in W. Va. Leg. Reg. ~~11-1A~~, Series ~~1A~~ §§ 11.04, 11.05, 11.06, 11.07, 11.08.

(3) For the purposes of these regulations, payments in kind of natural resources to any person from such fee estates shall be considered non-farm income. For example: Payments of so called "free gas" to lessors or tenants of a natural gas producing tract are non-farm income for the purposes of these regulations.

Section 10.05(f)

(C) Estates in land arising from the severance of the surface and any mineral estate, shall be valued as follows:

(1) Each separate estate in land, if owned by the person requesting farm use valuation, shall be valued as follows:

(a) Where the annual wholesale value of farm commodities or products as enumerated in Section 10.04⁵ of these regulations is fifty percent (50%) or more of the usual annual gross income from all separate estates, the property shall be subject to farm use valuation only.

(b) Where the annual wholesale value of farm commodities or products, as enumerated in Section 10.04⁵ of these regulations is less than fifty percent (50%) of the usual annual gross income from all uses of the separate estates, the property shall be valued by adding to the surface farm use value, the applicable natural resource value as provided in W. Va. Leg. Reg.

Section 10.05(f)

~~11-1A~~, Series ~~1A~~¹, §§ 11.04, 11.05,
11.06, 11.07, 11.08.

(2) Where the owner of any freehold estate in land is not the person requesting farm use valuation, those estates shall be valued as follows:

(a) The estate which encompasses the surface land shall be subject to farm use valuation.

(b) The estate(s) which do not encompass surface land shall be valued as provided in W. Va. Leg. Reg. ~~11-1A~~¹, Series ~~1A~~¹, §§ 11.04, 11.05, 11.06, 11.07, 11.08.

Provided, however, That nothing herein shall alter the method of valuation of lands or minerals owned by domestic or foreign corporations. Property owned by a corporation or an unincorporated business is not considered a farm or land used for farming purposes unless the principal activity of the corporation or unincorporated business is the business of farm-

Section 10.05(f)

ing, and in the event that the controlling stock interest in a corporation is owned by another corporation, the corporation owning the controlling interest must also *be in the business* of farming. A corporation or unincorporated business shall be deemed to be primarily engaged in the business of farming if the wholesale value of farm commodities or products as enumerated in Section 10.0⁵~~4~~ of these regulations is fifty percent (50%) or more of the annual gross income of the corporation or unincorporated business. In addition, a person is not engaged in farming if he is primarily engaged in forestry or growing timber. An individual employed other than in farming is not an unincorporated business.

- (4) Life Estates and Estates and Interests Less Than Fee Simple. -- Life estates, dower interests, terms of years, remainders, remainder interests and similar estates and

Section 10.05(f)

interests in property qualified for farm real estate valuation under these regulations shall be valued at present value based upon the farmland valuation of the property derived in accordance with these regulations.

Section 10.06(a)

^{10.7}
~~10.06~~ Capitalization Rate.

(a) Discussion. -- A single statewide capitalization rate will be determined annually by the Tax Commissioner through the use of generally accepted methods for estimating such rates. The rate so developed will assume a level perpetual income series. The capitalization rate used to value farmland will be developed considering (1) a discount rate determined by the summation technique, (2) a recapture component, and (3) a property tax component.

(b) Components. -- Components of the capitalization rate are as follows:

(1) Discount Component.

(A) Summation Technique. -- The summation technique will be employed in developing a discount component in the valuation of farmland. Since land is a non-wasting asset and is expected to last indefinitely the rental income from land is assumed to be perpetual. The present value of future rentals for farmland will be estimated reflecting the following four (4) major subcomponents of a discount rate:

Section 10.06(b)

(i) Safe Rate. -- The "Safe Rate" will be developed through review of quarterly interest rates offered on thirteen (13) week United States Treasury Bills for a period of three (3) years prior to the appraisal date.

(ii) Risk Rate. -- The "Risk Rate" will be developed through review of data resulting from an annual survey of lending institutions, such survey reflecting interest rates required on loans for acquisition and/or development of farmland. This survey will be conducted for a three (3) year period prior to the appraisal date. Results of the survey will be compared to quarterly interest rates offered on thirteen (13) week United States Treasury Bills for the same three (3) year period. An interest differential will then be selected representing the "Risk Rate."

(iii) Non-Liquidity Rate. -- The "Non-Liquidity Rate" will be developed

Section 10.06(b)

through an annual survey to determine a reasonable estimate of time that farmland remains on the market before being sold. The selling time requirement thus determined will be used to identify United States Treasury Bills with similar time differentials in excess of thirteen (13) week Treasury Bills. The interest differential between these securities will be deemed to be representative of the "Non-Liquidity Rate."

(iv) Management Rate. -- The "Management Rate" will be developed through a survey of investment firms to identify charges for the management of investment portfolios.

(2) Recapture Component. -- Land is a nonwasting asset and is expected to last indefinitely. Given this characteristic, inclusion of a recapture component in the capitalization rate is not appropriate.

(3) Property Tax Component. -- This component will be derived by multiplying the assessment rate by the statewide average of tax rates on Class II property.

10.8
~~10.07~~.

Farmland and Structures Situated Thereon
Valuation Application; Appeal.

(a) When to Apply. -- In order to qualify under the provisions of this rule for valuation purposes, the owner(s) of land must apply annually for farmland and structures situated thereon valuation after June 30th and on or before September 1st of each year. The application must be on forms prescribed by the State Tax Commissioner and filed with the assessor of the county wherein the land is situated. See Appendix II of these regulations for application timetable.

(b) Response To Applicant. -- The assessor must notify each applicant, by first class mail, of his decision to grant or deny the application, not later than thirty (30) days following the receipt of the application. In those instances where the application is denied, the notice must include the basis for the denial, advise the applicant of the right to appeal and explain the appeal process.

(c) Appeal Process. -- The applicant may, within thirty (30) days of notification of the denial of the application, appeal the assessor's decision to the State Tax Commissioner. The State Tax Commissioner shall rule on the petition not later than January 1st

Section 10.07(a)

and shall notify the appellant and assessor thereof in due course. The Tax Commissioner may consider any appropriate information relevant to the determination. The decision, which shall be binding on the assessor and property owner, shall only apply to the eligibility of property for farm use valuation. The Tax Commissioner shall decide only the issue of whether the property constitutes a "farm" or "farms" within the meaning of W. Va. Code § 11-1A-3(i) and these regulations. Questions involving classification shall be resolved through W. Va. Code § 11-3-24a. Questions involving appraised values shall be resolved through W. Va. Code § 11-3-24.

APPENDIX I

CATEGORIES OF FARMLAND

A. Introduction

(a) Appendix I divides farmland into three categories according to utility or use of the land.

(b) Farmland is categorized as:

(1) Tillable. -- The term "tillable land" shall mean land used or usable and intended for use in raising crops.

(2) Pasture. -- The term "pasture land" shall mean used or usable and intended for use in grazing livestock.

(3) Woodland. -- The term "woodland" shall mean land used for growing timber.

Appendix I

(c) Each of these three categories is divided into five subcategories which grade the property according to quality and fitness for the particular utility or use category to which it has been relegated. These subcategories are designated "Grade A" through "Grade E." Land having less than the highest quality and fitness is classified as "Grade B" through "Grade E," "Grade E" being the lowest quality and fitness classification.

Any given tract of land may fall into any number of these categories and subcategories in accordance with the actual use to which the land is suited.

Appendix I

B. TILLABLE

Tillable land is categorized into five (5) grades.

Grade "A". -- This land is good loam soil that is easy to work (a tract approximately ten acres or more in one continuous parcel) and can be cultivated safely with ordinary good farm methods. This land is nearly level and there is little or no erosion.

Grade "B". -- This land is level to rolling and can be cultivated safely with ordinary good farm methods. The soil may need lime or fertilizing. The bottom land may need improved drainage.

Grade "C". -- This land is also level to rolling crop land. The drainage of the property is generally good. A small amount of erosion may be taking place. This land can be cultivated with care. It needs contour strip cropping, usually best suited for hay and other grass crops. This type of property may be cut into smaller sections due to some sort of natural or man-made obstructions.

Grade "D". -- This land is good hillside farmland; eighty percent (80%) of this land can be farmed with a

Appendix I

tractor. The soil is generally of a good quality and the grainage is good. This type of land is generally best suited for the raising of hay.

Grade "E". -- This crop land is very steep hillside that is too steep to farm with modern farm machinery. The soil is generally of a poor quality and its cultivation may cause severe erosion.

C. PASTURE

Pasture land is categorized into five (5) grades.

Grade "A". -- This type of land could be used for either pasture or crop land. Its topography is level to rolling. The land can be clipped with a farm tractor; lime and fertilizer can be applied with modern farm equipment. The drainage of the property will be good and the soil will be of good quality. The land is clear of any significant overgrowth such as excess trees or brush.

Grade "B". -- This land is of similar nature to the Grade "A" Pasture land other than the fact that the quality of the soil is not as good. The size of the parcel will be of smaller nature. This type of land, for some reason, is not suitable for tilling and is generally best suited for permanent pasture.

Grade "C". -- This land will generally have a moderate amount of erosion. The topography of the land will be average.

Grade "D". -- This land is generally hillside pasture that has a very steep degree of slope. The pasture will generally have some natural obstruction such as overbrush, etc. The type of soil is generally of poor quality.

Appendix I

Grade "E". -- This land is generally very steep and there may be a mixture of overbrush and pasture throughout. Brush must be cleared with hand tools. The soil consistency is generally of a poor quality; lime or fertilizer is seldom applied to this type of land and then only with hand tools.

Appendix I

D. WOODLAND

Woodland is categorized into five (5) grades:

Grade "A". -- This land is adaptable, upon clearing, for use as tillable land or pasture land. The topography of the land will be level to slightly rolling. The soil type is general of loam. There will be a stand of tress of commercial species.

Grade "B". -- This land is also level to rolling. It is adaptable for other profitable uses. There may be a minimal amount of erosion. The soil is generally of a good quality.

Grade "C". -- The topography of this land indicates that its best use is for the growing of timber. There is a stand of sound trees of commercial species in good form.

Grade "D". -- The topography of this land is such that the land is not economically feasible to use for anything other than growing tress. There may be some erosion of the soil.

Grade "E". -- The topography of this land is generally steep. It will be difficult land from which to harvest the timber. This land generally exhibits poor soil quality.

APPENDIX II

TIMETABLE FOR FILING APPLICATION AND APPEALS

The following timetable shows the final dates for filing the farm use application, for filing appeals and for the issuance of administrative decisions at each step of the application and appeal procedure.

- September 1st -- The taxpayer's farm use application must be filed after June 30 and on or before September 1st of the calendar year for determinations applicable to the next tax year. See Section 10.0⁹⁸(a) of these regulations.
- October 1 -- The assessor must grant or deny the application and notify the applicant of such action within thirty (30) days of receipt of the application. See Section 10.0⁹⁸(b) of these regulations.
- October 31-- The applicant may appeal the assessor's decision to the Tax Commissioner within thirty (30) days of notification thereof. See Section 10.0⁹⁸(c) of these regulations.

State Tax Department
Leg. Reg. 11-1A
Series 1A

January 1 -- The Tax Commissioner must rule on the applicant's appeal on or before January 1. See Section 10.07⁸(c) of these regulations. An adverse decision of the Tax Commissioner may be appealed to the circuit court under W. Va. Code § 11-3-25.

February 15th -- If the Tax Commissioner rules in favor of the applicant, finding that the property in controversy is a "farm" or "farms" within the meaning of W. Va. Code § 11-1A-3(i) and these regulations, the taxpayer may then petition the county commission under the review and equalization provisions of W. Va. Code § 11-3-24 for farmland valuation. The county commission must meet not later than February 1st for the purpose of equalization and review, and may not adjourn sine die before February 15th. See W. Va. Code § 11-3-24.

**STATE OF WEST VIRGINIA
APPRAISAL MANUAL**

PREPARED BY
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FOREWORD

The Property Tax Limitation and Homestead Exemption Amendment of 1982 has focused new attention on property taxation. This Appraisal Manual is provided as a tool to assist in the fair and uniform administration of property taxation in West Virginia.

While this manual may not answer every question related to property valuation, it does provide a procedure that can insure a uniform statewide approach to value. The proper use of this manual is important in maintaining a quality valuation system.

This Manual is supplied free to West Virginia assessors by the State Tax Department, but remains the property of the State and may be recalled and revised.

The West Virginia State Tax Department wishes to acknowledge the assistance of Cole-Layer-Trumble Company and others who have contributed to the development of this manual.

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An appraisal, in itself, is nothing more than an opinion of value. This does not imply, however, that one opinion is necessarily as good as another; there are valid and accurate appraisals, and there are invalid and inaccurate appraisals. The validity of an appraisal can be measured against the supporting evidence from which it was derived, and its accuracy against that very thing it is supposed to predict — the actual behavior of the market. Each is fully contingent upon the ability of the appraiser to record adequate data and to interpret that data into an indication of value.

Appraising real property, like the solving of any problem, is an exercise in reasoning. It is a discipline, and like any discipline, it is founded on fundamental economic and social principles. From these principles evolve certain premises which, when applied to the valuation of property, serve to explain the reaction of the market. This section concerns itself with those concepts and principles basic to the property valuation process. One cannot overstate the necessity of having a workable understanding of them.

BUNDLE OF RIGHTS

Real estate and real property are often used interchangeably. Generally speaking, *real estate* pertains to the real or fixed improvements to the land such as structures and other appurtenances, whereas *real property* encompasses all the interests, benefits and rights enjoyed by the ownership of the real estate.

Real property ownership involves the Bundle of Rights Theory which asserts that the owner has the right to enter it, use it, sell it, lease it, or give it away, as he so chooses. These rights are guaranteed by law, but they are subject to certain governmental and private restrictions.

The Governmental restrictions are found in its power to:

- tax property.
- take property by condemnation for the benefit of the public, providing that just compensation is made to the owner (Eminent Domain).
- police property by enforcing any regulations deemed necessary to promote the safety, health, morals and general welfare of the public.
- provide for the reversion of ownership to the state in cases where a competent heir to the property cannot be ascertained (Escheat).

Private restrictions imposed upon property are often in the form of agreements incorporated into the deed. The deed also spells out precisely which rights of the total bundle of rights the buyer is acquiring. Since value is related to each of these rights, the appraiser should know precisely which rights are involved in his appraisal.

Appraisals for Ad Valorem tax purposes generally assume the property is owned in the "Fee Simple", meaning that the total bundle of rights is considered to be intact.

THE NATURE AND MEANING OF VALUE

An appraisal is an opinion or estimate of value. The concept of value is basic to the appraisal process and calls for a thorough understanding. The American Institute of Real Estate Appraisers' Appraisal Terminology Handbook, 1981 edition, offers the following definitions of value:

"The measure of value is the amount (for example, of money) which the potential purchaser probably will pay for possession of the thing desired."

"The ratio of exchange of one commodity for another, for example, one bushel of wheat in terms of a given number of bushels of corn; thus the value of one thing may be expressed in terms of another thing. Money is the common denominator by which value is measured."

"It is the power of acquiring commodities in exchange, generally with a comparison of utilities — the utility of the commodity parted with (money) and that of the commodity acquired in the exchange (property)."

"Value depends upon the relation of an object to unsatisfied needs; that is, supply and demand."

"Value is the present worth of future benefits arising out of ownership to typical users and investors."

With these definitions, one can see that value is not an intrinsic characteristic of the commodity itself. On the contrary, value is determined by people . . . created by desire, modified by varying degrees of desire and reduced by lack of desire. Throughout the definitions a relationship between the purchase and the commodity (property) is implied; this relationship is "value". A purchaser desires a property because it is a useful commodity in that it has utility. Utility is a prerequisite to value, but utility standing alone does not sufficiently cause value. If a great supply of a useful commodity exists, as

for example air, needs would be automatically satisfied, desire would not be aroused, and therefore value would not be created. Therefore, besides having utility, in order to effectively arouse desire, the commodity must also be scarce.

One additional factor is necessary to complete the value equation . . . the ability to become a buyer. A translation must be made of desire into a unit of exchange; a buyer must have purchasing power. The relationship is now complete . . . the commodity has utility and is relatively scarce, it arouses desire, and the buyer is able to satisfy that desire by trading for it . . . value is created. The question is how much value, and herein lies the job of the appraiser.

Numerous definitions of value have been offered, some simple and some complex. It would seem though that any valid definition of value would necessarily embody the elements of utility, desire, scarcity and purchasing power. Furthermore, the concept of value very rarely stands alone. Instead, it is generally prefixed by a descriptive term which serves to relate it to a specific appraisal purpose or activity such as "loan value". Since appraisals are made for a variety of reasons, it is important for the appraiser to clarify the specific purpose for the appraisal and the type of value which he seeks to estimate.

For Ad Valorem Tax purposes, the value sought is generally market value. The descriptive term "market" indicates the activity of buyers and sellers. MARKET VALUE is the justifiable price, or that price which an informed and intelligent buyer, fully aware of the existence of competing properties, and not being compelled to act, would be justified in paying for a particular property.

VALUE IN USE AS OPPOSED TO VALUE IN EXCHANGE

We have stated that there are a number of qualifying distinctions made in reference to the meaning of value. One of the most common and probably the most important relative to the purpose of this manual is the distinction between value in use and value in exchange. We have defined market value as a justifiable price which buyers, in general, will pay in the market. The question arises then as to the value of property which, by nature of its special and highly unique design, is useful to the present owner, but relatively less useful to buyers in the market. One can readily see that such a property's utility value may differ greatly from its potential sales price. It is even possible that no market for such a property exists. Such a property is said to have value in use which refers to the actual value of a commodity to a

specific person, as opposed to value in exchange which aligns itself with market value, referring to the dollar-value of a commodity to buyers in general.

THE PRINCIPLE OF SUPPLY AND DEMAND

Among the forces which constantly operate to influence supply and demand are population growth, new techniques in transportation, purchasing power, price levels, wage rates, taxation, governmental controls, and scarcity. A sudden population growth in an area would create an increase in demand for housing. If the demand increased at a higher rate than the supply, there could soon be a scarcity of housing. If the demand was backed up by purchasing power, rentals and sale prices would tend to increase and ultimately reach a level which would tend to stimulate more builders to compete for the potential profits and thus serve to increase the supply toward the level of demand. As the supply is increased demand would begin to taper off. This would cause rentals and sale prices to level off. When builders, due to increases in labor and material rates, are no longer able to build cheaply enough to meet the new level of prices and rents, competition would tend to taper off and supply would level off. The cycle is then complete.

Balance occurs when reasonable competition serves to coordinate supply with demand. When competition continues unchecked to produce a volume which exceeds the demand, the net returns to investors are no longer adequate to pay all the costs of ownership, resulting in loss rather than profit and consequently, a decline in values.

A community may well support two shopping centers, but the addition of a third shopping center may increase the supply to an excess. If this occurs, one of two effects are caused; either the net dollar return to all the shopping centers will be reduced below that level necessary to support the investment, or one of the shopping centers will flourish at the others' expense.

THE PRINCIPLE OF HIGHEST AND BEST USE

The highest and best use for a property is that use which will produce the highest net return to the land for a given period of time within the limits of those uses which are economically feasible, probable and legally permissible.

On a community-wide basis, the major determining factor in highest and best use is the maximum quantity of land which can be devoted to a specific use and still yield a satisfactory return. Once a suitable basic use has been chosen

for a specific property, each increment of capital investment to the existing or planned improvement will increase the net return to the land only up to a certain point; after this point is reached, the net return to the land begins to diminish. This is the point at which the land is at its highest and best use.

For example, in planning a high-rise office building, each additional upper floor represents an extra capital expenditure which must yield a certain return to the investor. This return will be dependent upon the levels of economic rent which the market will bear at the time. An optimum number of floors can be calculated above which the income yield requirements of additional expenditures will no longer be satisfactorily met. This, notwithstanding the possibility of other more particular considerations, should determine the number of stories of the building.

Detailed analysis of this type is rarely thrust upon the property tax appraiser. Generally the tax appraiser will find the most prudent course of action is to consider the present use and follow development rather than anticipate it.

THE PRINCIPLE OF CHANGE

The impact of change on the value of real property manifests itself in the life cycle of a neighborhood. The cycle is characterized by three stages of evolution: the development and growth evidenced by improving values; the leveling off stage evidenced by static values; and finally, the stage of infiltration of decay evidenced by declining values.

The highest and best use today is not necessarily the highest and best use tomorrow. The highest and best use of the land often lies in a succession of uses. A declining single-family residential neighborhood may be ripe for multi-family, commercial or industrial development. Whether it is or not depends upon the relationship of present or anticipated future demand with existing supply.

In estimating value, the appraiser is obligated to reasonably anticipate the future benefits, as well as the present benefits derived from ownership and to evaluate the property in light of the quality, quantity, and duration of these benefits based on actual data as opposed to speculative or potential benefits which may or may not occur.

THE PRINCIPLE OF SUBSTITUTION

Value is created by people in the market place. It is the function of translating demand into a commodity of exchange. When the benefits and advantages

derived from two properties are equal, the lowest priced property receives the greatest demand, and rightfully so. The informed buyer is not justified in paying anything more for a property than it would cost to acquire an equally desirable property. That is to say that the value of a property is established as that amount for which equally desirable comparable properties are being bought and sold in the market. Herein lies an approach to value . . . and the basis of the valuation process.

TRADITIONAL APPROACHES TO VALUE

In the preceding paragraphs, it has been stated that value is an elusive item that occurs in many different forms, and that the forces and influences which combine to create, sustain, or destroy value are numerous and varied. It is the appraiser's function to define the type of value sought, to compile and to analyze all related data, and giving due consideration to all the factors which may influence the value, to process and translate that data into a final opinion or *estimate of value*. This he must do for each property he is to appraise.

The processing of this data into a conclusion of value generally takes the form of three recognized approaches to value: Cost Approach, Market Data Approach and Income Approach. Underlying each of the approaches is the principle that the justifiable price of a property is no more than the cost of acquiring and/or reproducing an equally desirable substitute property. The use of one or all three approaches in the valuation of a property is determined by the quantity, quality, and accuracy of the data available to the appraiser.

The COST APPROACH involves making an estimate of the depreciated cost of reproducing or replacing the building and site improvements. *Reproduction Cost* refers to the cost at a given point in time of reproducing a replica property, whereas *Replacement Cost* refers to the cost of producing improvements of equal utility. Depreciation is deducted from this cost new for loss in value caused by physical deterioration, and functional or economic obsolescence. To this depreciated cost is then added the estimated value of the land, resulting in an indication of value derived by the Cost Approach.

The significance of the Cost Approach lies in its extent of application . . . it is the one approach that can be used on all types of construction. It is a starting point for appraisers, and therefore it is a very effective "yardstick" in any equalization program for Ad Valorem taxes. Its widest application is in the appraisal of properties where the lack of adequate market and income data preclude the reasonable application of the other traditional approaches.

The MARKET DATA APPROACH involves the compiling of sales and offerings of properties which are comparable to the property being appraised. These sales and offerings are then adjusted for any dissimilarities, and a value range obtained by comparison of said properties. The approach is reliable to the extent that the properties are comparable, and the appraiser's judgment of proper adjustments is sound. The procedure for using this approach is essentially the same for all types of property with the only difference being the elements of comparison.

The significance of this approach lies in its ability to produce estimates of value which directly reflect the attitude of the market. Its application is contingent upon the availability of comparable sales, and therefore finds its widest range in the appraisal of vacant land and residential properties.

The INCOME APPROACH measures the present worth of the future benefits of a property by the capitalization of the net income stream over the remaining economic life of the property. The approach involves making an estimate of the "effective gross income" of a property, derived by deducing the appropriate vacant and collection losses from its estimated economic rent, as evidenced by the yield of comparable properties. From this figure then is deducted applicable operating expenses, the cost of taxes and insurance, and reserve allowances for replacements resulting in an estimate of net income, which may then be capitalized into an indication of value.

The approach obviously has its basic application in the appraisals of properties universally bought and sold on their ability to generate and maintain a stream of income for their owners. The effectiveness of the approach lies in the appraiser's ability to relate to the changing economic environment and to analyze income yields in terms of their relative quality and durability.

PROPERTY VALUATION TECHNIQUES

APPLYING THE COST APPROACH

If the highest and best use of a property is its present use, a valid indication of value may be derived by estimating the value of the land, and adding the land value to the depreciated value of the structures on the land; the resulting equation being . . .

$$\begin{array}{r} \text{Estimated Land Value} \\ + \text{Estimated Replacement Cost New of Structures} \\ - \text{Estimated Depreciation} \\ \hline = \text{Indication of Property Value} \end{array}$$

Since estimating the land value is covered in a separate section, this section will address itself to the two remaining elements, Replacement Cost and Depreciation.

REPLACEMENT COST

Replacement Cost is the current cost of producing an improvement of equal utility to the subject property; it may or may not be the cost of reproducing a replica property. The distinction being drawn is one between *Replacement Cost*, which refers to a substitute property of equal utility, as opposed to *Reproduction Cost*, which refers to a substitute replica property. In a particular situation the two concepts may be interchangeable, but they are not necessarily so. They both, however, have application in the Cost Approach to value, the difference being reconciled in the consideration of depreciation allowances.

In actual practice, outside of a few historic type communities in this country, developers and builders, for obvious economic reasons, replace buildings, not reproduce them. It logically follows that if an appraiser's job is to measure the actions of knowledgeable persons in the market place, the use of proper replacement costs should provide an accurate point of beginning in the valuation of most improvements.

The replacement cost includes the total cost of construction incurred by the builder whether preliminary to, during the course of, or after completion of the construction of a particular building. Among these are material, labor, all subcontracts, builders' overhead and profit, architectural and engineering fees, consultation fees, survey and permit fees, legal fees, taxes, insurance, and the cost of interim financing.

ESTIMATING REPLACEMENT COST

There are various methods that may be employed to estimate replacement cost new. The methods widely used in the appraisal field are the quantity-survey method, the unit-in-place or component part-in-place method, and the model method.

The *Quantity-Survey Method* involves a detailed itemized estimate of the quantities of various materials used, labor and equipment requirements, architect and engineering fees, contractor's overhead and profit, and other related costs. This method is primarily employed by contractors and cost estimators for bidding and budgetary purposes and is much too laborious and costly to be effective in every day appraisal work, especially in the mass appraisal field. The method, however, does have its place in that it is used to develop certain unit-in-place costs which can be more readily applied to estimating for appraisal purposes.

The *Unit-in-Place Method* is employed by establishing in-place cost estimates (including material, labor, overhead and profit) for various structural components. The prices established for the specified components are related to their most common units of measurement such as cost per yard of excavation, cost per lineal foot of footings, and cost per square foot of floor covering.

The unit prices can then be multiplied by the respective quantities of each as they are found in the composition of the subject building to derive the whole dollar component cost, the sum of which is equal to the estimated cost of the entire building, providing of course, that due consideration is given to all other indirect costs which may be applicable. This components part-in-place method of using basic units can also be extended to establish prices for larger components in-place such as complete structural floors (including the finish flooring, sub-floor, joists and framing) which are likely to occur repeatedly in a number of buildings.

The *Model Method* is still a further extension, in that unit-in-place costs are used to develop base unit square foot or cubic foot costs for total specified representative structures in place, which may then serve as "models" to derive the base unit cost of comparable structures to be appraised. The base unit cost of the model most representative of the subject building is applied to the subject building and appropriate tables of additions and deductions are used to adjust the base cost of the subject building to account for any significant variations between it and the model.

Developed and applied properly, these pricing techniques will assist the appraiser in arriving at valid and accurate estimates of replacement cost new

as of a given time. That cost generally represents the upper limit of value of a structure. The difference between its replacement cost new and its present value is depreciation. The final step in completing the Cost Approach then is to estimate the amount of depreciation and deduct said amount from the replacement cost new.

DEPRECIATION

Simply stated, depreciation can be defined as "a loss in value from all causes." As applied to real estate, it represents the loss in value between market value and the sum of the replacement cost new of the improvements plus the land value as of a given time. The causes for the loss in value may be divided into three broad classifications: Physical Deterioration, Functional Obsolescence, and Economic Obsolescence.

Physical Deterioration pertains to the wearing out of the various building components, referring to both short-life and long-life terms, through the action of the elements, age, and use. The condition may be considered either "curable" or "incurable", depending upon whether it may or may not be practical and economically feasible to cure the deficiency by repair and replacement.

Functional Obsolescence is a condition caused by either inadequacies or over-adequacies in design, style, composition, or arrangement inherent to the structure itself, which tends to lessen its usefulness. Like physical deterioration, the condition may be considered either curable or incurable. Some of the more common examples of functional obsolescence are excessive wall and ceiling heights, excessive structural construction, surplus capacity, ineffective layouts, and inadequate building services.

Economic Obsolescence is a condition caused by factors extraneous to the property itself, such as changes in population characteristics and economic trends, encroachment of inharmonious land uses, excessive taxes, and governmental restrictions. The condition is generally incurable in that the causes lie outside the property owner's realm of control.

ESTIMATING DEPRECIATION

An estimate of depreciation represents an opinion of the appraiser as to the degree that the present and future appeal of a property has been diminished by deterioration and obsolescence. Of the three estimates necessary to the cost approach, it is the one most difficult to make. The accuracy of the

estimate will be a product of the appraiser's experience in recognizing the symptoms of deterioration and obsolescence and the ability to exercise sound judgment in equating all observations to the proper monetary allowance to be deducted from the replacement cost new. There are several acceptable methods which may be employed:

Physical deterioration and/or functional obsolescence can be measured by observing and comparing the physical condition and/or functional deficiencies of the subject property as of a given time with either an actual or hypothetical, comparable, new and properly planned structure.

Curable physical deterioration and functional obsolescence can be measured by estimating the cost of restoring each item of depreciation to a physical condition as good as new, or estimating the cost of eliminating the functional deficiency.

Functional and economic obsolescence can be measured by capitalizing the estimated loss in rental due to the structural deficiency or lack of market demand.

Total accrued depreciation may be estimated by first estimating the total useful life of a structure and then translating its present condition, desirability, and usefulness into an effective age (rather than an actual age) which would represent that portion of its total life (percentage) which has been used up.

Total accrued depreciation may also be estimated by deriving the amount of depreciation recognized by purchasers as evidenced in the prices paid for property in the market place; the loss of value being the difference between the cost of replacing the structure new and its actual selling price (total property selling price less the estimated value of the land).

PROPERTY VALUATION TECHNIQUES

APPLYING THE MARKET DATA APPROACH

An indication of the value of a property can be derived by analyzing the selling prices of comparable properties. The use of this technique, often referred to as the "comparison approach" or "comparable sales approach", involves the selection of a sufficient number of valid comparable sales and the adjustment of each sale to the subject property to account for variations in time, location, site and structural characteristics.

SELECTING VALID COMPARABLES

Since market value has been defined as the price which an informed and intelligent buyer, fully aware of the existence of competing properties and not being compelled to act is justified in paying for a particular property, it follows that if market value is to be derived from analyzing comparable sales, that the sales must represent valid "arms length" transactions. Due consideration must be given to the conditions and circumstances of each sale before selecting the sales for analysis. Some examples of sales which *do not* normally reflect valid market conditions are as follows:

Sales in connection with foreclosures, bankruptcies, condemnations and other legal action.

Sales to or by federal, state, county and local governmental agencies.

Sales to or by religious, charitable or benevolent tax exempt agencies.

Sales involving family transfers, or "love and affection."

Sales involving intra-corporate affiliations.

Sales involving the retention of life interests.

Sales involving cemetery lots.

Sales involving mineral or timber rights, and access or drainage rights.

Sales involving the transfer of part interests.

In addition to selecting valid market transactions, it is equally important to select properties which are truly comparable to the property under appraisal. For instance, sales involving both real property and personal property or chattels may not be used unless the sale can be adjusted to reflect only the real property transaction, nor can sales of non-operating or deficient industrial plants be validly compared with operating plants. The comparables

and subject properties must exhibit the same use, and the site and structural characteristics must exhibit an acceptable degree of comparability.

PROCESSING COMPARABLE SALES

All comparables must be adjusted to the subject property to account for variations in time and location. The other major elements of comparison will differ depending upon the type of property being appraised. In selecting these elements, the appraiser must give prime consideration to the same factors which influence the prospective buyers of particular types of properties.

The typical home buyer is interested in the property's capacity to provide the family with a place to live. A primary concern is with the living area, utility area, number of rooms, number of baths, age, structural quality and condition, the presence of a modern kitchen and recreational conveniences of the house. Equally important is the location and neighborhood, including the proximity to and the quality of schools, public transportation, and recreational and shopping facilities.

In addition to the residential amenities, the buyer of agricultural property is primarily interested in the productive capacity of the land, the accessibility to the market place, and the condition and functional utility of the farm buildings and structures on the land.

The typical buyer of commercial property, including warehouses and certain light industrial plants, is primarily concerned with its capability to produce revenue. Of special interest will be the age, design and structural quality and condition of the improvements, the parking facilities, and the location relative to transportation, labor markets and trade centers.

In applying the market data approach to commercial/industrial property, the appraiser will generally find it difficult to locate a sufficient number of comparable sales, especially of properties which are truly comparable in their entirety. It will, therefore, generally be necessary to select smaller units of comparison such as price per square foot, per unit, per room, etc. In doing so, great care must be exercised in selecting a unit of comparison that represents a logical common denominator for the properties being compared. A unit of comparison which is commonly used and proven to be fairly effective is the Gross Rent Multiplier, generally referred to as G.R.M., which is derived by dividing the gross annual income into the sales price. Using such units of comparison enables the appraiser to compare two properties which are similar in use and structural features, but differ significantly in size and other characteristics.

Having selected the major factors of comparison, it remains for the appraiser to adjust each of the factors to the subject property. In comparing the site, adjustments for size, location, accessibility, and site improvements must be made. In comparing the structures, adjustments for size, quality, design, condition, and significant structural and mechanical components also must be made. The adjusted selling prices of the comparable properties will establish a range in value in which the value of the subject property will fall. Further analysis of the factors should enable the appraiser to narrow the range down to the value level which is most applicable to the subject property.

PROPERTY VALUATION TECHNIQUES APPLYING THE INCOME APPROACH

INTRODUCTION

The justified price paid for income producing property is no more than the amount of investment required to produce a comparably desirable return; and since the market can be analyzed in order to determine the net return actually anticipated by investors, it follows that the value of income producing property can be derived from the income which it is capable of producing. What is involved is an estimate of income through the collection and analysis of available economic data, the development of a property capitalization rate, and the processing of the net income into an indication of value by employing one or more of the acceptable capitalization methods and techniques.

THE PRINCIPLES OF CAPITALIZATION

Capitalization is the process for converting the net income produced by property into an indication of value. Through the years of appraisal history, a number of procedures have been recognized and employed by appraisal authorities in determining the value of real estate by the income approach. Although present-day practice recommends only certain methods, we will at least touch on the other approaches to value — even though they may not be accepted in today's appraisal scene because they do not accurately reflect the current market conditions.

EXPLORING THE RENTAL MARKET

The starting point for the appraiser is an investigation of current economic rent in a specific area in order to establish a sound basis for estimating the gross income which should be returned from competitive properties. The appraiser must make a distinction between *economic rent* or the rent which property is normally expected to produce on the open market, as opposed to *control rent* or the rent which property is actually realizing at the time of the appraisal due to lease terms established some time in the past.

The first step then is to obtain specific income and expense data on properties which best typify normal market activity. The data is necessary to develop local guidelines for establishing the economic rent and related expenses for various types of properties.

The next step is to similarly collect income and expense data on individual properties, and to evaluate the data against the established guidelines.

The collection of income and expense data (I & E) is an essential phase in the valuation of commercial properties. The appraiser is primarily concerned with the potential earning power of the property. The objective is to estimate its expected net income. Income and Expense Statements of past years are valuable only to the extent which they serve this end. The statements must not only be complete and accurate, but must also stand the test of market validity. Consideration of the following factors should assist the appraiser in evaluating the I & E data in order to arrive at an accurate and realistic estimate of net income.

QUESTIONS RELATING TO INCOME DATA

- A. Was the reported income produced entirely by the subject property? Very often the rental will include an amount attributable to one or more additional parcels of real estate. In this case, it would be necessary to obtain the proper allocations of rent.
- B. Was the income attributable to the subject property as it physically existed at the time of the appraisal, or did the appraisal include the value of leasehold improvements and remodeling for which the tenant paid in addition to rent? If so, it may be necessary to adjust the income to reflect economic rent.
- C. Does the reported income represent a full year's return? It is often advisable to obtain both monthly and annual amounts as a cross-check.
- D. Does the income reflect current economic rent? Is either part or all of the income predicated on old leases? If so, what are the provisions for renewal options and rates?
- E. Does the reported income reflect 100% occupancy? What percentage of occupancy does it reflect? Is this percentage typical of this type of property, or is it due to special non-recurring causes?
- F. Does the income include rental for all marketable space? Does it include an allowance for space, if any, which is either owner or manager occupied? Is the allowance realistic?
- G. Is the income attributable directly to the real estate and conventional amenities? Is some of the income derived from furnishings and appliances? If so, it will be necessary to adjust the income or make provisions for reserves to eventually replace them, whichever local custom dictates.

- H. In many properties an actual rental does not exist because the real estate is owner occupied. In this event it is necessary to obtain other information to provide a basis to estimate economic rent. The information required pertains to the business operation using the property. Proper analysis of the annual operating statements of the business, including gross sales or receipts, can provide an accurate estimate of economic rent. Information requirements for a few of the more common property uses are as follows:

Retail Stores	The annual net gross sales. (Gross sales less returned merchandise)
Hotels and Motels	The annual operating statement of the business. If retail or office space is leased in these properties, obtain the actual rent paid.
Theaters	The annual gross receipts (including admissions and concessions) and seating capacity.
Automobile Parking	The annual gross receipts.

ANALYSIS OF EXPENSE DATA

The appraiser must consider only those expenses which are applicable to the cost of ownership; that is, those expenses which are normally owner incurred. Any portion of the expenses incurred directly or indirectly by the tenant should not be considered. Each expense item must stand the test of both legitimacy and accuracy. How do they compare with the established guidelines and norms? Are they consistent with the expenses incurred by comparable properties?

Management refers to the cost of administration. These charges should realistically reflect what a real estate management company would actually charge to manage the property. If no management fee is shown on the statement, a proper allowance must be made by the appraiser. On the other hand, if excessive management charges are reported, as is often the case, the appraiser must disregard the reported charges and use an amount which he deems appropriate and consistent with comparable type properties. The cost of management bears a relationship with the risk of ownership and will generally range between 4 to 10% of the gross income.

General expenses may include such items as the cost of services and supplies not charged to a particular category. Unemployment and F.I.C.A. taxes, Workmen's Compensation, and other employee insurance plans are usually legitimate deductions when employees are a part of the building operation.

Reimbursed expenses refer to the cost associated with the maintenance of public or common areas of the commercial property. This expense is passed on to the tenants and should, therefore, only be considered when the amount of reimbursement is included as income.

Miscellaneous expenses is the "catch-all" category for incidentals. This item should reflect a very nominal percentage of the income. If expenses reported seem to be excessive, the appraiser must examine the figures carefully in order to determine if they are legitimate expenses, and if so, to allocate them to their proper category.

Cleaning expenses are legitimate charges. They are for such items as general housekeeping and maid service, and include the total cost of labor and related supplies. All or a portion of the cleaning services may be provided by outside firms working on a "contract" basis. Cleaning expenses vary considerably and are particularly significant in operations such as offices and hotels. "Rule of thumb" norms for various operations are made available through national management associations. The appraiser should have little difficulty in establishing local guidelines.

Utilities are generally legitimate expenses and if reported accurately, need very little reconstruction by the appraiser, other than to determine if the charges are consistent with comparable properties. Local utility companies can provide the appraiser with definite guidelines.

Heat and Air Conditioning costs are often reported separately and in addition to utilities. The expenses would include the cost of fuel other than the above mentioned utilities, and may include, especially in large installations, the cost of related supplies, inspection fees, and maintenance charges. These are generally legitimate costs, and the same precautions prescribed for "utilities" are in order.

Elevator expenses, including the cost of repairs and services, are legitimate deductions, and are generally handled through service contracts. These fees can generally be regarded as fairly stable annual recurring expenses.

Decorating and minor alterations are necessary to maintain the income stream of many commercial properties. In this respect they are legitimate expenses. However, careful scrutiny of these figures is required. Owners tend to include the cost of major alterations and remodeling which are, in fact, capital expenditures, and as such are not legitimate operating expenses.

Repairs and Maintenance expenses reported for any given year may not necessarily be a true indication of the average or typical annual expense for these items. For example, a statement could reflect a substantial expenditure for a specific year (possibly because the roof was replaced and/or several items of deferred maintenance were corrected); yet the statement for the following year may indicate that repairs and maintenance charges were practically nil. It is necessary for the appraiser to either obtain complete economic history on each property in order to make a proper judgment as to the average annual expense for these items, or include a proper allowance based on norms for the type and age of the improvements to cover annual expenses. Since it is neither possible nor practical to obtain enough economic history on every property, the latter method is generally used and the amounts reported for repairs and maintenance are then estimated by the appraiser.

Insurance. Caution must be used in accepting insurance expense figures. Cost shown may be for more than one year, or may be for blanket policies including more than one building. It is generally more effective for the appraiser to establish his own guidelines for insurance. He must also be careful to include only items applicable to the real estate. Fire extended coverage and owner's liability are the main insurance expense items. Separate coverages on special component parts of the buildings, such as elevators and plate glass, are also legitimate expenses.

Real Estate Taxes. In making appraisals for tax purposes, the appraiser must exclude the actual amount reported for real estate taxes. Since future taxes will be based on his appraised value, the appraiser must express the taxes as a factor of the estimated value. This can be done by including an additional percentage in the capitalization rate to account for real estate taxes.

Depreciation. The figure shown for depreciation on an operating statement is a "bookkeeping figure" which the owner uses for Internal Revenue purposes and should *not* be considered in the income approach. This reflects a tax advantage which is one of the benefits of ownership.

Interest. Although interest is considered a legitimate expense, it is always included in the Capitalization Rate. Most property is appraised as if it were "free and clear"; however, the appraiser does consider the interest of a current mortgage in the Capitalization Rate build-up.

Land Rent. When appraising for real estate tax purposes, only the sum of the leasehold and the leased fee is usually considered. Land rent is not deducted as an expense. Considered separately, rent from a ground lease would be an expense to the leasehold interest and an income to the leased fee. However, if land were rented from another property to supply additional parking for example, that land rent would be an allowable expense.

It is obvious that there are some expense items encountered on operating statements that the appraiser should not consider as allowable. This is because he is interested in legitimate cash expenses only. Income statements are usually designed for income tax purposes where credit can be taken for borrowing costs and theoretical depreciation losses.

It is virtually impossible and certainly not always practical to obtain a complete economic history on every commercial property being appraised. On many properties, however, detailed economic information can be obtained through the use of Income and Expense forms. One must realistically recognize the fact that the data obtainable on some properties is definitely limited.

In most cases, the gross income and a list of the services and amenities furnished can be obtained during the data gathering operation. However, in order to insure a sound appraisal, it may be necessary to estimate the *fixed and operating expenses*. This is best accomplished by setting guidelines for expenses, based on a percent of Effective Gross Income or a cost per square foot of leasable area. These percentages or costs will vary depending on the services supplied and the type of property.

CAPITALIZATION METHODS

The most prominent methods of capitalization are Direct, Straight Line, Sinking Fund, and Annuity. Each of these is a valid method for capitalizing income into an indication of value. The basis for their validity lies in the action of the market, which indicates that the value of income producing property can be derived by equating the net income with the net return anticipated by informed investors. This can be expressed in terms of a simple equation:

$$\text{Value} = \text{Net Income} \div \text{Capitalization Rate}$$

The *Straight Line* and *Sinking Fund* methods are both actual forms of Straight Capitalization, with one using Straight Line recapture and the other using Sinking Fund recapture. Both methods follow the same basic principles as Direct Capitalization, differing only in that they provide for separate capitalization rates for land and buildings; the building rate differing from the land rate in that it includes an allowance for recapture.

Straight Line Capitalization allows for "recapture" based on remaining economic life of the building — implying that at the end of that period of time, there would be a zero improvement value. There are three fallacies in this thinking. First, the potential buyer (investor) has no intention of hold-

ing the property that long. The average investment period might average ten years. Second, the investor anticipates that at the end of that period he will either get all his money back or will make a profit. And third, is the depreciation allowance possible in connection with federal income taxes.

Depreciation allowances begin to "run out" between seven and ten years, so the advantages of owning the property are reduced considerably. A prudent owner may choose to sell the property at this point and re-invest in another property so that he may begin the depreciation cycle again and continue to take full advantage of the favorable tax laws.

For these reasons, the Straight Line Capitalization Method does not usually follow what the market indicates.

Straight Line recapture calls for the return of investment capital in equal increments or percentage allowances spread over the estimated remaining economic life of the building.

Sinking Fund recapture calls for the return of invested capital in one lump sum at the termination of the estimated remaining economic life of the building. This is accomplished by providing for the annual return of a sufficient amount needed to invest and annually re-invest in "safe" interest-bearing accounts, such as government bonds or certificates of deposit, which will ultimately yield the entire capital investment during the course of the building's economic life.

Annuity Capitalization lends itself to the valuation of long-term leases. In this method, the appraiser determines, by the use of annuity tables, the present value of the right to receive a certain specified income over stipulated duration of the lease. In addition to the value of the income stream, the appraiser must also consider the value that the property will have once it reverts back to the owner at the termination of the lease. This reversion is valued by discounting its anticipated value against its present day worth. The total property value then is the sum of the capitalized income stream plus the present worth of the reversion value.

CURRENT TECHNIQUES

There are two methods, however, that do lend themselves to an accurate measure of market value based on potential income. These are Direct Capitalization, utilizing the Direct Comparison Method of Rate Selection, and Mortgage Equity Capitalization.

DIRECT CAPITALIZATION

In *Direct Capitalization*, the appraiser determines a single "overall" capitalization rate. This is done by analyzing actual market sales of similar types of properties. He develops the net income of each property, and divides the net income by the sales price to arrive at an overall rate to provide an indication of value.

MORTGAGE EQUITY CAPITALIZATION

Mortgage Equity Capitalization is a form of direct capitalization with the major difference in the two approaches being the development of the overall capitalization rate.

In this method, equity yields and mortgage terms are considered influencing factors in construction of the interest rate. In addition, a plus or minus adjustment is required to compensate for anticipated depreciation or appreciation. This adjustment can be related to the recapture provisions used in other capitalization methods and techniques.

RESIDUAL TECHNIQUES

It can readily be seen that any one of the factors of the Capitalization Equation ($\text{Value} = \text{Net Income} \div \text{Capitalization Rate}$) can be determined if the other two factors are known. Furthermore, since the value of property is the sum of the land value plus the building value, it holds that either of these can be determined if the other is known. The uses of these mathematical formulas in capitalizing income into an indication of value are referred to as the *residual techniques*, or more specifically, the property residual, the building residual, and the land residual techniques.

The *Property Residual Technique* is an application of Direct Capitalization. In this technique, the total net income is divided by an overall capitalization rate (which provides for the return on the total investment) to arrive at an indicated value for the property. This technique has received more popular support in recent years because it closely reflects the market. With this technique, the capitalization rate may be developed by either "direct comparison" in the market or by the Mortgage Equity Method.

The *Building Residual Technique* requires the value of the land to be a known factor. The amount of net income required to earn an appropriate rate of return on the land investment is deducted from the total net income. The remainder of the net income (residual) is divided by the building capitalization rate (which is composed of a percentage for the return on the investment, plus a percentage for the recapture of the investment) to arrive at an indicated value for the building.

The *Land Residual Technique* requires the value of the building to be a known factor. The amount of net income required to provide both a proper return on and the recapture of the investment is deducted from the total net income. The remainder of the net income (residual) is then divided by the land capitalization rate (which is composed of a percentage for the return on the investment) to arrive at an indicated value for the land.

MORTGAGE EQUITY METHOD EXAMPLE

For purposes of illustration, assume an investment financed with a 70% loan at 14.0% interest. The term of the mortgage is 20 years, paid off in level monthly payments. The total annual cost for principal and interest on such a loan can be determined by referring to the mortgage equity tables. Select the Constant Annual percent for an interest rate of 14.0% and a term of 20 years. Note that the constant is 14.92% of the amount borrowed, or .92% more than the interest rate alone.

Assume that the equity investor will not be satisfied with less than a 18% yield. The income necessary to satisfy both Lender and Equity can now be shown. The product of the percent portion and the rate equals the weighted rate. The total of each weighted rate equals the weighted average.

	PORTION	RATE		WEIGHTED RATE
Mortgage loan (principal interest)	70%	.1492	=	.1044
Equity (down payment)	30%	.18	=	.0540
Weighted Average	100%			.1584

Note that the "constant annual percent" is used for the rate of the loan.

Since there is a gain in equity's position through the years by the loan being paid off little by little, it is necessary to calculate the credit for "Equity Build-Up". Assume that the investor plans to hold the property for ten years. Since the mortgage is for 20 years, only a portion of the principal will be paid off and this amount must be discounted, as it won't be received for ten years. From the Table of Loan Balance and Debt Reduction, at the end of ten years for a 20 year mortgage at 14%, the figure is .199108. Consulting the sinking fund tables indicates that the discount factor for 18% and 10 years is .0425.

The credit for Equity Build-Up can now be deducted from the basic rate, thus . . .

$$\begin{array}{rclcl}
 .199108 & & 70\% & & .0425 & & = & .0059 \\
 (\% \text{ of loan paid in 10 yrs.}) & \times & (\text{loan rate}) & \times & (\text{sinking fund 18\% for 10 yrs.}) & & & \\
 \text{Resulting Net Rate} & & & & & & = & .1525
 \end{array}$$

LAND VALUATION TECHNIQUES

In making appraisals for Ad Valorem Tax purposes, it is generally necessary to estimate separate values for the land and the improvements on the land. In actuality, the two are not separated and the final estimate of the property as a single unit must be given prime consideration. However, in arriving at that final estimate of value, aside from the requirements for property tax appraisals, there are certain other reasons for making a separate estimate of value for the land:

An estimate of land value is required in the application of the Cost Approach.

An estimate of land value is required to be deducted from the total property selling price in order to derive indications of depreciation through market-data analysis. (Depreciation being equal to the difference between the replacement cost new of a structure and the actual price paid in the market place for the structure.)

As land is not a depreciable item, a separate estimate of land value is required for bookkeeping and accounting purposes; likewise, the total capitalization rate applicable to land will differ from the rate applicable to the improvements on the land.

Since land may or may not be used to its highest potential, the value of land may be completely independent of the existing improvements on the land.

Real Estate is valued in terms of its highest and best use. The highest and best use of the *land* (or site), if vacant and available for use, may be different from the highest and best use of the *improved property*. This will be true when the improvement is not an appropriate use and yet makes a contribution to total property value in excess of the value of the site. Highest and Best Use (Highest and Most Profitable Use; Optimum Use) is that reasonable and probable use which will support the highest present value as of the date of the appraisal. Alternatively, it is the most profitable *likely* use to which a property can be put. It may be *measured* in terms of the present worth of the highest net return that the property can be expected to produce over a stipulated long run period of time. (American Institute of Real Estate Appraisers' Appraisal Terminology Handbook, 1981 edition.)

As appraisers' opinions are based on data derived from the market, it is necessary to study and adapt, if possible, procedures used by those closest to everyday transactions.

COMPARABLE SALES METHOD

The most frequently used method in estimating the value of land is the comparable sales method in which land values are derived from analyzing the selling prices of similar sites. This method is in essence the application of the market data approach to value and all the considerations pertaining thereto are equally applicable here.

The appraiser must select comparable and valid market transactions, and must weigh and give due consideration to all the factors significant to value, adjusting each to the subject property. The comparable sites must be used in the same way as is the subject property, and subjected to the same zoning regulations and restrictions. It is also preferable, whenever possible, to select comparables from the same or a similar neighborhood. The major adjustments will be to account for variations in time, location, and physical characteristics to include size, shape, topography, landscaping, access, as well as other factors which may significantly influence the selling price, such as the productivity of farm land.

Although it is always preferable to use sales of unimproved lots for comparables, it is not always possible to do so. Older neighborhoods are not likely to yield a sufficient number of representative sales of unimproved lots to permit a valid analysis. In such cases, in order to arrive at an estimate of land values using the comparable sales approach, it is necessary to consider improved property sales and to estimate the portion of the selling price applicable to the structure. The procedure would be to estimate the replacement cost of the buildings as of the date of sale, estimate the accrued depreciation and deduct that amount from the replacement cost resulting in the estimated selling price of the buildings, which can be deducted from the total selling price of the property to derive the portion of the selling price which can be allocated to the land. The equation is as follows:

$$\begin{array}{r} \text{Selling Price of Property} \\ - \text{Estimated Depreciated Value of Buildings} \\ \hline = \text{Indication of Land Value} \end{array}$$

In some of these older neighborhoods, vacant lots will exist often as a result of fire or normal deterioration. Since the desirability as a new building site is restricted, value is generally determined by adjoining property owners who have a desire for additional land area.

In order to apply the comparable sales method, it is first necessary to establish a common unit of comparison. The units generally used in the valuation of land are price per front foot, price per square foot, price per acre, price per apartment unit, and price per motel unit. The selection of any one particular unit depends upon the type of property being appraised . . . frontage being commonly used for platted, uniform type residential lots, and square footage and acreage for larger, unplatted tracts, as well as irregularly shaped lots lacking in uniformity. Use of square footage is especially desirable in Central Business Districts where the entire lot maintains the same level of value: depth factor adjustments have a tendency to distort this concept. Commercial arteries are also best valued on a square foot basis.

The utility of a site will vary with the frontage, width, depth, and overall area. Similarly, the unit land values should be adjusted to account for differences in size and shape between the comparables and the subject property. Since such an adjustment is generally necessary for each lot, it is beneficial that the appraiser adopt and/or develop standardized procedures for adjusting the lot size and the unit values to account for the variations. It is not uncommon for all lots within a development to market at the same price. Should data indicate this, it is necessary to make alterations or adjustments to maintain this value level. In some cases, a "site value" concept has advantages. Some of the techniques commonly employed are as follows:

Standard lot sizing techniques provide for the adjustment of the frontage, width, and depth of irregular shaped lots to make the units of measurement more comparable with uniform rectangular lots.

Standard Depth Tables provide for the adjustment of front foot unit values to account for variations in depth from a predetermined norm.

Frontage Tables provide for the adjustment of front footage unit values to account for variations in the relative utility value of excessive or insufficient frontage as compared to a predetermined norm.

Acreage or Square Footage Tables provide for the adjustment of unit values to account for variations in the relative utility value of excessive or insufficient land sizes as compared to a predetermined norm.

During the process of adjusting the comparable sales to account for variations between them and the subject property, the appraiser must exercise great care to include all significant factors and to properly consider the impact of each of the factors upon the total value. If done properly, the adjusted selling prices of the comparable properties will establish a range in value in

which the value of the subject property will fall. Further analysis of the factors should enable the appraiser to narrow the range down to the value level which is most applicable to the subject property.

THE SOIL PRODUCTIVITY METHOD

This method involves the classification of agricultural tracts according to a productivity index, and establishing corresponding unit land values either by the analysis of comparable sales or the capitalization of income yields. The method requires a great deal of data and time, and its application, for ad valorem tax purposes, is generally limited to the appraisal of predominantly agricultural jurisdictions, in which soil productivity is either the primary influence to buyers and sellers, or in which soil productivity is the legal basis for the assessment of farm land.

There is a second condition which presupposes the use of the soil productivity method: the availability of current soil maps and related data. Soil productivity refers to the capacity of a soil to produce crops. Its productive capacity is basically dependent upon the properties and characteristics inherent in the soil; the prevailing environmental and climatic conditions; and the level of management input. Since the appraiser, for tax purposes, generally is neither provided with the time nor the resources to survey, analyze, and classify the varied numbers of soils, the use of the method is solely contingent upon the availability of reliable soil maps and data compiled from scientific soil surveys. Such surveys are generally conducted and reported under the auspices of the agricultural departments at the various state universities.

Providing then, that the value of the farm land as evidenced in the market place, or as mandated by law, is directly related to its capacity to produce, and that current soil maps and related data are available, it follows that soil productivity should be given prime consideration in the valuation of farm land.

The following is a suggested procedure for establishing unit land values based upon the relative productivity of the soil. Whereas precise terminology may differ from state to state, the general procedure should prove to be fairly applicable to any region.

1. Obtain soil maps. Soil maps prepared by soil surveyors should provide an accurate inventory of the soil resources of an area. The soil mapping units delineated on the maps provide a basis for soil-use suggestions and for crop-yield and/or soil productivity estimates.

2. Obtain or develop soil productivity index ratings for each soil mapping unit. Soil productivity is generally expressed in terms of yield per acre. In developing a soil productivity approach to value, it is necessary to compare the productivity of different soils and different yields. A productivity index provides the statistical means of expressing the productivity of different soils in relative units of comparison.

Table 1 shows the calculation of a productivity index for Muscatine silt loam at a high management level. The yield estimates are related to a base yield. The same base yield is used for all soils, but the crop-yield estimates and acreage ratio will vary with each soil. The acreage ratio is an expression of the percentage of the time that a particular crop is grown. Management level is held constant. Thus, the soil productivity index provides a measure of the soil contribution in crop production. Such ratings may be prepared for cropland, pasture, and timber.

TABLE 1. EXAMPLE CALCULATION OF SOIL-PRODUCTIVITY INDEX

CROP	(1) Average Yield (Per Acre)	(2) Base Yield (Index = 100)	(3) Relative Yield (1) ÷ (2)	(4) Acreage Ratio	(5) Cost Contribution (3) x (4)
Corn	145 Bu.	90 Bu.	161%	.55	88
Soybeans	46 Bu.	30 Bu.	153%	.30	46
Wheat	56 Bu.	30 Bu.	186%	.08	15
Oats	86 Bu.	60 Bu.	143%	.07	10
The Soil-Productivity Index (Sum of Crop Contribution)					= 159
Rounded to the nearest multiple of 5					= 160

3. Determine appropriate soil-use categories. Separate soil-use categories may be established for each significant use. However, in many areas, it is often more practical to consider only cropland, and to establish the necessary guidelines for adjusting land in timber, brush, or pasture accordingly.
4. Compile data on the selling prices and/or income yields or agricultural land in representative soil areas.
5. Either obtain or measure and record the acreage of each soil-use mapping unit category for each tract of land in the sampling compiled in Step 4. If measured, a planimeter, grid, or electric area calculator should be used.

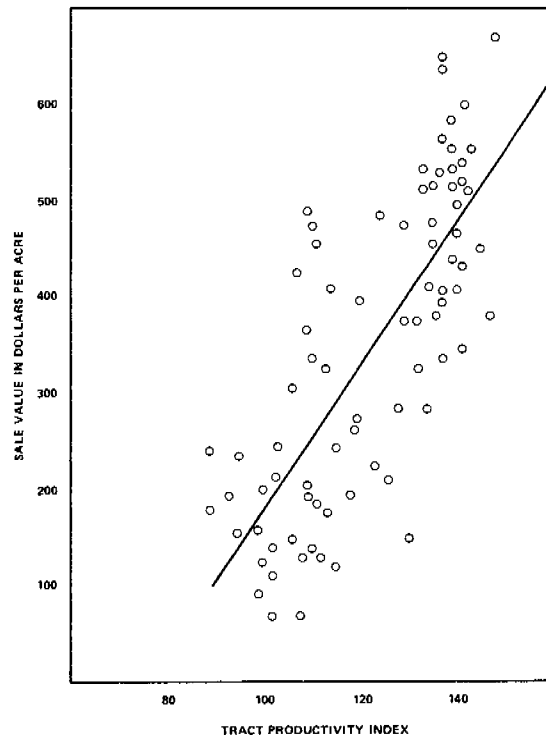
6. Calculate a tract-productivity index for each tract of land in the sampling. A tract-productivity index may be calculated by using the acreage and soil-productivity index for each soil-mapping unit in a tract. The acreage is multiplied by the soil-productivity index to obtain a soil contribution for each mapping unit. The soil contributions are added together, and the resulting sum is divided by the number of acres in the tract. The result is a weighted index of the soil productivity of the tract. Table 2 shows an example calculation.

TABLE 2. EXAMPLE CALCULATION OF TRACT PRODUCTIVITY INDEX

(1) Soil	(2) Mapping Unit (From Soil Map)	(3) Acreage	(4) Soil Productivity Index	(5) Soil Contribution (3) x (4)
Stable	68 AO	14	150	2100
Denny	45 AO	2	110	220
Muscatine	41 AO	17	160	2720
Tama	36 C2	7	130	910
Totals	—	40	—	5950
$\text{Tract Productivity Index} = \frac{\text{Sum of (5)}}{\text{Sum of (3)}} = \frac{5950}{40} = 149$				

7. Determine the relationship of productivity and selling price and/or income yields per acre for each of the tracts included in the sampling. A curve (or graph) may be prepared by plotting the measure of dollar value along the vertical axis, and the productivity along the horizontal axis as shown in Figure 1.

FIGURE 1. Graph showing the relationship of sales price and productivity.



8. Either obtain or measure and record the acreage of each soil-use mapping unit category for each tract of agricultural land to be appraised.

9. Calculate a tract productivity index for each tract of agricultural land to be appraised and determine an estimate of its value from the graph generated in Step 7. Once the productivity of the tract is known, the base value of the tract can be determined from such a graph, or if preferred, a table can be prepared from the graph showing the tract productivity in one column and the estimated corresponding base unit level values in an adjoining column.

Note: the base unit land values obtained in Step 9 will often require adjustments to account for factors such as location, accessibility, special soil conditions, etc., which influence land value, but which cannot be measured by productivity.

In such cases where soil productivity is a prime factor in determining the value of the land (as indicated by the linear relationship between selling prices and soil productivity in Figure 1), the procedural steps outlined above should provide a sound basis for establishing equitable values.

It should be noted, however, that the procedure is not a formula for appraising farm land, but only a method of establishing unit values based upon a soil productivity index. Soil productivity is but one value-influencing factor to be considered, and depending upon the area in which the farm land is located, it may or may not have significant bearing upon the market value of the property.

In the final analysis, each farm appraisal must stand the test of comparison with competing properties. Intelligent buyers may be assumed to know of the existence of similar properties as well as the bidding prices or asking prices for such properties. It is also reasonable to assume that well informed buyers of competing properties have examined the characteristics of the property, in a practical, if not scientific way before establishing the value of the property to them as investors.

Similarly, the appraiser must rely heavily upon the comparison process in determining the relationship of a farm property of unknown value, but of known characteristics (subject farm), to comparable farms of known value as well as known characteristics (bench-mark farms). Each value-influencing factor must be analyzed in order to determine its individual contribution to the overall value. In the process, consideration must be given to such factors as the time and condition of the sale, the size of the property, the suitability and productivity of the soil, the value of the buildings, the location of the property in relation to market accessibility, and the location of the property in relation to its suitability for higher land uses.

Only after determining the contribution value of each of these factors can the appraiser determine the proper basis or criteria for establishing unit land values which will accurately reflect the action of the market.

THE LAND RESIDUAL TECHNIQUE

In the absence of sufficient market data, income-producing land may be valued by determining the portion of the net income attributable to the land and capitalizing the net income into an indication of value. The procedure is as follows:

1. Determine the highest and best use of the land, which may be either its present use or hypothetical use.
2. Estimate the net income which the property can be expected to yield.
3. Estimate the replacement cost new of the improvements.
4. If the case involves the present use, estimate the proper allowance for depreciation, and deduct that amount from the replacement cost new of the improvements to arrive at an estimate of their depreciated value.
5. Develop appropriate capitalization rates.
6. Calculate the income requirements of the improvements, and deduct the amount from the total net income to derive that portion of the income which can be said to be attributable to the land.
7. Capitalize the residual income attributable to the land to an indication of value.

RATIO METHOD

A technique useful for establishing broad indications of land values is a "typical" allocation or *ratio method*. In this technique, the *ratio* of the land value to the total value of improved properties is observed in situations where there is good market and/or cost evidence to support both the land values and total values. This market abstracted ratio is then applied to similar properties where the total values are known, but the allocation of values between land and improvements are not known. The ratio is usually expressed as a percentage which represents the portion of the total improved

value that is land value, or as a formula:

$$\frac{\text{Total Land Value}}{\text{Total Property Value}} \times 100\% = \% \text{ Land Is of Total Property Value}$$

This technique can be used on most types of improved properties, with important exceptions being farms and recreational facilities, *provided* that the necessary market and/or cost information is available. In actual practice, available market information limits this technique primarily to residential properties, and to a much lesser extent, commercial and industrial properties such as apartments, offices, shopping centers, and warehouses.

The ratio technique cannot give exact indications of land values. It is nevertheless useful, especially when used in conjunction with other techniques of estimating land values because it provides an indication of the reasonableness of the final estimate of land value.

The ratio should be extracted from available market information and applied to closely similar properties. It should be noted that any factor that affects values may also affect the ratio of values. Zoning is particularly important because it may require more or less improvements be made to the land, or may require a larger or smaller minimum size. This tends to have a bearing on the land values, and so it may also influence the ratio of values considerably from community to community.

The following is an example of a residential land valuation situation:

Market information derived from an active new subdivision

Typical Lot Sale Price (most lots equivalent)	\$15,000
Improved Lot Sales (range)	\$65,000 to \$75,000
Indicated Ratio	$\frac{\$15,000}{\$75,000} \text{ to } \frac{15,000}{65,000} \times 100\%$ 20% to 23%

Similar subdivision, but 100% developed

Typical Lot Sale (most lots equivalent)	unavailable
Improved Lot Sales (range)	\$85,000 to \$105,000
Broadest Indicated Range of Lot Values (20% x \$85,000 to 23% x \$125,000)	\$17,000 to \$24,150
Narrowest Indicated Range of Lot Values (23% x \$85,000 to 20% x \$105,000)	\$19,550 to \$21,000

If both lots and improvements vary considerably, the broadest range is most appropriate. If most lots vary little and are judged equivalent but the improvements vary somewhat, the narrowest range is appropriate. Most subdivisions exhibit a combination of the two ranges, showing a narrow typical range, but a wider actual range of land values.

In preceding sections, we have outlined the fundamental concepts, principles, and valuation techniques underlying the Appraisal Process. We will now approach the problem at hand . . . the revaluation of certain specified real property within a total taxing jurisdiction, be it an entire county or any subdivision thereof . . . and to structure a systematic mass appraisal program to effect the appraisal of said properties in such a way as to yield valid, accurate, and equitable property valuations at a reasonable cost dictated by budgetary limitations, and within a time span totally compatible with assessing administration needs.

The key elements of the program are validity, accuracy, equity, economy, and efficiency. To be effective, the program must . . .

- incorporate the application of proven and professionally acceptable techniques and procedures;
- provide for the compilation of complete and accurate data and the processing of that data into an indication of value approximating the prices actually being paid in the market place;
- provide the necessary standardization measures and quality controls essential to promoting and maintaining uniformity throughout the jurisdiction;
- provide the appropriate production controls necessary to execute each phase of the operation in accordance with a carefully planned budget and work schedule; and
- provide techniques especially designed to streamline each phase of the operation, eliminating superfluous functions, and reducing the complexities inherent in the Appraisal Process to more simplified but equally effective procedures.

In summary, the objective of an individual appraisal is to arrive at an opinion of value, the key elements being the validity of the approach and the accuracy of the estimate. The objective of a mass appraisal for tax purposes is essentially the same. However, in addition to being valid and accurate, the value of each property must be equitable to that of each other property, and what's more, these valid, accurate, and equitable valuations must be generated as economically and efficiently as possible.

OVERVIEW

The prime objective of mass appraisals for tax purposes is to equalize property values. Not only must the value of one residential property be equalized with another, but it must also be equalized with each agricultural, commercial, and industrial property within the political unit.

The common denominator or the basis for equalization is market value . . . that price which an informed and intelligent person, fully aware of the existence of competing properties and not being compelled to act, is justified in paying for a particular property.

The job of the appraiser is to arrive at a reasonable estimate of that justified price. To accomplish this, the coordination of approaches to the valuation of the various classes of property must be made so that they are related one to another in such a way as to reflect the motives of the prospective purchasers of each type of property.

A prospective purchaser of a residential property is primarily interested in its capacity to render service to the family as a place to live. Its location, size, quality, design, age, condition, desirability and usefulness are the primary factors to be considered in making a selection. By relying heavily upon powers of observation and inherent intelligence, knowing what could be afforded and simply comparing what is available, one property will eventually stand out to be more appealing than another. So it is likewise the job of the appraisers to evaluate the relative degree of appeal of one property to another for tax purposes.

The prospective purchaser of agricultural property will be motivated somewhat differently. The primary interest will be in the productive capabilities of the land. It is reasonable to assume that the purchaser will be familiar, at least in a general way, with the productive capacity of the farm. It might be expected that the prudent investor will have compared one farm's capabilities against another. Accordingly, the appraiser for local tax equalization purposes must rely heavily upon prices being paid for comparable farm land in the community.

The prospective purchaser of commercial property is primarily interested in the potential net return and tax shelter the property will provide. That price which is justified to pay for the property is a measure of the prospects for a net return from the investment. Real estate, as an investment then, must not only compete with other real estate, but also with stocks, bonds, annuities, and other similar investment areas. The commercial appraiser must explore

the rental market and compare the income-producing capabilities of one property to another.

The prospective purchaser of industrial property is primarily interested in the overall utility value of the property. Of course, in evaluating the overall utility, individual consideration must be given to the land and each improvement thereon. Industrial buildings are generally of special purpose design, and as such, cannot readily be divorced from the operation for which they were built. As long as the operation remains effective, the building will hold its values; if the operation becomes obsolete, the building likewise becomes obsolete. The upper limit of its value is its replacement cost new, and its present day value is some measure of its present day usefulness in relation to the purpose for which it was originally designed.

Any effective approach to valuations for tax purposes must be patterned in such a way as to reflect the "modus operandi" of buyers in the market place. As indicated above, the motives influencing prospective buyers tend to differ depending upon the type of property involved. It follows that the appraiser's approach to value must differ accordingly.

The residential appraiser must rely heavily upon the market data approach to value . . . analyzing the selling prices of comparable properties and considering the very same factors of location, size, quality, design, age, condition, desirability, and usefulness which were considered by the buyer.

The farm appraiser must likewise rely primarily upon the market data approach to value, but in addition to analyzing the selling prices of comparable properties, an effective analysis of the farm's productive potential must also be made.

Rural dwellings are similar to urban dwellings in that their primary purpose is to provide a family with a home; as such, the appraiser should value them in the same manner as the valuation of any other residence. The approach to farm buildings, however, must be somewhat different. Here, the primary objective is to arrive at that value which the building's presence adds to the productivity of the land . . . their degree of utility or usefulness. In determining the productive capabilities of the land, it will be necessary to divide the land into various classes according to specific types and uses, such as tillable, pasture, woodland, and waterland; to compute the acreage of each class; and to value each class individually. Due consideration must be given to soil types and their fertility, making every effort to utilize all soil and land maps available through agriculture extension services, and state universities. Similarly, equal consideration must be given to all other factors affecting the value of the property, such as its location relative to the market place, its

relative accessibility, the topography of the land, the shape and size of the fields, the extent and condition of the fences, drainage, water supply, etc.

The commercial appraiser will find that since commercial property is not bought and sold as frequently as is residential property, the sales market cannot be readily established. By relying heavily on the income approach to value, the net economic rent which the property is capable of yielding can be determined, and the amount of investment required to effect that net return at a rate commensurate with that normally expected by investors, can also be determined. This can only be achieved through a comprehensive study of the income-producing capabilities of comparable properties and an analysis of present-day investment practices.

The industrial appraiser will not be able to rely on the market data approach because of the absence of comparable sales, each sale generally reflecting different circumstances and conditions. Also, it is not possible to rely upon the income approach . . . again because of the absence of comparable investments, and because of the inability to accurately determine the contribution of each unit of production to the overall income produced. Therefore, by relying heavily on the cost approach to value, a determination must be made of the upper limit or replacement cost new of each improvement and the subsequent loss of value resulting overall from physical, functional and economic factors.

The fact that there are different approaches to value, some of which are more applicable to one class of property than to another, does not, by any means, preclude equalization between classes. Remember that the objective in each approach is to arrive at a price which an informed and intelligent person, fully aware of the existence of competing properties and not being compelled to act, is justified in paying for any one particular property. Underlying, and fundamental to each of the approaches is the comparison process. Regardless of whether the principal criteria are actual selling prices, income-producing capabilities, or functional usefulness, like properties must be treated alike. The primary objective is equalization. The various approaches to value, although valid in themselves, must nevertheless be coordinated one to the other in such a way as to produce values which are not only valid and accurate, but are also equitable. The same "yardstick" of values must be applied to all properties, and must be applied by systematic and uniform procedures.

It is obvious that sales on all properties are not required to effectively apply the market data approach. The same is true regarding any other approach. What is needed is a comprehensive record of all the significant physical and

economic characteristics of each property in order to compare the properties of "unknown" values with the properties of "known" values. All significant differences between properties must in some measure, either positively or negatively, be reflected in the final estimate of value.

Each property must be given individual treatment, but the treatment must be uniform and standardized, and essentially no different than that given to any other property. All the factors affecting value must be analyzed and evaluated for each and every property within the entire political unit. It is only by doing this that equalization between properties and between classes of properties can be ultimately effected.

All this, at best, is an oversimplification of the equalization process underlying the entire Mass Appraisal Program. The program itself consists of various operational phases, and its success depends primarily upon the systematic coordination of collecting and recording data, analyzing the data, and processing the data to an indication of value.

DATA INVENTORY

Basic to the appraisal process is the collecting and recording of pertinent data. The data will consist of general supporting data, referring to the data required to develop the elements essential to the valuation process; neighborhood data, referring to information regarding pre-delineated neighborhood units; and specific property data, referring to the data compiled for each parcel of property to be processed into an indication of value by the cost, market and/or income approach.

The data must be comprehensive enough to allow for the adequate consideration of all factors which significantly affect property values. In keeping with the economics of a mass appraisal program, it is costly and impractical to collect, maintain, and process data of no or marginal contribution to the desired objectives. The axiom "too much data is better than insufficient data" does not apply. What does apply is the *proper amount* of data, no more or no less, which is necessary to provide the data base required to generate the desired output.

General Supporting Data. The appraisal staff will be primarily concerned with cost, sales and income data, but they will also find it necessary to research and compile general socio-economic information pertaining to the entire political unit under appraisal. The information will serve to assist the staff during the analytical phase of the operation and should include, but not necessarily be limited to, population trends, prevailing geographical

factors, primary transportation facilities, primary income sources, unemployment and income levels, institutional influences, the annual volume of new construction and ownership transfers, availability of vacant land, construction labor and material costs, preponderance of residential rentals, and the amount of residential vacancies.

Cost data must be sufficient enough to develop or select and validate the pricing schedules and cost tables required to compute the replacement cost new of improvements needed to apply the cost approach to value.

All data pertaining to the cost of total buildings in place should include the parcel identification number, property address, date of completion, construction cost, name of builder, source of information, structural characteristics, and other information pertinent to analysis.

Cost information may be recorded on the same form (unassigned property record card) used to record specific property data.

The principal sources for obtaining cost data are builders and developers, and it is generally advisable to collect cost data in conjunction with new construction pick-ups.

Sales data must be sufficient enough to provide a representative sampling of comparable sales needed to apply the market data approach, to derive unit land values and depreciation indicators needed to apply the cost approach, and to derive gross rent multipliers and elements of the capitalization rate needed to apply the income approach.

All sales data should include the parcel identification number, property classification code, month and year of sale, selling price, source of information, i.e., buyer, seller, agent, or fee, and a reliable judgment as to whether or not the sale is representative of a true arm's length transaction.

Sales data should be recorded on the same form (assigned property record card) used to record specific property data, and verified during the property listing phase.

The principal source for obtaining sales data is the County Recorder's Office and the real estate transfer returns. Other sources may include developers, realtors, lending institutions, and individual owners during the listing phase of the operation.

Income and expense data must be sufficient enough to derive capitalization rates and accurate estimates of net income needed to apply the income approach.

Income and expense data should include both general data regarding existing financial attitudes and practices, and specific data regarding the actual incomes and expenses realized by specific properties.

The general data should include such information as equity return expectations, gross rentals, vacancy and operating cost expectations and trends, prevailing property management costs, and prevailing mortgage costs.

Specific data should include the parcel identification number, property address (or building ID), source of information, the amount of equity, the mortgage and lease terms, and an itemized account of the annual gross income, vacancy loss, and operating expenses for the most recent two-year period.

The general data should be documented in conjunction with the development of capitalization procedural guidelines. The specific data, since it is often considered confidential and not subject to public access, should be recorded on special forms, designed in such a way as to accommodate the property owner or agent thereof in submitting the required information. The forms should also have space reserved for the appraiser's analysis and calculations.

The principal sources for obtaining the general financial data are investors, lending institutions, and property managers. The primary sources for obtaining specific data are the individual property owners and/or tenants during the listing phase of the operation.

Neighborhood data. At the earliest feasible time during the data inventory phase of the operation, and after a thorough consideration of the living environment and economic characteristics of the overall county, or any political sub-division thereof, the appraisal staff should delineate the larger jurisdictions into smaller "neighborhood units," each exhibiting a high degree of homogeneity in residential amenities, land use, economic trends, and housing characteristics such as structural quality, age, and condition. The neighborhood delineations should be outlined on an index (or comparable) map and each assigned an arbitrary Neighborhood Identification Code, which when combined with the parcel identification numbering system, will serve to uniquely identify it from other neighborhoods.

Neighborhood data must be comprehensive enough to permit the adequate consideration of value-influencing factors to determine the variations in selling prices and income yields attributable to benefits arising from the location of one specific property as compared to another. The data should include the taxing district, the school district, the neighborhood identification

code, special reasons for delineation (other than obvious physical and economic boundaries), and various neighborhood characteristics such as the type (urban, suburban, etc.), the predominant class (residential, commercial, etc.), the trend (whether it is declining, improving, or relatively stable), its accessibility to the central business district, shopping centers, interstate highways and primary transportation terminals, its housing characteristics, the estimated range of selling prices for residentially-improved properties, and a rating of its relative durability.

All neighborhood data should be recorded on a specially designed form during the delineation phase.

Specific property data must be comprehensive enough to provide the data base needed to process each parcel of property to an indication of value, to generate the tax roll and related tax roll requirements, to generate other specified output, and to provide the assessing officials with a permanent record to facilitate maintenance functions and to administer taxpayer assistance and grievance proceedings.

The data should include the parcel identification number, ownership and mailing address, legal description, property address, property classification code, local zoning code, neighborhood identification code, site characteristics, and structural characteristics.

All the data should be recorded on a single, specially-designed property record card customized to meet individual assessing needs. Each card should be designed and formatted in such a way as to accommodate the listing of information and to facilitate data processing. In addition to the property data items noted above, space must be provided for a building sketch, land and building computations, summarizations, and memoranda. In keeping with the economy and efficiency of a mass appraisal program, the card should be formatted to minimize writing by including a sufficient amount of site and structural descriptive data which can be checked and/or circled. The descriptive data should be comprehensive enough to be suitable for listing any type of land and improvement data regardless of class, with the possible exception of large industrial, institutional, and utility complexes which require lengthy descriptions. In these cases, it will generally be necessary to use a specially-designed supplemental property record document, keyed and indexed to the corresponding property record card. The property record card should be made a permanent part of the assessing system, and used not only in conjunction with the revaluation, but also to update the property records for subsequent assessments.

The specific property data should be compiled from existing assessing records and field inspections. The parcel identification number, ownership, mailing address, and legal description may be obtained from existing tax rolls. Property classification codes may also be obtained from existing tax rolls (whenever available) and verified in the field. Local zoning codes may be obtained from existing zoning maps. Neighborhood identification codes may be obtained from the neighborhood delineation maps. Lot sizes and acreage may be obtained from existing tax maps. The property address, and the site and structural characteristics may be obtained by making a physical inspection of each property.

In transferring lot sizes from the tax maps to the property record cards, the personnel performing the tasks must be specially trained in the use of standardized lot sizing techniques and depth tables, which are necessary to adjust irregular shaped lots and abnormal depths to account for variations from predetermined norms. In regard to acreage, the total acreage may be transferred, but the acreage breakdowns required to effect the valuation of agricultural, commercial, and industrial properties must be obtained in the field from the property owner and verified by personal observation and aerial photographs, if available.

Field inspections must be conducted by qualified listers under the close supervision of the appraisal staff. During this phase of the operation, the lister must visit each property and make personal contact with the occupant. In the course of the inspection, the following procedures must be adhered to.

- identification of the property.
- verification of the ownership (recording any transfers which may have occurred).
- recording the property address.
- verification of the property classification and zoning codes.
- interviewing the occupant of the building and recording all pertinent economic data.
- inspection of the interior of the building and recording of all pertinent physical data.
- measuring and inspecting the exterior of the building, as well as all other improvements on the property, and recording the story height, and the dimensions and/or size of each.

- recording a sketch of the principal building(s), consisting of a plan view showing the main portion of the structure along with any significant attached exterior features, such as porches, etc. All components must be identified and the exterior dimensions shown for each.
- selection of and recording the proper quality grade of the improvement.
- selection of and recording the proper replacement costs or replacement cost adjustments for all field priced items.
- reviewing the property record card for completeness and accuracy.

After the field inspection is completed, the property record cards must be submitted to clerical personnel to review the cards for completeness, calculate the areas, and make any necessary mathematical extensions.

Complete and accurate data are essential to the program. Definite standardized data collection and recording procedures must be followed if these objectives are to be met.

PROCESSING THE DATA

This phase of the operation involves the analysis of data compiled during the data inventory phase and the processing of that data to an indication of value through the use of the cost, market, and income approaches to value.

During the analytical phase, it will be necessary to analyze cost, market, and income data in order to provide a basis for validating the appropriate cost schedules and tables required to compute the replacement cost new of all buildings and structures; for establishing comparative unit land values for each class of property; for establishing the appropriate depreciation tables and guidelines for each class of property; and for developing gross rent multipliers, economic rent and operating expense norms, capitalization rate tables and other related standards and norms required to effect the mass appraisal of all the property within an entire political unit on an equitable basis.

After establishing the appropriate standards and norms, it remains to analyze the specific data compiled for each property by giving due consideration to the factors influencing the value of that particular property as compared to another, and then to process the data into an indication of value by employing the techniques described in the section of the manual dealing with the application of the traditional approaches to value.

Any one, or all three of the approaches, if applied properly, should lead to an indication of market value; of primary concern is applying the approaches on an equitable basis. This will require the coordinated effort of a number of individual appraisers, each appraiser acting as a member of a team, with the team effort directed toward a valid, accurate and equitable appraisal of each property within the political unit. Each property must be physically reviewed, during which time the following procedures must be adhered to.

- verification of the accuracy of each of the characteristics recorded on the property record card.
- certification that the proper schedules and cost tables were used in computing the replacement cost of each building and structure.
- determination of the proper quality grade and design factor to be applied to each building to account for variations from the base specifications.
- making a judgment of the overall condition, desirability, and usefulness of each improvement in order to arrive at a sound allowance for depreciation.
- capitalization of net income capabilities into an indication of value in order to determine the loss of value attributable to functional and economic obsolescence.
- addition of the depreciated value of all improvements to the land value, and reviewing the total property value in relation to the value of comparable properties.
- determination that the total property value established can be correlated to actual sales of comparable properties.

At the completion of the review phase, the property record cards must be, once again, submitted to clerical personnel for final mathematical calculations and extensions, and a final check for completeness and accuracy.

Once the final values have been established for each property, the entire program should be evaluated in terms of its primary objectives . . . do the values approximate a satisfactory level of market value, and what's more important, are the values equitable? Satisfactory answers to these questions can best be obtained through a statistical analysis of recent sales in an appraisal-to-sale ratio study, if sufficient sales are available.

To perform the study, it is necessary to take a representative sampling of recent valid sales and compute the appraisal-to-sale ratio for each of the sales. If the sample is representative, the computed median appraisal-to-sale ratio will give an indication of how close the appraisals within each district approximate the market value. This is providing, of course, that the sales included represent true market transactions. It is then necessary to determine the deviation of each individual appraisal-to-sale ratio from the median ratio, and to compute either the average or the standard deviation, which will give an indication of the degree of equity within each individual district. What remains then is to compare the statistical measures across property classes in order to determine those areas, if any, which need to be further investigated, revising the appraisal, if necessary, to attain a satisfactory level of value and equity throughout the entire jurisdiction.

The techniques and procedures set forth herein, if applied skillfully, should yield highly accurate and equitable property valuations, and should provide a sound property tax base. It should be noted, however, that no program, regardless of how skillfully administered, can ever be expected to be error-free. The appraisal must be fine tuned and this can best be done by giving the taxpayer an opportunity to question the value placed upon his property and to produce evidence that the value is inaccurate or inequitable. During this time, the significant errors will be brought to light, and taking the proper corrective action will serve to further the objectives of the program. What's important in the final analysis is to use all these measures as well as any other resources available to effect the highest degree of accuracy and equity possible.

DATA INVENTORY
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STATE OF VIRGINIA RESIDENTIAL/AGRICULTURAL PROPERTY RECORD CARD

ZIP & MAILING ADDRESS

LEGAL DESCRIPTION

010	COUNTY	DISTRICT	MAP	PARCEL NO.	VALID	CARD NUMBER
101	ROUTING NO.	102	CLASS	103	TAX CLASS	104
106	PARTIAL	107	LIVING UNITS	108	NEIGHBORHOOD	
110	NUMBER	SUFFIX	STREET NAME			

SALES DATA					
NO	YR	TYPE	AMOUNT	SOURCE	VALID
201					
202					
203					

TYPE CODES		VALIDITY CODES	
1. LAND	0. VALID SALE	5. LIQUIDATION/FORCED SALE	
2. LAND & BUILDINGS	1. INVOLVED ADDN'L PARCELS	6. FINANCING/	
3. BUILDING	2. NOT OPEN MARKET	LAND CONTRACT	
	3. CHANGED AFTER SALE	7. CONSTRUCTION COST ONLY	
	4. RELATED INDIVIDUALS	8. INCLUDED EXCESSIVE	
	OR CORPORATIONS	PERSONAL PROPERTY OR	
		OTHER - SEE NOTES	

ENTRANCE INFORMATION			
MONTH	DATE	YEAR	ENTR. CODE
451			
452			
453			

SUMMARY OF VALUES		ENTRANCE CODES		INFO CODE	
TOTAL VALUE	LAND	1. ENTRANCE GAINED	1. OWNER		
TOTAL VALUE	BUILDINGS	2. ENTRANCE AND INFO REFUSED	2. TENANT		
TOTAL VALUE	LAND & BLDGS.	3. ESTIMATED FOR MISCELLANEOUS	3. OTHER		
		4. REASON - SEE NOTES			
		5. VACANT OR OBBY ONLY			

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471	
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LOCATION & FRONTING	
CENTRAL BUS. DIST.	1
PERM. DEN. BUS. DIST.	2
BUSINESS CLUSTER	3
MAJOR STRIP	4
SECONDARY STRIP	5
NEIGH. or SPOT (RES. AREA)	6
COMM./IND. PARK	7
INDUSTRIAL SITE	8
APARTMENT/CONDOMINIUM COMP.	9

RECORD OF OWNERSHIP			
OWNER	DATE	PRICE	PAGE

LAND DATA & COMPUTATIONS									
299	300	301	302	303	304	305	306	307	308
DELETED 300-379									
ITS	1. REGULAR LOT	2. REAR LOT	3. IRREGULAR LOT	4. WATERFRONT					
	311	312	313	314	315	316	317	318	319
	320	321	322	323	324	325	326	327	328
	329	330	331	332	333	334	335	336	337
	338	339	340	341	342	343	344	345	346
	347	348	349	350	351	352	353	354	355
	356	357	358	359	360	361	362	363	364
	365	366	367	368	369	370	371	372	373
	374	375	376	377	378	379	380	381	382
	383	384	385	386	387	388	389	390	391
	392	393	394	395	396	397	398	399	400
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	410	411	412	413	414	415	416	417	418
	419	420	421	422	423	424	425	426	427
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	527	528	529	530	531	532	533	534	535
	536	537	538	539	540	541	542	543	544
	545	546	547	548	549	550	551	552	553
	554	555	556	557	558	559	560	561	562
	563	564	565	566	567	568	569	570	571
	572	573	574	575	576	577	578	579	580
	581	582	583	584	585	586	587	588	589
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	599	600	601	602	603	604	605	606	607
	608	609	610	611	612	613	614	615	616
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	626	627	628	629	630	631	632	633	634
	635	636	637	638	639	640	641	642	643
	644	645	646	647	648	649	650	651	652
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	662	663	664	665	666	667	668	669	670
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	698	699	700	701	702	703	704	705	706
	707	708	709	710	711	712	713	714	715
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	725	726	727	728	729	730	731	732	733
	734	735	736	737	738	739	740	741	742
	743	744	745	746	747	748	749	750	751
	752	753	754	755	756	757	758	759	760
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	806	807	808	809	810	811	812	813	814
	815	816	817	818	819	820	821	822	823
	824	825	826	827	828	829	830	831	832
	833	834	835	836	837	838	839	840	841
	842	843	844	845	846	847	848	849	850
	851	852	853	854	855	856	857	858	859
	860	861	862	863	864	865	866	867	868
	869	870	871	872	873	874	875	876	877
	878	879	880	881	882	883	884	885	886
	887	888	889	890	891	892	893	894	895
	896	897	898	899	900	901	902	903	904
	905	906	907	908	909	910	911	912	913
	914	915	916	917	918	919	920	921	922
	923	924	925	926	927	928	929	930	931
	932	933	934	935	936	937	938	939	940
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	950	951	952	953	954	955	956	957	958
	959	960	961	962	963	964	965	966	967
	968	969	970	971	972	973	974	975	976
	977	978	979	980	981	982	983	984	985
	986	987	988	989	990	991	992	993	994
	995	996	997	998	999	1000	1001	1002	1003
	1004	1005	1006	1007	1008	1009	1010	1011	1012
	1013	1014	1015	1016	1017	1018	1019	1020	1021
	1022	1023	1024	1025	1026	1027	1028	1029	1030
	1031	1032	1033	1034	1035	1036	1037	1038	1039
	1040	1041	1042	1043	1044	1045	1046	1047	1048
	1049	1050	1051	1052	1053	1054	1055	1056	1057
	1058	1059	1060	1061	1062	1063	1064	1065	1066
	1067	1068	1069	1070	1071	1072	1073	1074	1075
	1076	1077	1078	1079	1080	1081	1082	1083	1084
	1085	1086	1087	1088	1089	1090	1091	1092	1093
	1094	1095	1096	1097	1098	1099	1100	1101	1102
	1103	1104	1105	1106	1107	1108	1109	1110	1111
	1112	1113	1114	1115	1116	1117	1118	1119	1120
	1121	1122	1123	1124	1125	1126	1127	1128	1129
	1130	1131	1132	1133	1134	1135	1136	1137	1138
	1139	1140	1141	1142	1143	1144	1145	1146	1147
	1148	1149	1150	1151	1152	1153	1154	1155	1156
	1157	1158	1159	1160	1161	1162	1163	1164	1165
	1166	1167	1168	1169	1170	1171	1172	1173	1174
	1175	1176	1177	1178	1179	1180	1181	1182	1183
	1184	1185	1186	1187	1188	1189	1190	1191	1192
	1193	1194	1195	1196	1197	1198	1199	1200	1201
	1202	1203	1204	1205	1206	1207	1208	1209	1210
	1211	1212	1213	1214	1215	1216	1217	1218	1219
	1220	1221	1222	1223	1224	1225	1226	1227	1228
	1229	1230	1231	1232	1233	1234	1235	1236	1237
	1238	1239	1240	1241	1242	1243	1244	1245	1246
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[illegible]

DEFINITION OF TERMS

Following is an explanation of the terms as they are used throughout the specifications.

Characters — refer to the letters, digits, and symbols which make up the data to be entered on the data collection form.

Alpha Character — letter

Numeric Character — digit

Symbol Character — calculation signs, etc.

Character positions — refer to the blank dashes (underscores) on the data collection form where data is to be entered.

Right Justified — the last character position must be filled with the last character of the entry.

Left Justified — the first character position must be filled with the first character of the entry.

OWNERSHIP

OWNERSHIP & MAILING ADDRESS — Space is provided to enter the name or names of the property owners and the mailing address to which the tax bills are forwarded. This information is obtained from existing client records and is generally entered on the data collection form by a computer lineprinter. Depending upon particular project requirements, other data, such as mortgagor codes, deed information, sales etc., may also be entered in this area.

LEGAL DESCRIPTION — Space is provided to enter the legal description of the property. This information is obtained from existing records and is generally entered on the data collection form by a computer lineprinter.

PARCEL IDENTIFICATION

The parcel identification consists of a county, district, map, parcel, and if applicable, a special ID number. The parcel ID is a unique number which is the basis of identifying all parcels. The inventory of parcel numbers should be strictly monitored, therefore only certain designated personnel should be authorized to create, delete, or alter parcel numbers.

(010) **COUNTY** — Required entry. Space is provided to enter a two digit numeric code identifying a particular county. A county number must be entered on every data collection form. A complete listing of West Virginia county numbers can be found in the Appendix of this manual.

DISTRICT — Required entry. Space is provided to enter a two digit numeric code identifying a particular political jurisdiction. A district number must be entered on every data collection form.

MAP — Required entry. Space is provided to enter four numeric and/or alpha characters used to denote the division of properties generally defined on an individual tax map. A map number must be entered on every data collection form.

PARCEL NO.

Prefix — Required entry. Four character positions to the left of the decimal point are provided to enter numeric or alpha characters denoting the individual parcels located within a tax map. This is a right justified entry - all character positions must be filled in. Use leading zeros when necessary.

Suffix — Optional entry. The four character positions to the right of the decimal point are for entering numeric and/or alpha characters denoting a suffix to the parcel number when applicable. When activated, the suffix entry should be right justified. If manually entered, all character positions should be filled in. Use leading zeros if necessary.

010	COUNTY	DISTRICT	MAP	0510.0001	SPECIAL ID	OF	CARD NUMBER
				PARCEL NO			

SPECIAL ID — Optional entry. Space is provided to enter a code number to identify undivided interest, county court splits, and permanent buildings on leased land.

The first character position is reserved for a numeric code identifying the type of ownership division. The possibilities are . . .

- 1 Building on leased land
- 3 Undivided part interest
- 6 County Court split

No other entries are permissible. The three suffix positions are not to be used.

010	COUNTY	DISTRICT	MAP	PARCEL NO	3	SPECIAL ID	OF	CARD NUMBER

CARD NUMBER — Required entry. Character positions are provided to enter two sets of two numeric characters each. The last two positions are reserved to enter the total number of cards required to list the parcel and the first two positions are reserved to enter the sequential number assigned to each particular card . . . i.e., for parcels requiring one card, enter 01 of 01; for parcels requiring two cards, enter 01 of 02 on the first card and 02 of 02 on the second card; for three cards, 01 of 03, 02 of 03, 03 of 03, etc., up to 01 of 99 and 99 of 99. A card number must be entered on every data collection form. This data is to be duplicated on all input records. All character positions must be filled in. Use leading zeros if necessary.

Note: Multiple Sequence Cards. Normally, it will be necessary for the data collector to create extra cards to accommodate additional structures encountered at the property. Certain legal and identification data is required to be entered by the data collector on all multiple sequence cards. In addition to the normal listing and descriptive data, the data collector should include:

Owner's name — as shown on the first card

Parcel ID — *exactly* as shown on the first card

- (101) ROUTING NUMBER — Optional entry. Character positions are provided to enter three numeric characters - ranging from 001 to 999 - to the left of the decimal point, and two numeric characters - ranging from 01 to 99 - to the right of the vertical hash mark, denoting the sequential routing number assigned to each parcel of property. The character positions to the right of the hash mark are provided to facilitate the identification of property splits . . . the first split from a property being identified as 01, the second as 02, etc.

Consult your supervisor for specific location applications.

Note: For parcels requiring multiple card listing, the *same* routing number must be entered on each card.

- (102) CLASS — Required entry. A character position is provided to enter the general property class of the subject parcel. The basis for classification is the most predominant present-day use. If the parcel is unused, the basis for classification would depend upon the anticipated use, or the use for which it is zoned.

Enter R RESIDENTIAL to indicate one to four family residential use.

Enter A APARTMENT to indicate multi-family use . . . five or more families.

Enter F FARM to indicate rural properties, generally defined by a minimum acreage requirement, and usually but not necessarily devoted to agriculture.

Enter C COMMERCIAL to indicate properties devoted to trade, services, and recreational use.

Enter I INDUSTRIAL to indicate properties devoted to the manufacturing and/or processing of products.

Enter X EXEMPT to indicate non-taxable properties.

Enter U UTILITY to indicate properties devoted to the production of public utility commodities or services under the control of governmental agencies such as the Public Utility Commission.

A class must be entered on every data collection form.

Note: For multiple sequence forms, the class must be the same for all cards in a series.

(103) **TAX CLASS** — Required entry. A character position is provided to enter the appropriate numeric or alpha tax class.

- Enter 2 to indicate all property owned, used and occupied by the owner exclusively for residential purposes; all farms, including land used for horticulture and grazing, occupied and cultivated by their owners or bona fide tenants.
- Enter 3 to indicate all real and personal property situated outside of municipalities, exclusive of Class 2.
- Enter 4 to indicate all real and personal property situated inside of municipalities, exclusive of Class 2.
- Enter C to indicate property SPLIT BY COUNTY COMMISSION for classification purposes.
- Enter N to indicate exempt or non-taxable property.
- Enter A to indicate operating public utility property.
- Enter S to indicate property sold to the state.

(104) **LAND USE** — Required entry. Character positions are provided to enter a three digit numeric code denoting the present use of each particular parcel of land. A land use code must be entered on all data collection forms. In the case of multiple land uses on the same parcel, enter the land use code which is most representative of the improvements listed on that particular data collection form and enter a check mark [✓] in the bracket provided.

Note: Appropriate land use codes may be found in the Appendix of this manual.

(105) **NRP (Not Real Property)** — Optional entry. A character position is provided to enter a check mark [✓] to denote a mobile home or other improvement that should be considered personal property rather than real property because of its current situation, i.e., improvement on leased land.

(106) **PARTIAL** — Optional entry. A character position is provided to enter the alpha character "Y" to denote that the subject parcel has a partially completed dwelling located on it. If this condition does not exist, simply leave the entry blank.

Note: For parcels requiring multiple card listing, the partial code "Y" must be entered on each card.

(107) **LIVING UNITS** — Optional entry. A character position is provided to denote the amount of living units which exist in the subject dwelling. Enter the amount of living units.

A living unit is defined as any room or group of rooms designed as the living quarters of one family or household, equipped with cooking and toilet facilities and having an independent entrance from a public hall or from the outside.

Note: A single family residence contains one living unit, and the correct entry would be 1.

Note: If the parcel is vacant or contains only auxiliary improvements, simply leave the entry blank.

(108) **NEIGHBORHOOD** — Optional entry. Character positions are provided to enter three numeric characters ranging from 001 to 999 to the left of the vertical hash mark to denote a specific neighborhood identification number. A character position is provided to the right of the vertical hash mark to enter an additional digit, 1 to 9, to denote the creation of a subneighborhood within a neighborhood subsequent to the initial neighborhood delineation. For example, neighborhood 200 is being re-defined as neighborhood 200/1 and 200/2. If the subject property's neighborhood identification

number does not include the subneighborhood, simply leave it blank. A neighborhood may be defined as a geographical area exhibiting a high degree of homogeneity in residential amenities, land use, economic trends, and housing characteristics, such as structural quality, age, and condition.

- (110) **PROPERTY ADDRESS** — Required entry. Thirty character positions are provided to enter alpha and numeric characters denoting the existing property address. This may include any combination of street number, suffix, street direction, and street or road name.

Examples:

110	<u>1525</u>	<u>ANN WASHINGTON ST</u>
	NUMBER	STREET NAME

110	<u>ROUTE 52</u>
	NUMBER

Note: The property address is not necessarily the same as the mailing address.

RECORD OF OWNERSHIP — Optional entry.

Space is provided to enter information on the present and previous owner of the parcel.

OWNER — Enter last name first. If there are multiple owners, enter the owner with the largest percentage interest. If all owners share equally, enter the owner whose last name comes first alphabetically. If the interest is separately assessed, a separate card will be prepared.

DATE — Enter the month and year that the parcel was sold.

PRICE — Enter the consideration that was paid for the parcel.

DEED BOOK — Enter the deed book or will book number in which the transfer was recorded.

PAGE — Enter the page number of the deed book or will book in which the transfer was recorded.

(201-203) SALES DATA — Optional entry.

Space is provided to enter the data for three sales. The data is arranged in vertical columns. All the data should be listed from top to bottom, allowing one line for each sale. All sales entries will be processed.

DATE — Character positions are provided to enter two sets of two numeric characters each . . . the number of the month and the last two digits of the year of the sale. Each character position must be filled in. Use leading zeros if necessary.

TYPE — Refers to the distinction between a type of sale involving LAND only, as opposed to a sale involving both LAND AND BUILDINGS or just BUILDING(S) only. Three alternatives are provided. Enter the code which is representative of the sale. Only one code may be entered.

- Enter 1 LAND to indicate that the sale involved land only.
- Enter 2 L & B to indicate that the sale involved both land and buildings.
- Enter 3 BUILDING to indicate that the sale involved a building(s) only. For example, buildings on leased land or high rise condominiums.

AMOUNT (SALE PRICE) — Character positions are provided to enter up to eight numeric characters (up to \$99,999,999). It is not necessary to fill in each character position. Use the character positions to the right and omit leading zeros.

SOURCE — Refers to the source of the sales data entered in this section. Four alternatives are provided. Enter the code which is most representative of the source. Only ONE code may be entered.

- Enter 1 BUYER to indicate that the information was obtained from the grantee - or buyer.
- Enter 2 SELLER to indicate that the information was obtained from the grantor - or seller.
- Enter 3 AGENT to indicate that the information was obtained from an agent representing a buyer or seller.
- Enter 4 OTHER to indicate that the information was obtained from conveyance fee, similar transfer records, or any other source.

SALES VALIDITY CODES

Space is provided to enter one of nine numeric codes. This numeric code will be keypunched for computer process and MUST be entered on the data collection form.

- Enter 0 to indicate the sale can be considered an "arms length" transaction (a valid sale).
- Enter 1 to indicate that the sale involved more than one parcel.
- Enter 2 to indicate that the property was not exposed to the open market or that the marketing time for the property could be considered abnormal.
- Enter 3 to indicate that the highest and best use of the property has changed since the sale or that construction and/or demolition of improvements have taken place since the transaction occurred.

- Enter 4 to indicate that the parties of the transaction were either related individuals or corporations.
- Enter 5 to indicate that the cause of the transaction was either a liquidation of assets or a forced sale.
- Enter 6 to indicate that the sale involved abnormal financing or that the transaction was a land contract arrangement.
- Enter 7 to indicate that the amount shown is a construction cost only used for verification of cost schedules.
- Enter 8 to indicate that the sale included an excessive amount of personal property or any other situation that would make the sale NOT an "arms length" transaction.
- Enter 9 to indicate that the sale is invalidated as of its entry on the file.

If further explanation is needed, consult your project supervisor.

DELETE (D) — Space is provided to enter an alpha character "D" to be used for removing (deleting) invalid sales which had previously been entered in the sales history file as valid, i.e., further investigation shows that a sale that has been previously encoded as valid is actually invalid.

(299-380) LAND DATA & COMPUTATIONS — Required field.

There are five categories of land entries — NONE, LOTS, SQUARE FEET, ACREAGE, and GROSS. Each category is comprised of a number of *coded*, land-type descriptions, such as "Primary Site," "Secondary Site," etc.

Each entry is preceded by a field number or line number. Immediately following the field number is a space to enter the code number of the land-type (within the category) involved in that particular entry.

		299	DELETE 300-379 LAND DATA & COMPUTATIONS									
0	NONE	300	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH	ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE	
LOTS		301	---	---	---	351	---	---	---	☐	---	
1	REGULAR LOT	302	---	---	---	352	---	---	---	☐	---	
2	REAR LOT	303	---	---	---	353	---	---	---	☐	---	
3	IRREGULAR LOT	304	---	---	---	354	---	---	---	☐	---	
4	WATERFRONT	304	---	---	---	354	---	---	---	☐	---	
SQUARE FEET		311	---	---	---	361	---	---	INFLUENCE FACTORS		---	
1	PRIMARY SITE	312	---	---	---	362	---	---	1. UNIMPROVED	☐	---	
2	SECONDARY SITE	312	---	---	---	362	---	---	2. EXCESSIVE FRONTAGE	☐	---	
3	RESIDUAL	313	---	---	---	363	---	---	3. TOPOGRAPHY	☐	---	
4	WATERFRONT	313	---	---	---	363	---	---	4. SHAPE OR SIZE	☐	---	
5	UNDEVELOPED	314	---	---	---	364	---	---	5. ECONOMIC	☐	---	
ACREAGE		321	---	---	---	371	---	---	6. RESTRICTIONS - NONCONFORMING	☐	---	
1	HOMESITE	322	---	---	---	372	---	---	7. ECONOMIC MISIMPROVEMENT	☐	---	
2	TILLABLE	322	---	---	---	372	---	---	8. FREQUENT FLOODING	☐	---	
3	PASTURE	323	---	---	---	373	---	---	9. CORNER/ALLEY (+)	☐	---	
4	WOODLAND	323	---	---	---	373	---	---	0. VIEW (+)	☐	---	
5	WASTELAND	324	---	---	---	374	---	---				
6	PRIMARY SITE	324	---	---	---	374	---	---				
7	SECONDARY SITE	325	---	---	---	375	---	---				
8	RESIDUAL	325	---	---	---	375	---	---				
9	WATERFRONT	326	---	---	---	376	---	---				
0	UNCLASSIFIED	326	---	---	---	376	---	---				
GROSS		327	---	---	---	377	---	---				
1	IRREGULAR LOT	328	---	---	---	378	---	---				
2	SITE VALUE	328	---	---	---	378	---	---				
3	RESIDUAL	329	---	---	---	379	---	---				
4	WATERFRONT	329	---	---	---	379	---	---				
0	MINUS R.O.W.	330	---	---	---	380	---	---				

(299) **DELETE** — This is a computer file maintenance entry and normally will not be utilized on the field card. The purpose of the DELETE is to remove all data previously entered in the computer for lines 300 to 379.

This action is initiated by circling the field number 299. As all parcels will require some type of land entry, a group land DELETE (299) action must also contain new land data information desired.

(300) **NONE** — Use for cases where no land value is applicable for that parcel or card. Enter the code descriptor "0" when applicable. Normal cases requiring no land descriptor:

- A - Multiple-sequence cards — normally all land data is recorded on the first card of a multiple series. All other cards in the series (2 of 2) should be entered as no land.
- B - Building on leased land — if the card represents a building value only parcel, enter as no land.
- C - Condominiums — in many cases, the land for condominiums is owned in common and no attempt is made to segregate a land or structure value.

(301-304) LOTS

Use for all lot computations. Enter the proper code number (1 to 4 inclusive). Complete the corresponding areas of each entry . . . actual frontage, effective frontage, and effective depth. Space is provided for four entries.

- 1 Regular Lot — Either an interior lot, i.e., bordered on two sides by adjacent lots, or a corner lot located at a street intersection with frontage on two sides.
- 2 Rear Lot (Minus Lot) — Lot without street or road frontage. Access is from an adjacent parcel.
- 3 Irregular Lot — Lot which is highly irregular in shape, such as a cul de sac.
- 4 Waterfront — Lot with waterfront access.

Note: Effective frontage and effective depth are determined by applying the lot sizing procedures found in the Appendix of this manual.

All character positions in actual frontage, effective frontage, and effective depth must be filled in. Use leading zeros if necessary.

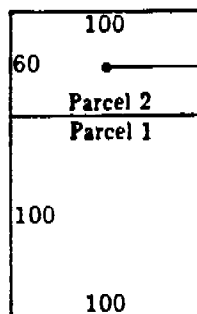
The unit price will be calculated against the effective frontage and the effective depth.

REGULAR LOT/IRREGULAR LOT/WATERFRONT — Use for normal lot computations. Enter the code number 1, 3, or 4. Complete the corresponding area for each entry . . . actual frontage, effective frontage, and effective depth.

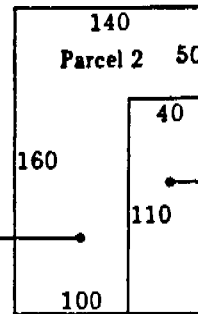
		299	DELETE 300-379									
			LAND DATA & COMPUTATIONS									
0	NONE	300		ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR	LAND VALUE
LOTS		301	1	121.1	121	150	351	---	---	---	[] --- %	
1	REGULAR LOT	302	1	150.3	150	120	352	---	---	---	[] --- %	
3	IRREGULAR LOT	303	1	137.8	138	100	353	---	---	---	[] --- %	
4	WATERFRONT	304	4	100.0	100	150	354	---	---	---	[] --- %	

REAR LOT (MINUS LOT) — Use for rear lot computations only. This entry must always be used in conjunction with a Regular Lot. The procedure is as follows -

- 1) Enter the front and rear lot as in Regular Lot. Enter the code number 1. Proceed in the same manner as prescribed for Regular Lot.
- 2) Enter the front lot (the Minus Lot) in the entry line immediately below the Regular Lot. Enter the code number 2. Proceed in the same manner as prescribed for Regular Lot.



Example A



Example B

Example A

		299	DELETE 300-379 LAND DATA & COMPUTATIONS									
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR	LAND VALUE
LOTS		301	1	100.0	100	160	351	—	—	—	—	—
1	REGULAR LOT	302	2	100.0	100	100	352	—	—	—	—	—
2	REAR LOT	303	—	—	—	—	353	—	—	—	—	—
3	IRREGULAR LOT	304	—	—	—	—	354	—	—	—	—	—
4	WATERFRONT											

Example B

		299	DELETE 300-379 LAND DATA & COMPUTATIONS									
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR	LAND VALUE
LOTS		301	1	100.0	140	160	351	—	—	—	3 — [-] 05%	—
1	REGULAR LOT	302	2	040.0	040	110	352	—	—	—	3 — [-] 05%	—
2	REAR LOT	303	—	—	—	—	353	—	—	—	—	—
3	IRREGULAR LOT	304	—	—	—	—	354	—	—	—	—	—
4	WATERFRONT											

Note: A rear lot - minus lot will always take two entries.

The same influence factor must be used on the Rear Lot - Minus Lot as was used on the regular lot.

(311-314) SQUARE FEET

Use for square foot computations. Enter the proper code number (1 to 5 inclusive) and the corresponding square foot area for that land type. Space is provided for four possible entries and each entry will accommodate a size up to 99,999,999 square feet.

- 1 Primary Site — lot improved with a major structure, such as a dwelling. Normally the typical or zoned base lot size for the neighborhood.
- 2 Secondary Site — extra buildable lot or lots.
- 3 Residual — all excess land considered not an actual or potential building site.
- 4 Waterfront — improved or vacant building site with waterfront access.
- 5 Undeveloped — unimproved or vacant building site. Normally similar to improved lots within the neighborhood.

SQUARE FEET	311	1	32500	SQ. FT.	361	---	---	---	---	INFLUENCE FACTORS	---	---	---	---
1 PRIMARY SITE	312	2	10700	SQ. FT.	362	---	---	---	---	1. UNIMPROVED	---	---	---	---
2 SECONDARY SITE	313	---	---	SQ. FT.	363	---	---	---	---	2. EXCESSIVE FRONTAGE	---	---	---	---
3 RESIDUAL	314	---	---	SQ. FT.	364	---	---	---	---	3. TOPOGRAPHY	---	---	---	---
4 WATERFRONT														
5 UNDEVELOPED														

(321-329) ACREAGE

Use for acreage computations. Enter the proper code (0 to 9 inclusive) and the corresponding acreage size for that land type. Space is provided for nine possible entries and each entry will accommodate up to 99,999.99 acres. Leading zeros are not required, but all character positions must be right justified. *Example:* 10 acres would be 10 .00

- * 1 Homesite — acreage allocation for a dwelling site.
- * 2 Tillable — number of acres of cleared land capable of growing crops.
- * 3 Pasture — number of acres of cleared land not economically suitable for growing crops, but suitable for grazing of livestock.
- * 4 Woodland — number of acres of uncleared wooded land.
- 5 Wasteland — number of acres of land not suitable for building sites, agricultural, or forest-land use. Normally restricted to swampland, ravines, etc.
- 6 Primary Site — similar to square feet definition.
- 7 Secondary Site — similar to square feet definition.
- 8 Residual — similar to square feet definition.
- 9 Waterfront — similar to square feet definition.
- * 0 Unclassified/Undeveloped — an unimproved or vacant building site.
- T Timber — unimproved timberland.

ACREAGE	321	1	1.00	ACRES	371	---	---	---	---	4. SHAPE OR SIZE	---	---	---	---
1 HOMESITE	322	2	127.50	ACRES	372	---	---	---	---	5. ECONOMIC	---	---	---	---
2 TILLABLE	323	3	45.30	ACRES	373	---	---	---	---	6. RESTRICTIONS - NONCONFORMING	---	---	---	---
3 PASTURE	324	5	7.00	ACRES	374	---	---	---	---	7. ECONOMIC MISIMPROVEMENT	---	---	---	---
4 WOODLAND	325	---	---	ACRES	375	---	---	---	---	8. FREQUENT FLOODING	---	---	---	---
5 WASTELAND	326	---	---	ACRES	376	---	---	---	---	9. CORNER/ALLEY (+)	---	---	---	---
6 PRIMARY SITE	327	---	---	ACRES	377	---	---	---	---	10. VIEW (+)	---	---	---	---
7 SECONDARY SITE	328	---	---	ACRES	378	---	---	---	---					
8 RESIDUAL	329	---	---	ACRES	379	---	---	---	---					
9 WATERFRONT														
0 UNCLASSIFIED														
	330													

* Refer to the Appendix for our description of grade.

(330) GROSS

Use to (1) Site value Irregular Lots, Residual Land, Waterfront, and any other such sites for which you cannot, or do not wish to show computations, or (2) Make a gross value deduction for utility, right of ways, and other similar property obstructions, (code 0). Enter the proper code number. Enter the gross sound value. Space is provided for one entry of a maximum of nine whole numbers - up to \$999,999,999.

- 1 Irregular Lot
- 2 Site Value
- 3 Residual
- 4 Waterfront
- 0 Minus R.O.W.

Note: The site value in this entry will be added to or deducted from the other land entries in arriving at the total land value. Codes 1 to 4, inclusive, can be used *without* other land entries. Code 0 can only be used *with* other land entries, and providing that the total amount deducted does not exceed the sum of the other entries.

GROSS	
1	IRREGULAR LOT
2	SITE VALUE
3	RESIDUAL
4	WATERFRONT
0	MINUS R.O.W.
330	1 5 0 0 0

(301-329) INFLUENCE FACTORS

Each land entry, with the exception of the "Gross" entry, provides two character positions for entering up to two separate one-digit influence factor codes, a bracket in which to enter either a plus (+) or minus (-) symbol, and two character positions to enter the corresponding influence factor as a percentage to be added to (plus) or deducted from (minus) the calculated land value for each entry. Up to two (any combination of two) influence factors may be used with each entry. In entries where a single factor is used, enter the factor in the first character position to the left and leave the second character position blank.

- Enter 1 (-) to indicate comparative value loss attributable to a lack of improvements.
- Enter 2 (-) to indicate comparative value loss attributable to excessive frontage in relation to utility.
- Enter 3 (-) to indicate comparative value loss attributable to topographical features.
- Enter 4 (-) to indicate comparative value loss (over and above the adjustment considered in lot sizing procedures) attributable to the shape or size of the lot in relation to its utility.
- Enter 5 (-) to indicate comparative value loss attributable to physical economic detriments influencing the site, i.e., a dwelling next to a landfill.
- Enter 6 (-) to indicate comparative value loss attributable to restrictions regulating its use.
- Enter 7 (-) to indicate comparative value loss attributable to economic misimprovement (either under-improvement or over-improvement) of the site.
- Enter 8 (-) to indicate comparative value loss attributable to frequent flooding.
- Enter 9 (+) to indicate comparative value enhancement attributable to corner and/or alley influence.

Enter 0 (+) to indicate comparative value enhancement attributable to the capability of the site to provide an appealing and desirable view.

Note: Both character positions provided for the percentage of enhancement or loss factor must be filled in. Use leading zeros if necessary.

		299	DELETE 300-379 LAND DATA & COMPUTATIONS										
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE
LOTS		301	1	150.3	150	125	351	— — —			3	— 05 %	
1 REGULAR LOT		302		— • —	— — —	— — —	352	— — —				— — %	
2 REAR LOT				— • —	— — —	— — —		— — —				— — %	
3 IRREGULAR LOT		303		— • —	— — —	— — —	353	— — —				— — %	
4 WATERFRONT		304		— • —	— — —	— — —	354	— — —				— — %	

(351-379) ACTUAL UNIT PRICE

Normal project procedure will accommodate a system of unit land rates by type to be computer assessed and applied via a table of appropriate land rates by neighborhood. Therefore, in most cases no entry will be necessary in the unit price section. However, if it is determined that the table rate is not appropriate for the subject parcel, an override land rate may be entered by encoding the correct rate in the field directly opposite the appropriate land type, i.e., unit price override 363 applies to the land data recorded in Field 313 of the SQUARE FEET section. All unit price entries should be entered right-justified with all positions to the right of the decimal in the sq. ft. area filled in.

PROPERTY FACTORS

(400) **TOPOGRAPHY** — Required entry. Refers to the topographical features of the subject property. Seven alternatives are provided. Enter a check mark [✓] in the space provided to the immediate right of the numeric code which is most representative of the subject property. Only one code may be checked in entries 1 through 3.

- Check 1 LEVEL to indicate the subject property is level to the access street.
- Check 2 ABOVE STREET to indicate the property is above the street level.
- Check 3 BELOW STREET to indicate that the property is below street level.

Of the following group, only one code may be checked.

- Check 4 ROLLING to indicate the property is comprised of many small hills.
- Check 5 STEEP to indicate the property has excessive grade as compared to access roadway.
- Check 6 LOW to indicate the property has a low terrain.
- Check 7 SWAMPY to indicate wet spongy land, marsh or bog.

(401) **UTILITIES** — Required entry. Refers to services which are available to the property. These can be private or public. Six alternatives are available and up to three codes may be checked. Enter a check mark [✓] in the space provided to the immediate right of the numeric codes which are most representative of the subject property.

- Check 1 ALL PUBLIC to indicate all public utilities - to include water, sewer, gas, and electric - are available.

- Check 2 PUBLIC WATER to indicate public water is available to the property.
- Check 3 PUBLIC SEWER to indicate public sewer is available to the property.
- Check 4 WELL to indicate that the *only* water available to the property is a private well.
- Check 5 SEPTIC to indicate *only* private sewer (septic tank) is available to the property.
- Check 6 GAS to indicate natural gas is available to the subject property.

Note: If code 1 is checked, no other code or combination of codes may be checked.

Note: For vacant woodland tracts, write in none and 7 and check 7.

(402) **STREET OR ROAD** — Required entry. Refers to the primary fronting street or the street providing the most immediate access to the subject property and the features which exist at the property. Enter a check mark in the space provided to the immediate right of the numeric codes which are representative of the subject property. Six alternatives are provided. Only one entry should be made for codes 1 through 5. Code 6 may be checked in addition to one code 1 - 5.

- Check 1 PAVED to indicate concrete, blacktop, or a comparably surfaced street.
- Check 2 SEMI-IMPROVED to indicate a gravel or comparably semi-improved street.
- Check 3 DIRT STREET to indicate an existing street or road which has no surface improvements in evidence.
- Check 4 PROPOSED to indicate that a street does not actually exist, but is planned (and approved) for the future. Commonly referred to as a "paper street."
- Check 5 LANDLOCKED to indicate a property without access to any type of street or road.
- Check 6 SIDEWALK to indicate the presence of a paved sidewalk available for public use.

(411-413) **INCOME DATA** — Optional entry

A character position is provided to enter a one digit numeric code (1-5) denoting the type of rental property being described. Four character positions are provided to enter the size of the rental unit being described, in a right justified manner. Four character positions are also provided to enter the amount of rent paid, in a right justified manner. Space is provided for any combination of three entries.

Agricultural

Enter 1	to indicate tillable.	Enter 4	to indicate tobacco.
Enter 2	to indicate pasture.	Enter 5	to indicate orchard.
Enter 3	to indicate woodland.		

Size — Enter amount of acres rented - right justified.

Rent per Yr/Mo — Enter amount of rent per acre per year.

Residential

- Enter 6 to indicate residential.

Size — Enter amount of total square feet of living area.

Rent per Yr/Mo — Enter amount of rent per month.

BUILDING PERMIT RECORD — Optional entry. Space is provided to record building permit information. This information should include the date the permit was issued, the permit number, the amount of the permit, and the purpose of the permit.

(415) LOCATION & FRONTING — Required entry. One choice is permitted in each category.

LOCATION — Refers to the neighborhood type that the subject property is located within. Ten alternatives are provided. Enter a check mark [✓] in the space provided to the immediate right of the numeric code which is most representative of the subject property. Only one code may be checked. Normally only 6 - Neighborhood or Spot (Res Area) will apply to dwellings in a basically residential area.

- Check 1 **CENTRAL BUSINESS DISTRICT** to indicate the core area in the center of a city in which is concentrated the major retail, financial, governmental, professional, and services activities of the city. In many instances, these boundaries have already been established or defined by city planners or other agencies.
 - Check 2 **PERIMETER CENTRAL BUSINESS DISTRICT** to indicate the outer boundaries of the Central Business District or core area and in which the concentration of major mercantile activity is significantly less pronounced.
 - Check 3 **BUSINESS CLUSTER** to indicate a cluster or number of commercial properties grouped together due to some attracting force such as a major intersection of interstate highways or a major shopping mall.
 - Check 4 **MAJOR STRIP** to indicate the type of commercial development wherein the major thoroughfares are bordered by an almost continuous row or strip of retail stores and allied service establishments.
 - Check 5 **SECONDARY STRIP** to indicate row or strip type commercial development bordering secondary arteries.
 - Check 6 **NEIGHBORHOOD or SPOT (Res Area)** to indicate —
 - A - For commercial properties - individual or scattered commercial establishments located in basically residential areas.
 - B - Dwelling located in a primarily residential area.
 - Check 7 **COMMERCIAL-INDUSTRIAL PARK** to indicate a controlled park-like development designed to accommodate specific light industrial and mercantile properties and containing the required utilities, streets, and other appurtenances.
 - Check 8 **INDUSTRIAL SITE** to indicate land or land and improvements adaptable for industrial use and not located in an established industrial park. Normally a combination of land, improvements, and machinery intended for the assembling, processing, and manufacturing of products from raw materials or fabricated parts or for the production of natural resources.
 - Check 9 **APARTMENT/CONDOMINIUM COMPLEX** to indicate the property is an apartment or condominium complex site.
- Cross out 8 and write in "0," add "/MINE SITE" next to "INDUSTRIAL SITE," and enter a check in the space provided to indicate the property is a MINE SITE including one or more of the following: portal/shaft area, parking lots, water treatment facilities, mine fan areas, gob piles, and/or preparation plant sites.

Note: For all Residential and Agricultural properties check 6.

FRONTING — Refers to the type of primary fronting street and a descriptive feature of that street. Nine alternatives are provided. Enter a check mark in the space provided to the immediate right of the numeric code which is most representative of the subject property. Codes 7 or 8 or both may

be checked to indicate a descriptive feature of that street if it applies. Code 9 should be checked only for dwellings or scattered commercial property located on a primarily residential street.

- Check 1 **CENTRAL BUSINESS DISTRICT** to indicate a major artery located within the Central Business District or core area.
- Check 2 **MAJOR THOROUGHFARE** to indicate a highly traveled major artery not located within the Central Business District. Many traffic lights and strip commercials are in evidence.
- Check 3 **SECONDARY ARTERY** to indicate moderately traveled secondary arteries typically found in mixed residential and commercial neighborhoods.
- Check 4 **MEDIAN SEPARATION** to indicate that the primary fronting street has a section or strip down the center of the highway dividing opposing lanes of traffic. It may be a narrow concrete buffer, or a wider landscaped strip.
- Check 5 **FRONTAGE/SERVICE ROAD** to indicate a local street paralleling a limited access highway and built to service abutting properties and to gather and control vehicles entering or leaving the limited access highway.
- Check 6 **PRIVATE ROAD** to indicate that the primary fronting street is a privately owned road constructed to service the subject property.
- Check 7 **ONE-WAY STREET** to indicate that the primary fronting street has a traffic flow in only one direction.
- Check 8 **RAIL ACCESS** to indicate that the subject property contains a railroad spur track to which a railroad delivers and removes freight.
- Check 9 **RESIDENTIAL** to indicate the property is a dwelling on an isolated commercial property located on a primarily residential street.

Note: Only one choice is permitted for codes 1, 2, 3, 5, 6, and 9. Codes 4, 7, and 8 may only be checked as additional codes.

Note: For all Residential and Agricultural properties, check 9.

(451-453) ENTRANCE INFORMATION — Required entry

Space is provided to enter the data for three calls to the property. The data is arranged in vertical columns. All the data should be listed from top to bottom, allowing one line for each attempt to gain entrance.

DATE — Character positions are provided to enter three sets of two numeric characters each: the number of the month, the day, and the last two digits of the year.

ENTR. CODE — One character position is provided to enter one of five numeric entrance codes denoting if entrance was gained or not, and the current status of the entrance information.

- Enter 1 to indicate that entrance (inspection) was gained.
- Enter 2 to indicate that both entrance (inspection) and information were refused by a responsible occupant.
- Enter 3 to indicate that it was necessary to estimate the property for miscellaneous reasons.
- Enter 4 to indicate that a door hanger was left at the property for response by a responsible occupant.
- Enter 5 to indicate that the parcel is vacant or contains only auxiliary improvements and no responsible occupants are available.

INFO CODE — One character position is provided to enter one of three numeric codes to indicate the responsible occupant from whom the data was obtained.

Enter 1 to indicate owner.

Enter 2 to indicate tenant.

Enter 3 (OTHER) to indicate that a responsible occupant not mentioned above was contacted or that no contact was made, or is not applicable, as in the case of a vacant lot.

IDENTIFICATION — Three character positions are provided to enter the initials or employee number of the data collector making the call at the property. An entry must be made on each data collection form.

(471, 472) NOTES — Optional entry

Space is provided to note any pertinent facts or unusual occurrences during listing of the property. Further explanation of listing data, i.e., sales information, etc., may also be noted. Notes should be short and to the point. Two lines of thirty characters each are provided.

SUMMARY OF VALUES — Optional entry

This section of the card will be utilized to summarize all values on the data collection form. It will be utilized mainly by appraisal personnel for manual pricing, and not by data collectors.

IMPROVEMENT DATA
(Back Side of the Card)

(500) **IMPROVEMENT DESCRIPTOR** — Required entry. Three alternatives are provided.

VACANT LOT — This category is to be activated *if and only if* the parcel is vacant. Circle the descriptor "V" and *do not enter any other data on this side of the card.*

500	☒ V	VACANT	☐ D	DWELLING	☐ O	OTHER

DWELLING — This category is to be activated *if and only if* a dwelling is on the parcel, and the dwelling data is to be computer processed. Circle the descriptor "D" and complete the remaining items in the left hand column of the card as specified below.

500	☐ V	VACANT	☒ D	DWELLING	☐ O	OTHER

OTHER — This category is to be activated if the parcel is not vacant, but contains buildings that would be listed under "Other Building & Yard Improvements" and/or the "Gross Building Summary." Circle the descriptor "O" and enter the appropriate data necessary.

500	☐ V	VACANT	☐ D	DWELLING	☒ O	OTHER

Note: Only one of the above entries may be circled.

(505) **STORY HEIGHT** — Required entry for dwellings. Refers to the actual story height of the subject dwelling. Circle the number that is most representative of the story height of the dwelling.

Circle 1.0 to indicate one story.

Circle 1.5 to indicate one and one-half story.

Circle 2.0 to indicate two story.

Circle 2.5 to indicate two and one-half story.

Circle 3.0 to indicate three story.

Note: Refer to the story height illustrations found in the Appendix of this manual.

(510) **EXTERIOR WALLS** — Required entry for dwellings. Circle the numeric code which is most representative of the exterior walls of the dwelling. The computer is presently programmed to calculate base prices for three different types of exterior walls: frame, masonry, and a combination of frame and masonry. *Only one entry may be circled.*

Circle 1 to indicate Frame will be priced as Frame.

Circle 2 to indicate Insul. Brick or Stone . will be priced as Frame.

Circle 3 to indicate Aluminum/Vinyl will be priced as Frame.

Circle 4 to indicate Asbestos will be priced as Frame.

Circle 5 to indicate Concrete Block will be priced as Frame.

Circle 6 to indicate Stucco will be priced as Frame.

Circle 7 to indicate Brick will be priced as Masonry.

- Circle 8 to indicate Stone will be priced as Masonry.
Circle 9 to indicate Masonry and Frame . . will be priced as ½ Masonry and ½ Frame.

(515) **STYLE** — Required entry for dwellings. Circle the numeric code which is most representative of the style of the dwelling. *Only one entry may be circled.*

- Circle 01 to indicate Conventional.
Circle 02 to indicate Ranch.
Circle 03 to indicate Modern or Contemporary.
Circle 04 to indicate Bi-Level or Split Foyer.
Circle 05 to indicate Tri-Level or Split Level.
Circle 06 to indicate Rowhouse or Townhouse.
Circle 07 to indicate Cabin.
Circle 08 to indicate Colonial.
Circle 09 to indicate Cape Cod or Cape Ann.
Circle 10 to indicate Condominium.
Circle 11 to indicate Other, or a style that does not fall in the above categories.

(520) **AGE** — Character positions are provided to enter three numeric characters denoting the year of construction; and two numeric characters denoting the year of remodeling. Each character position must be filled in.

YEAR BUILT — Required entry for dwellings. Refers to the original date of construction. This term must always be entered. If the exact date cannot be ascertained, make the best estimate possible based on known construction dates in the immediate area, and place a check mark [✓] in the brackets provided.

REMODELED — Optional entry. Refers to the date of the last extensive remodeling . . . i.e., remodeling which significantly alters the “effective age” of the dwelling. If the dwelling has not been remodeled, leave the item blank.

(525) **LIVING ACCOMMODATIONS** — Required entry for dwellings. Character positions are provided to enter either one or two numeric characters denoting the quantities of each of the items described below. Each character position must be filled in. Use leading zeros if necessary. If the item does not exist, enter zero.

TOTAL ROOMS — Two character positions are provided to enter the total number of separate rooms [excluding bathroom(s) and hallway(s)] comprising the living area of the dwelling . . . i.e., kitchens, living rooms, dining rooms, family rooms, dens, studies, and bedrooms.

BEDROOMS — Two character positions are provided to enter the total number of separate rooms designed to be used as bedrooms. If a room was designed to be a bedroom, but is being utilized for some other purpose - such as a den, it is to be included in this count.

FAMILY ROOMS — One character position is provided to enter the number of informal living rooms . . . quality of finish consistent with the general finish of the dwelling.

- (530) **PLUMBING** — Required entries for dwellings. Character positions are provided to enter either one or two numeric characters denoting the quantities of each of the items described below. Each character position must be filled in. Use leading zeros if necessary. If the item does not exist, enter zero.

FULL BATHS — One character position is provided to enter the number of three-fixture bathrooms which include a water closet, lavatory, and bathtub or shower stall (a bathtub with a shower outlet is considered one fixture).

HALF BATHS — One character position is provided to enter the number of two fixture toilet rooms including a water closet and lavatory.

ADDITIONAL FIXTURES — One character position is provided to enter individual fixtures that do not fall into previously named categories . . . i.e., utility sinks, water closets, etc.

Note: A kitchen sink and hot water heater are to be shown in additional fixtures if present.

TOTAL FIXTURES — Two character positions are provided to enter the total number of plumbing fixtures, including the kitchen sink and water heater, found in the dwelling. The computer is programmed to include the first five fixtures in the base price and to show a plumbing addition or deduction for each fixture over or less than five, respectively. The total number of fixtures in the dwelling is to be entered in the field; all necessary calculations will be made by the computer.

- (535) **BASEMENT** — Required entry for dwellings. Refers to the presence of and approximate size of the basement under the main part of the dwelling. Four alternatives are provided. Circle the numeric code which is most representative of the subject property. Only *one* selection may be circled.

Circle 1 NONE to indicate slab or pier construction: no basement.

Circle 2 CRAWL to indicate crawl space to $\frac{1}{4}$ basement area.

Circle 3 PART to indicate more than a $\frac{1}{4}$ basement, but less than a $\frac{3}{4}$ basement.

Circle 4 FULL to indicate $\frac{3}{4}$ to full basement area.

- (540) **HEATING** — Required entry for dwellings. Refers to the presence of and type of heating system. Four alternatives are provided. Circle the type code which is most representative of the subject property. Only *one* selection may be circled.

Circle 1 NONE to indicate that the subject dwelling does not have a heating system . . . warranting a full deduction from the base price for "no heating" as indicated by the pricing schedule.

Circle 2 NON CENTRAL to indicate that the subject dwelling has a heating system that is considered non central for the area being heated . . . warranting a partial deduction from the base price for base or central heating as indicated by the pricing schedule. Examples of non central systems include gravity furnaces and certain floor furnace conditions.

Circle 3 CENTRAL to indicate that the subject dwelling has a central heating system commensurate with the quality grade specifications of the dwelling . . . warranting no addition to or deduction from the base price as indicated by the pricing schedule.

Note: Floor furnaces in dwellings under 900 SFLA should be considered central. Floor furnaces in dwellings over 900 SFLA should be considered non central as they become inadequate and inefficient to heat the required area.

Note: Space heaters, free standing wood or coal burning stoves, wood or coal burning fireplace inserts and unit heaters not attached to the dwelling so as to become a permanent part of the dwelling are considered to be personal property. The correct entry for heating and heating system type in this situation is (1) none. The correct entry for heating fuel type would be the type of fuel existent.

Circle 4 CENT/AIR (Central/Air Conditioning) to indicate that in addition to a central heating system, the subject dwelling has (either separate or combined) a central cooling system commensurate with the quality grade specifications of the dwelling . . . warranting an addition to the base price for "air conditioning" as indicated by the pricing schedule. If a cooling system as described exists, circle only this numeric code. This code implies that a central heating system exists.

(540) HEATING FUEL TYPE — Required entry for dwellings. Refers to the type of fuel used to power the heating system. Seven alternatives are provided. Only one may be circled.

Circle 1 to indicate NO HEATING FUEL TYPE exists.

Circle 2 to indicate GAS.

Circle 3 to indicate ELECTRIC.

Circle 4 to indicate OIL.

Circle 5 to indicate WOOD.

Circle 6 to indicate COAL.

Circle 7 to indicate SOLAR (sun).

(540) HEATING SYSTEM TYPE — Required entry for dwellings. Refers to the actual type of heating system. Five alternatives are provided. Only one selection may be circled.

Circle 1 NONE to indicate no central heating system exists.

Circle 2 WARM AIR to indicate the presence of a forced warm air system. With this system, the furnace has a fan or blower that pushes the warmed air through relatively small ducts. These ducts may run horizontally or vertically. Filters can be installed in the system to clean the air, and a humidifying system included to add the needed moisture.

Circle 3 ELECTRIC to indicate the presence of an electric heating system. This system is characterized by electric resistance elements that convert electricity into heat. These elements are embedded in the floors, walls, ceilings, or baseboard to provide radiant heat.

Circle 4 HOT WATER to indicate the presence of a hot water (hydronic) system. With this system, water is heated in a boiler of cast iron or steel. It is then pumped by one or more circulators through small tubes into baseboard panels, radiators, or tubes which are embedded in the walls, ceilings, or concrete slab.

Circle 5 HEAT PUMP to indicate a reverse cycle refrigeration unit which can be used for heating and cooling.

(545) ATTIC — Required entry for dwellings. Refers to the presence of a finished attic and the extent of the finish. Five alternatives are provided. Circle the type code number which is most applicable. Only one selection may be circled.

Circle 1 NONE to indicate no attic.

Circle 2 UNFIN to indicate an unfinished attic having a subfloor and stairs only.

Circle 3 PT FIN to indicate either an undivided (one room) fully finished attic, or a divided (two rooms) with one-half (one room) semi-finished attic, i.e., one of the two rooms finished and the balance unfinished.

Circle 4 FULL FIN to indicate a divided (two or more rooms) and fully finished attic.

Circle 5 FULL FIN/WALL HEIGHT to indicate a divided (two or more rooms) and fully finished attic which includes the presence of one or more small dormers.

Note: This should be circled when the existing wall height is not enough to be considered a 1.5 or 2.5 story dwelling.

(550) **PHYSICAL CONDITION** — Required entry for dwellings. Refers to a composite judgment of the overall physical condition or state of repair of the interior and exterior features of the dwelling, relative to its age or the level of maintenance which you would normally expect to find in a dwelling of a given age. Consideration should be given to foundation, porches, walls, exterior trim, roofing, chimneys, wall finish, interior trim, kitchen cabinets, heating system, and plumbing. Six alternatives are provided. Circle the numeric code which is most representative of the subject property. Only one selection may be circled.

Circle 1 EXCELLENT to indicate that the dwelling exhibits an outstanding standard of maintenance and upkeep in relation to its age.

Circle 2 GOOD to indicate that the dwelling definitely exhibits an above ordinary standard of maintenance and upkeep in relation to its age.

Circle 3 AVERAGE to indicate that the dwelling shows only minor signs of deterioration caused by normal "wear and tear." The dwelling exhibits an ordinary standard of maintenance and upkeep in relation to its age.

Circle 4 FAIR to indicate that the dwelling is in structurally sound condition, but has greater than normal deterioration present relative to its age. Dwellings in "fair" physical condition may be characterized as having a significant degree of deferred maintenance.

Circle 5 POOR to indicate that the dwelling shows signs of structural damage (as sagging roof, foundation cracks, uneven floors, etc.) possibly combined with a significant degree of deferred maintenance (as roof shingles need replacement).

Circle 6 UNSOUND to indicate that the dwelling is structurally unsound, not suitable for habitation and subject to condemnation. It is unfortunately possible that some dwellings may be occupied, but still suitable for coding as unsound.

(557) **CONDOMINIUM LEVEL** — Optional entry. Space is provided to enter the floor level that the condominium is on. The field is numeric, and two character positions are provided to enter 00 through 99. Use leading zeros when necessary.

Enter 00 to indicate lower level.

Enter 01 to indicate first floor.

Enter 02 to indicate second floor, etc.

(558) **CONDOMINIUM TYPE** — Optional entry. Space is provided to indicate the type of condominium.

Circle 1 to indicate that the condominium is an interior unit, when three or more condominium units are in evidence.

Circle 2 to indicate that the condominium is located at the end or the corner of the condominium complex.

Note: Fields 557 and 558 are required if the style "condominium" is used.

(559) **RECREATION ROOM AREA** — Optional entry. Indicates the presence of a basement room not considered part of the normal living area of the dwelling. The interior finish exhibits a quality of material and workmanship inconsistent with and generally inferior to the main living area of the dwelling. Enter the appropriate dimensions or square footage in the character positions provided. For hand pricing, a space is provided in the area to the right of the item for entering value points; each point is equal to \$100.

If dimensions are entered, a times sign (x) must always be entered on the third position from the left. All positions must be filled in.

Example: 20 x 20 Rec Room Enter as 2 0 x 0 2 0

If the area is entered, enter it right justified. Leading zeros are not necessary.

Example: 400 square foot Rec Room Enter as 4 0 0

(560) **FINISHED BASEMENT LIVING AREA** — Optional entry. Indicates the presence of an area of the basement which is finished with a quality of materials and workmanship consistent with the main living area of the dwelling - such as the lower or grade level of bi-level and split-level dwellings. For hand pricing, a space is provided in the area to the right of the item to enter value points; each point is equal to \$100. Enter either the appropriate dimensions or the square foot area of the finished basement living area in the same manner as that described for Recreation Room Area.

(561) **WOODBURNING FIREPLACE** — Optional entry. Indicates the presence of woodburning fireplace(s). A character position is provided to enter the number of existing stacks. A character position is also provided to enter the actual number of openings. Both character positions must be filled in when activated. For hand pricing, a space is provided in the area to the right of the item for entering value points; each point is equal to \$100.

Note: Woodburning fireplaces which have been closed off should not be listed.

(562) **METAL FIREPLACE** — Optional entry. Indicates the presence of prefabricated metal fireplace(s). A character position is provided to enter the number of stacks. For hand pricing, a space is provided in the area to the right of the item for entering value points; each point is equal to \$100.

(563) **BASEMENT GARAGE** — Optional entry. Indicates the presence of a garage in the basement level of the dwelling. A character position is provided to enter the car capacity of the basement garage (1-5). For hand pricing, a space is provided in the area to the right of the item for entering value points. Each point is equal to \$100.

(564) **UNFINISHED AREA** — Optional entry. Indicates the presence of an area within the dwelling which is void of interior finish and is normally considered a finished living area, as in a half-story or second floor which is unfinished. For hand pricing a space is provided in the area to the right of the item for entering value points; each point is equal to \$100.

Enter *either* the dimensions or the square foot area of the unfinished area in the same manner as that described for Recreation Room Area.

- (570) **GRADE FACTOR** — Required entry for dwellings. The letter grades are pre-printed on the card. Circle the appropriate letter grade. A bracket [] is provided to enter a plus or minus grade factor adjustment, if desired. The bracket should be left blank if not utilized.

Note: Only valid grades should be entered. The computer is programmed to reject all entries which do not conform.

- (575) **C & D FACTOR** — Optional entry. Character positions are provided to enter a plus or minus symbol (within the brackets) and two numeric characters (to the right of the brackets) denoting a percentage to be either added to or deducted from the accumulated total value of the dwelling (after applying the grade factor) for Cost and/or Design factors not previously considered. All character positions must be filled in. Use leading zeros if necessary. Zero percent may be indicated by striking a line through the whole entry.

Note: It is not necessary to enter the percentage in increments of five. The computer is programmed to process all numeric entries. Proper procedures must be established by the project supervisor.

- (580) **CDU** — Required entry for dwellings. Two-letter alpha codes denoting the composite rating of the overall condition, desirability, and usefulness of the dwelling are pre-printed on the card. Circle the alpha code which is most representative of the subject dwelling.

Circle EX Excellent - to indicate perfect condition; very attractive and highly desirable.

Circle VG Very Good - to indicate slight evidence of deterioration; still attractive and quite desirable.

Circle GD Good - to indicate minor deterioration visible; slightly less attractive and desirable, but useful.

Circle AV Average - to indicate normal wear and tear is apparent; average attractiveness and desirability.

Circle FR Fair - to indicate marked deterioration, but quite usable; rather unattractive and undesirable.

Circle PR Poor - to indicate definite deterioration is obvious; definitely undesirable and barely usable.

Circle VP Very Poor - to indicate condition approaches unsoundness; extremely undesirable and barely usable.

Circle UN Unsound - to indicate the dwelling is definitely unsound and practically unit for use.

- (565) **GROUND FLOOR AREA** — Optional entry. (Required entry when no sketch vectors are used.) Character positions are provided to enter five numeric characters (up to 99999) denoting the base square foot area of the dwelling *from which the base price is to be calculated when activated*. All character positions must be filled in. Use leading zeros if necessary.

(601-608) ADDITIONS – Optional entry

The data collection form is designed to calculate square foot area and to computer price additions. Only those additions which have been coded can be entered. The same additions code may be entered any number of times. Space is provided for eight separate entries of additions. Enter the appropriate two-digit additions code in the column that corresponds with its position of floor location – either Lower, 1st, 2nd, or 3rd. Normally, leave the area section blank.

Notes: In the rare case where more than eight additions exist on a dwelling, it is permissible to enter a manually calculated point total of the additions not previously entered. Enter the numeric code 99 – Miscellaneous in the lower story column of field number 608. The manually calculated point total should then be entered in the Area column of item number eight and no other information entered in the remaining area of the item. Each value point is equal to \$100.

If no additions are present, leave the entries blank. A list of valid addition codes are placed on the data collection form for convenient reference.

If the dwelling cannot be sketch vectored and no data is entered in fields 701 to 710, both field 565 – Main Ground Floor Area AND the area field of each addition line used (601 to 608) MUST BE entered. Consult sketch vectoring instructions for specific guidelines.

Example No. 1:

Subject dwelling has an attached, 180 square foot, open frame porch over enclosed frame porch, and a 440 square foot attached frame garage.

599	DELETE 601-608							ADDITIONS						
ADDN	CODE	LWR	1ST	2ND	3RD	AREA		ADDN	CODE	LWR	1ST	2ND	3RD	AREA
601	A1		12	11		1		605	A5					1
602	A2		13			1		606	A6					1
603	A3					1		607	A7					1
604	A4					1		608	A8					1

Example No. 2:

Subject dwelling has the following additions -

1. 120 square foot, open frame porch
2. 60 square foot, open frame porch
3. 40 square foot, open frame porch over 60 square foot, enclosed frame porch

Note: In this situation, two entries are necessary, because the areas are different for the two porches.

4. 240 square foot greenhouse
5. 350 square foot 1s Fr
6. 300 square foot, frame garage
7. 80 square foot, wood deck
8. 150 square foot, masonry patio

599	DELETE 601-608							ADDITIONS						
ADDN	CODE	LWR	1ST	2ND	3RD	AREA		ADDN	CODE	LWR	1ST	2ND	3RD	AREA
601	A1		11			1		605	A5		36			1
602	A2		11			1		606	A6		10			1
603	A3			11		1		607	A7		13			1
604	A4		12			1		608	A8		99			4

Note: Since the number of addition pricing entries exceeds eight, it is necessary to utilize the numeric code 99 – Miscellaneous Value, and to manually calculate the point total of the wood deck and the masonry patio.

The following is a list of Addition Codes that are valid within the different story heights.

VALID ADDITION CODES BY STORY HEIGHT

Lower

- 50 Basement - Unfinished
- 99 Miscellaneous Value

First

10	1s Frame	24	Masonry Utility
11	OFP (Open Frame Porch)	25	Masonry Bay
12	EFP (Enclosed Frame Porch)	26	Masonry Overhang
13	Frame Garage	30	Carport
14	Frame Utility Building	31	Wood Deck
15	Frame Bay	32	Canopy
16	Frame Overhang	33	Concrete or Masonry Patio
20	1s Masonry	34	Stone or Tile Patio
21	OMP (Open Masonry Porch)	35	Masonry Stoop or Terrace
22	EMP (Enclosed Masonry Porch)	36	Attached Greenhouse
23	MG or BG (Masonry or Brick Garage)		

Second

10	1s Frame	20	1s Masonry
11	OFP (Open Frame Porch)	21	OMP (Open Masonry Porch)
12	EFP (Enclosed Frame Porch)	22	EMP (Enclosed Masonry Porch)
14	Frame Utility Building	24	Masonry Utility
15	Frame Bay	25	Masonry Bay
16	Frame Overhang	26	Masonry Overhang
17	½s Frame	27	½s Masonry
18	Attic (Unfinished)	31	Wood Deck
19	Attic (Finished)	32	Canopy

Third

10	1s Frame	20	1s Masonry
11	OFP (Open Frame Porch)	21	OMP (Open Masonry Porch)
12	EFP (Enclosed Frame Porch)	22	EMP (Enclosed Masonry Porch)
14	Frame Utility Building	24	Masonry Utility
15	Frame Bay	25	Masonry Bay
16	Frame Overhang	26	Masonry Overhang
17	½s Frame	27	½s Masonry
18	Attic (Unfinished)	31	Wood Deck
19	Attic (Finished)	32	Canopy

ENCODING SKETCH VECTORS AND ADDITIONS DATA

PURPOSE — Encode the sketch of the improvements as a set of vectors, so that the computer can plot the sketch and compute the square foot areas of the main body and all additions. Enter code numbers in the additions area to identify each addition so that values and area can be computed and shown on the final computer-printed residential card.

GENERAL — It is assumed that complete and accurate dimensions are available and have been checked from previous clerical functions. If missing or incorrect dimensions or identifications are evident, consult your supervisor for possible field correction.

Note: File maintenance required by incorrect sketch vector and additions data entries can be a costly and time-consuming operation. Special effort to enter correct data in accordance with the procedures hereafter outlined will eliminate much of this maintenance requirement and, therefore, result in a smoother flow of the project toward successful completion.

DEFINITIONS —

Vector an instruction that indicates the direction and distance a line is to be drawn

C commence (instructions for “pen down - start drawing”)

R right

L left

U up

D down

H halt (end of sketch vector)

A0 main body of dwelling sketch

A1 1st addition

A2 2nd addition

A3 3rd addition

A4 4th addition

A5 5th addition

A6 6th addition

A7 7th addition

A8 8th addition

Right justified — the last character position must be filled with the last character of the entry

Left justified — the first character position must be filled with the first character of the entry

SPECIFIC SKETCH VECTORING RULES —

1. There are three character positions available for each vector, each descriptor, (A0, A5, etc.), or each command (C, H). Only alpha characters are allowed in the first character position. Only numeric characters (or blanks) are allowed in the last two character positions. This numeric entry is left justified.

2. All sketches will have the same point of beginning: the lower left hand corner (southwest corner) of the main body of the dwelling. All vectors, including additions, will begin from this point. Each dwelling and each addition require a minimum of four vectors (square, rectangle).
3. On a transferring function, outside dimensions required to position an addition may not always be shown and will have to be calculated from other dimensions shown on the sketch, or will have to be determined by the data collector during field verification.
4. All vectors must return to the point of beginning of the individual sketch portion. This means that each addition and the main body must "close."
5. A maximum of 30 characters (including spaces) may be entered on each line of sketch data.
6. Each addition (A1, A2, A3, etc.) must start on a new line (702, 703, 704, etc.).
7. A maximum of eight additions is permitted.

PROCEDURE —

1. Determine the point of beginning or starting point of the main body of the improvement. This is always the southwest corner (lower left corner in the grid area) of the main body of the improvement.
2. The identifier for the main body of the dwelling (A0) and the instruction meaning pen down, commence (C) are pre-printed in their proper position on line 701.
3. The first manual entry required is direction (alpha) and distance (numeric, numeric) of the first vector. This entry must be located in character positions 7 through 9 of line 701.
4. Enter the balance of the required vectors to completely enclose the main body of the improvement, and return to the Point of Beginning. When the vectors are closed, the imaginary pencil will raise automatically.

Example:

701	A10	C1	U120	R140	D120	L140	H1				

5. The maximum continuous dimension allowed for any length or width is 99 feet.

			VALID			INVALID	
40	8	80			120		

6. If more than 30 spaces are required to vector any portion of the sketch, complete the vector string on the following line.

Example:

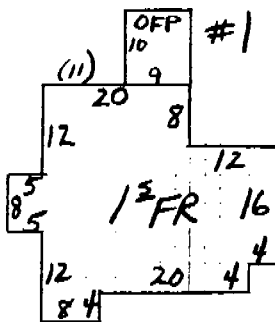
701	A10	C1	U110	L110	U115	R110	U130	R120	D130	R110
702	D115	L110	D110	L120						
703	A11	C1	U110	L110	D110	R110	H1			

7. Enter the addition identification (A1, A2, etc.) and then enter the vectors required to place and completely enclose the addition. It will be necessary to instruct the computer to go to the Point of Beginning of the addition before entering "C" - commence. Remember, *all* vectors start from the southwest corner of the improvement. When the Point of Beginning of the

addition is reached, enter the instruction "C" - commence, and then enter the balance of vectors required to completely enclose the addition and return to the Point of Beginning of the addition.

Note: Once vectoring proficiency has been established, it is often desirable to "shortcut" outside or through the main body of the improvement to reach the commence - "C" point of an addition. By following this practice, the "C" point can be reached with a maximum of two vectors. This may often be simpler than following the perimeter of the dwelling to the "C" point, but extreme caution should be used since the distance of these vectors may not be readily identifiable from the sketch. See example below.

CORRECT:



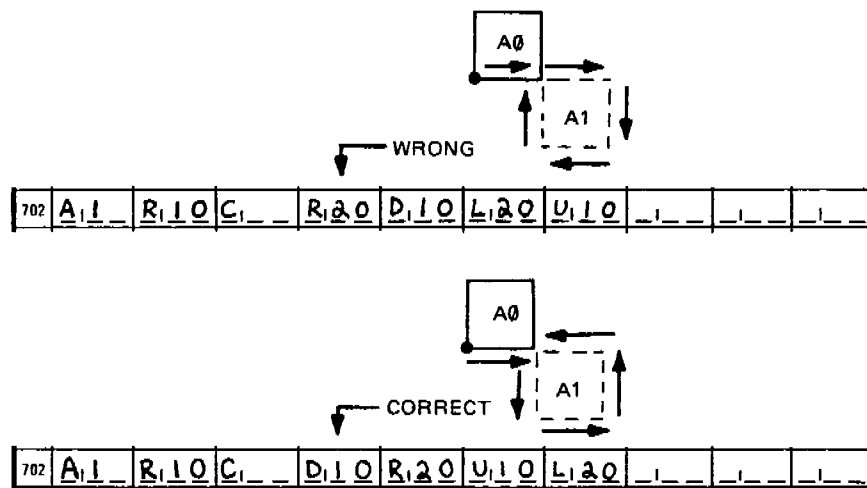
649	DELETE 701-710									
SKETCH VECTOR										
A - ADDITION			U - UP		R - RIGHT			H - HALT		
C - COMMENCE			D - DOWN		L - LEFT					
701	A 10	C 1	U 12	L 5	U 8	R 5	U 12	R 20	D 8	R 12
702	D 16	L 4	D 4	L 20	D 4	L 8	1	1	1	1
703	A 1	U 12	L 5	U 8	R 5	U 12	R 11	C 1	U 10	R 9
704	D 10	L 9	H 1	1	1	1	1	1	1	1
705	1	1	1	1	1	1	1	1	1	1
706	1	1	1	1	1	1	1	1	1	1
707	1	1	1	1	1	1	1	1	1	1
708	1	1	1	1	1	1	1	1	1	1
709	1	1	1	1	1	1	1	1	1	1
710	1	1	1	1	1	1	1	1	1	1

SHORTCUT:

649	DELETE 701-710									
SKETCH VECTOR										
A - ADDITION			U - UP		R - RIGHT			H - HALT		
C - COMMENCE			D - DOWN		L - LEFT					
701	A 10	C 1	U 12	L 5	U 8	R 5	U 12	R 20	D 8	R 12
702	D 16	L 4	D 4	L 20	D 4	L 8	1	1	1	1
703	A 1	R 11	U 32	C 1	R 9	U 10	L 9	D 10	H 1	1
704	1	1	1	1	1	1	1	1	1	1
705	1	1	1	1	1	1	1	1	1	1
706	1	1	1	1	1	1	1	1	1	1
707	1	1	1	1	1	1	1	1	1	1
708	1	1	1	1	1	1	1	1	1	1
709	1	1	1	1	1	1	1	1	1	1
710	1	1	1	1	1	1	1	1	1	1

Special Note: When vectoring an addition, it is necessary to cause the first vector *after* the instruction "C" - commence to go in a different direction than the preceding vector.

Example:



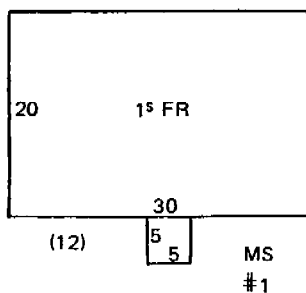
8. Enter the vectors required for the balance of additions, in order (A1, A2, A3, etc.). Be sure to start each addition on a separate line (702, 703, 704, etc.).
9. After all vectors for the main body and all additions are entered, enter the instruction "H" - halt to indicate all the vector strings are completed. The instruction "H" - halt is required to be the last entry made in the sketch vector area. Only one "H" may be entered on each data collection form.
10. Encoding the addition identifications — the last step in the sketch vector procedure is to fill in the addition identification codes in the "Additions" area of the data collection form.
For each addition — enter the proper code identifying that addition:
 - a. On the correct line for that addition
 - b. Correctly positioned in the column identifying the floor level of the addition (lower, 1st, 2nd, 3rd)

Notes: In cases where it is necessary to use two or more codes to completely describe a stacked addition with an identical floor area or each level (for example, a 2 story, open frame porch), place each code in its correct column for level placement on the same line for that addition.

The space for "Area" is left blank in all cases, EXCEPT those where the sketch is not vectored (for example, an addition which has a severe angle in the sketch). This possibility will be covered as a special example later in this instruction.

TYPICAL SKETCH VECTOR EXAMPLES

Example No. 1

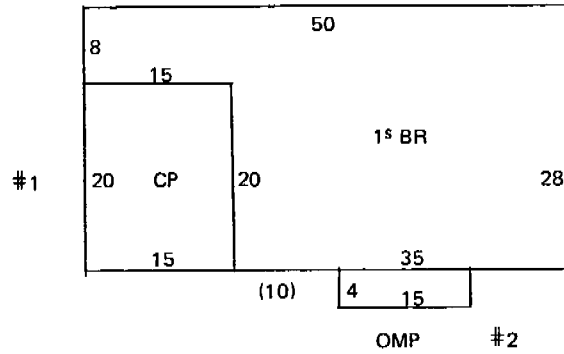


649		DELETE 701-710										SKETCH VECTOR													
A - ADDITION												U - UP				R - RIGHT				H - HALT					
C - COMMENCE												D - DOWN				L - LEFT									
701	A 10	C 1	U 20	R 30	D 20	L 30																			
702	A 1	R 12	C 1	D 5	R 5	U 5	L 5	H 1																	
703																									
704																									
705																									
706																									
707																									
708																									
709																									
710																									

599		DELETE 601-608										ADDITIONS															
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA
601	A1		35				605	A5						609	A9						613	A13					
602	A2		↑				606	A6						610	A10						614	A14					
603	A3						607	A7						611	A11						615	A15					
604	A4						608	A8						612	A12						616	A16					

MASONRY STOOP

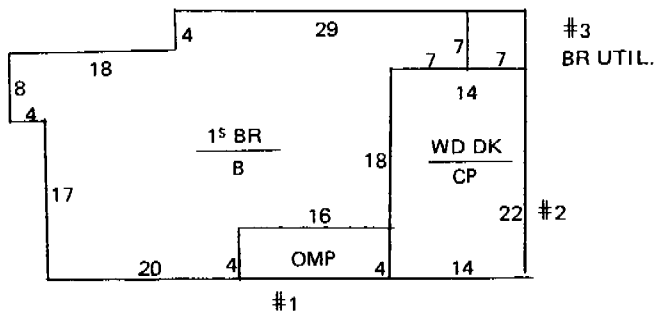
Example No. 2



649 DELETE 701-710 SKETCH VECTOR										
A - ADDITION				U - UP		R - RIGHT		H - HALT		
C - COMMENCE				D - DOWN		L - LEFT				
701	A10	C1	U20	L15	U8	R150	D128	L135		
702	A11	C1	U20	L15	D20	R115				
703	A12	R10	C1	D14	R115	U14	L115	H1		
704										
705										
706										
707										
708										
709										
710										

599 DELETE 601-608 ADDITIONS													
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA
601	A1		30				605	A5					
602	A2		21				606	A6					
603	A3						607	A7					
604	A4						608	A8					

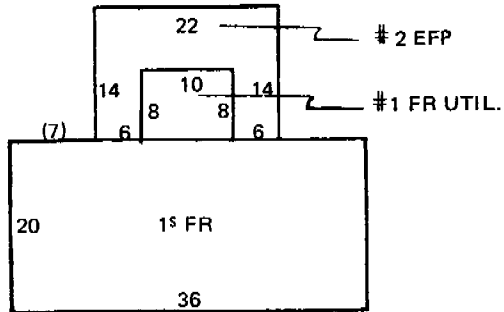
Example No. 3



649 DELETE 701-710											SKETCH VECTOR										
A - ADDITION						U - UP					R - RIGHT					H - HALT					
C - COMMENCE						D - DOWN					L - LEFT										
701	A10	C1	U17	L14	U18	R118	U14	R129	D17	L17											
702	D118	L116	D14	L120																	
703	A11	R120	C1	U14	R116	D14	L116														
704	A12	R136	C1	U122	R114	D122	L114														
705	A13	R150	U122	C1	L17	U17	R17	D17	H1												
706																					
707																					
708																					
709																					
710																					

599 DELETE 601-608											ADDITIONS										
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA								
601	A1		21				605	A5													
602	A2		30	31			606	A6													
603	A3		24				607	A7													
604	A4						608	A8													

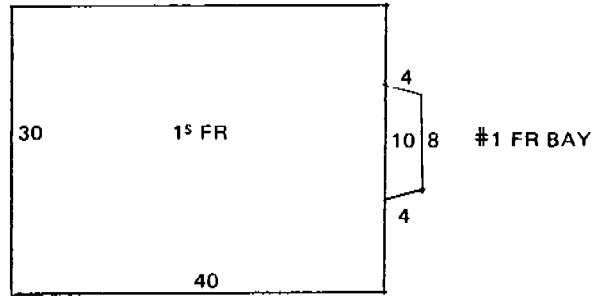
Example No. 4



649	DELETE 701-710										SKETCH VECTOR														
A - ADDITION											U - UP					R - RIGHT					H - HALT				
C - COMMENCE											D - DOWN					L - LEFT									
701	A 10	C 1	U 20	R 136	D 20	L 36	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
702	A 1	U 20	R 13	C 1	U 8	R 10	D 8	L 10	1	1	1	1	1	1	1	1	1	1	1	1					
703	A 2	U 20	R 7	C 1	U 14	R 22	D 14	L 6	U 8	L 10	1	1	1	1	1	1	1	1	1	1					
704	D 8	L 6	H 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
705	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
706	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
707	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
708	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
709	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
710	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					

599	DELETE 601-608										ADDITIONS									
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA							
601	A1		14			1	605	A5					1							
602	A2		12			1	606	A6					1							
603	A3					1	607	A7					1							
604	A4					1	608	A8					1							

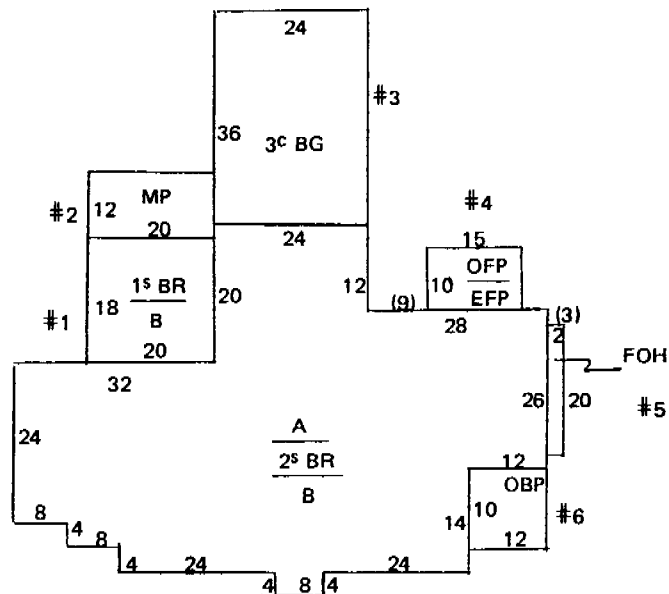
Example No. 5



Square off minor angle in addition #1
and enter as rectangle - 4 x 9

649	DELETE 701-710										SKETCH VECTOR																												
A - ADDITION										U - UP										R - RIGHT										H - HALT									
C - COMMENCE										D - DOWN										L - LEFT																			
701	A 10		C 1		U 30		R 40		D 30		L 40		1		1		1		1		1		1		1		1		1										
702	A 1		R 40		U 10		C 1		R 4		U 9		L 4		D 9		H 1		1		1		1		1		1		1										
703	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
704	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
705	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
706	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
707	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
708	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
709	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
710	1		1		1		1		1		1		1		1		1		1		1		1		1		1		1										
599	DELETE 601-608										ADDITIONS																												
ADDN	CODE	LWR	1ST	2ND	3RD	AREA					ADDN	CODE	LWR	1ST	2ND	3RD	AREA																						
601	A1		15			1					605	A5						1																					
602	A2					1					606	A6						1																					
603	A3					1					607	A7						1																					
604	A4					1					608	A8						1																					

Example No. 6



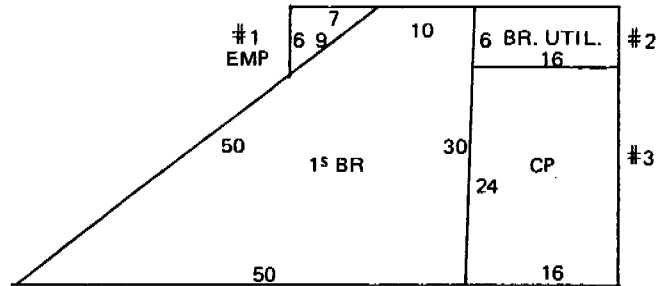
649	DELETE 701-710										SKETCH VECTOR									
A - ADDITION					U - UP					R - RIGHT					H - HALT					
C - COMMENCE					D - DOWN					L - LEFT										
701	A10	C1	U14	L124	U14	L18	U14	L18	U124	R132										
702	U120	R124	D112	R128	D126	L112	D114	L124	D14	L18										
703	A11	L128	U136	C1	R120	U118	L120	D118												
704	A12	L128	U154	C1	R120	U112	L120	D112												
705	A13	L18	U156	C1	R124	U136	L124	D136												
706	A14	R140	U144	C1	L115	U110	R115	D110												
707	A15	R144	U121	C1	R12	U120	L12	D120												
708	A16	R132	U18	C1	R112	U110	L112	D110	H1											
709																				
710																				

598	DELETE 601-608										ADDITIONS									
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA							
601	A1	50	20				605	A5			16									
602	A2		33				606	A6		21										
603	A3		23				607	A7												
604	A4		12	11			608	A8												

SPECIAL SKETCH VECTOR EXAMPLE

Example No. 7

Improvement and addition with severe angle in the sketch. In this case, a representative computer diagram and a computer-generated area will not be developed.



In cases such as this, the following rules apply —

- DO NOT enter any sketch vectors in fields 701 through 710.
- Enter the manually computed area of the main part of the improvement in field 565 - Main Ground Floor Area. Enter right justified with leading zeros.

Example:

565	MAIN GROUND FLOOR AREA	00,900

- Enter the following in the first line allowed for vectors (701): NO SKETCH. This entry should be made directly over the pre-printed characters, as shown in the following example.

Example:

701	NO	SKETCH								
702										
703										

- Enter BOTH the type codes AND the manually computed areas of each addition in the "Addition" area of the sketch vector sheet.

Example:

599	DELETE 601-608						ADDITIONS							
ADDN	CODE	LWR	1ST	2ND	3RD	AREA	ADDN	CODE	LWR	1ST	2ND	3RD	AREA	
601	A1	___	22	___	___	0.021	605	A5	___	___	___	___	___	
602	A2	___	24	___	___	0.096	606	A6	___	___	___	___	___	
603	A3	___	30	___	___	0.384	607	A7	___	___	___	___	___	
604	A4	___	___	___	___	___	608	A8	___	___	___	___	___	

Note: In the case where an improvement and its additions can be vectored with the exception of a minor addition (for example, a kidney-shaped masonry patio), it is desirable to make the patio "square" rather than to "NO SKETCH" the improvement and all additions.

1. Missing H (Halt)
2. Down and Up Relationship not equal
3. Right and Left Relationship not equal
4. First character after C (Commence) is not alpha
5. Additions
 - a. Missing C (Commence) in vector string
 - b. More than one C (Commence) in vector string
 - c. Addition descriptor key not continuous — for example, A6 must follow A5
 - d. Addition vectored, but with no corresponding description (fields 601-608)
 - e. Conversely, addition described, but with no corresponding vectors (702-710)
 - f. First character in vector string not A
 - g. Second character in vector string not numeric (1-8)
 - h. Second character in vector string greater than 8
6. Two continuous vectors showing no change in direction

[illegible]

(801-809) OTHER BUILDING AND YARD IMPROVEMENTS — Optional entry

This section provides guidelines for collecting and recording additional structural characteristics affecting property value.

STRUCTURE TYPE CODES — Required entry when activated. Refers to a category of improvements such as pools, barns, etc. The structure type code, therefore, stands for the overall structure itself and is made up of three parts.

The first character stands for the overall property identifier with which the structure is associated.

The second character in the structure type code stands for the structural category of the improvement.

The third character is numeric, which distinguishes one type of structure from another within the same category. Several examples are listed below.

<i>Structure Type Code</i>	<i>1st Character Meaning</i>	<i>2nd Character Meaning</i>	<i>3rd Character Meaning</i>
RG1	Residential	Garage	Frame or CB
RG2	Residential	Garage	Brick or Stone
AM1	Agricultural	Milk House	Attached CB
AM2	Agricultural	Milk House	Attached Glazed Tile

Note: A partial list of type codes is included on the data collection form.

QUANTITY — Required entry when activated. Refers to the number or quantity of totally identical structures being listed. Both character positions must be filled in. Use leading zeros if necessary.

YEAR — Required entry when activated. Refers to the year the item was constructed. Enter only the last two digits. If built prior to 1900, enter "00." If the year built is unknown, make the best estimate possible.

SIZE — Required entry when activated. Enter either the square foot area, the dimensions, or the volume of the item based on the appropriate cost schedules.

To enter the square foot area, character positions are provided for six numeric characters (up to 999,999 square feet). The square footage or volume should be right justified. Omit leading zeros.

To enter the dimensions, character positions are provided to enter six characters — two numeric characters denoting either the width or diameter, a multiplication symbol (x), and three numeric characters denoting the length or height of the item. The multiplication symbol must always be entered on the third character position from the left (within the two vertical hash marks). All character positions must be filled in. Use leading zeros if necessary.

GRADE — Optional entry. A character position is provided to enter one alpha character denoting the quality grade of the item. Valid grades are A, B, C, D, or E. If a quality grade is not applicable to the item, draw a line or dash through the character position.

CONDITION — Required entry when activated. A character position is provided to enter one alpha character denoting the overall condition of the item. Enter "E" for excellent, "G" for good, "A" for average, "F" for fair, "P" for poor, and "U" for unsound.

RATE — *For manual pricing purposes only.* Refers to the unit value to be applied to the size in order to compute the base value.

BASE VALUE — *For manual pricing purposes only.* Refers to the replacement cost of the item(s) prior to application of a local county modifier.

COUNTY MODIFIER — *For manual pricing purposes only.* Refers to a local county modifier to be applied to the base cost schedules - expressed as a percentage.

ADJUSTED VALUE — *For manual pricing purposes only.* Refers to the replacement cost of the item(s) after application of the local county modifier.

(MA) MARKET ADJUSTMENT — Optional entry. Refers to the resultant value (percent good) after deduction of physical depreciation and functional and/or economic obsolescence - expressed as a percentage.

Note: This is not a required entry. Other Building and Yard Improvements are computer priced and depreciated. If this entry is utilized, it will function as an override to the computer generated value of the structure.

MODIFICATION CODES — Optional entry. Refers to an addition or deduction to modify the cost component from the base specification. Modification codes are identified by one numeric character and should only be utilized for the specific structure(s) intended. Enter left justified. Up to four modification codes are allowed per line item.

SPECIAL MODIFICATION CODES — Optional entry. Refers to a special modification made to modify the cost component from the base specifications. Special modifications are also identified by three-part codes, as are the structure codes. The difference in using special modification codes as opposed to structure type codes is that a special modification code necessitates a separate line entry *immediately below* the structure type code being modified. Other items necessary to describe the special modification must also be entered to allow for proper processing of the modification to an indication of value.

Note: Special modification codes should only be utilized for the specific structures intended.

To further explain the concept of Other Buildings and Yard Improvements, the following examples are provided.

Residential

1. Detached brick garage, 22 ft. x 24 ft.
2. Metal utility shed, 12 ft. x 20 ft.
3. Reinforced concrete pool, 16 ft. x 32 ft., with electric heating, a diving board, and four underwater lighting fixtures.

799	DELETE 801-810													OTHER BUILDING & YARD IMPROVEMENTS												
	TYPE CODE	QUAN.	YEAR	SIZE		G	COND	RATE	BASE VALUE	CO MOD	ADJ VALUE	MA	MOD CODES	ACTUAL VALUE												
801	RGa	01	65	11.5x28		C	A																			
802	RSa	01	60	11.2x40		C	A																			
803	RP3	01	73	16x10.32		-	G						3													
804	SP1	01																								
805	SP3	04																								
806																										
807																										
808																										
809																										
810	MISCELLANEOUS IMPROVEMENTS													MV				TOTAL ACTUAL VALUE								

Agricultural

1. Bank barn, 24 ft. x 60 ft., gambrel roof, with two water connections.
2. One story, metal poultry house, 24 ft. x 60 ft., with a single pitch roof.
3. Concrete stave silo with roof, 14 ft. in diameter x 40 ft. in height.
4. Concrete stave silo without roof, 14 ft. in diameter x 40 ft. in height.

799	DELETE 801-810				OTHER BUILDING & YARD IMPROVEMENTS												
	TYPE CODE	QUAN	YEAR	SIZE	G	COND.	RATE	BASE VALUE	CO. MOD	ADJ. VALUE	MA	MOD CODES	ACTUAL VALUE				
801	AB1	01	30	1,440	C	P						2					
802	FB1	02															
803	AH1	01	35	24,060	-	P						5					
804	AS1	01	55	14,040	-	G											
805	AS2	01	55	14,040	-	E											
806																	
807																	
808																	
809																	
810	MISCELLANEOUS IMPROVEMENTS												MV				
													TOTAL ACTUAL VALUE				

ACTUAL VALUE — *For manual pricing purposes only.* Refers to the actual or replacement cost new less depreciation value of the item(s).

- (810) **MISCELLANEOUS IMPROVEMENTS** — Optional entry. Two character positions are provided to enter the number of miscellaneous improvements (01 to 99) being sound valued or salvage valued. Four character positions are provided to enter the amount (up to \$9999), right justified, of depreciated value being applied to the miscellaneous improvements.

Example:

4 Miscellaneous Sheds sound valued for \$50 each.

810	MISCELLANEOUS IMPROVEMENTS	MV 04										200	

TOTAL ACTUAL VALUE — *For manual pricing purposes only.* Refers to the sum total of all actual and sound values for the other building and yard improvements.

STRUCTURE TYPE & MODIFICATION CODES

Quality Grades necessary only where shown

Allowable Quality Grades: A, B, C, D, E

RESIDENTIAL

GARAGES STRUCTURE TYPE CODES

RA1—FR or CB attached garage	Dim. or SF
RA2—Brick or Stone attached garage . .	Dim. or SF
RG1—Frame or CB detached garage . . .	Dim. or SF
RG2—Brick or Stone detached garage . .	Dim. or SF

Allowable Quality Grades:
A, B, C, D, E

Maximum Size

5,000 SF
5,000 SF
5,000 SF
5,000 SF

Minimum Size

150 SF
150 SF
150 SF
150 SF

CARPORTS STRUCTURE TYPE CODES

RC1—Carport	Dim. or SF
RC2—Canopy	Dim. or SF

Maximum Size

1,000 SF
2,500 SF

Minimum Size

150 SF
10 SF

SWIMMING POOLS STRUCTURE TYPE CODES

	Max.	Min.
RP1—Plastic liner pool	5,000 SF	100 SF
RP2—Prefabricated vinyl pool	5,000 SF	100 SF
RP3—Reinforced concrete pool	5,000 SF	100 SF
RP4—Fiberglass pool	5,000 SF	100 SF
RP5—Gunite pool	5,000 SF	100 SF

SWIMMING POOLS MODIFICATION CODES

1. No filter
2. Gas or propane heating
3. Electric heating

SWIMMING POOLS SPECIAL MODIFICATION CODES

		Max.	Min.
SP1—Diving board	Qty.	5	0
SP2—Chrome or Steel ladder	Qty.	10	0
SP3—Underwater lighting	Qty.	50	0

SHEDS/UTILITY BUILDINGS STRUCTURE TYPE CODES

RS1—Frame utility shed	Dim. or SF
S2—Metal utility shed	Dim. or SF

Maximum Size

5,000 SF
5,000 SF

Minimum Size

15 SF
15 SF

AGRICULTURAL

BANK BARNs & FLAT BARNs STRUCTURE TYPE CODES

	Max.	Min.
AB1—Bank barn	15,000 SF	500 SF
AB2—Flat barn	15,000 SF	250 SF

Allowable Quality Grades: B, C, D

BANK BARNs & FLAT BARNs MODIFICATION CODES

1. Wood loft floor
2. Gambrel/arch type roof
3. Stalls and partitions
4. Earth floor
5. No lighting

BANK BARNs & FLAT BARNs SPECIAL MODIFICATION CODES

FB1—Water connection	Qty.
FB2—Roof ventilator	Qty.

FRAME CORN CRIBs STRUCTURE TYPE CODES

	Max.	Min.
AC1—Wood board	2,000 SF	35 SF
AC2—Welded wire	2,000 SF	35 SF

FRAME CORN CRIBs MODIFICATION CODES

1. Storage bin over (wood board)
2. Storage bin over (welded wire)
3. Lighting

WIRE CORN CRIBs STRUCTURE TYPE CODES

	Max.	Min.
AC3—35° roof, 5 gauge wire crib	20,000 bushels	750 bushels
AC4—45° roof, 5 gauge wire crib	20,000 bushels	750 bushels
AC5—35° roof, 2 gauge wire crib	20,000 bushels	750 bushels
AC6—45° roof, 2 gauge wire crib	20,000 bushels	750 bushels

WIRE CORN CRIBs MODIFICATION CODES

1. No concrete slab
2. No roof, 35°
3. No roof, 45°

AGRICULTURAL (con't.)

DAIRY & HORSE BARN STRUCTURE TYPE CODE

	Max.	Min.
AD1—Dairy and Horse barns Dim. or SF	15,000 SF	400 SF

Allowable Quality Grades: B, C, D

DAIRY & HORSE BARN MODIFICATION CODES

1. Earth floor
2. No lighting

DAIRY & HORSE BARN

SPECIAL MODIFICATION CODES

FD1—Barn cleaner gutter LF
FD2—Concrete feed bunk LF
FD3—Wood feed bunk LF
FD4—Mech. feeder, automatic . . LF
FD5—Mech. feeder, manual LF
FD6—Stable ceiling SF

CATTLE FEED BUNKS & FENCE BUNKS STRUCTURE TYPE CODES

	Max.	Min.
AF1—Concrete feed bunk LF	500 LF	5 LF
AF2—Post and plank bunk LF	500 LF	5 LF
AF3—Concrete fence bunk LF	500 LF	5 LF
AF4—Post and plank fence bunk . . . LF	500 LF	5 LF

CATTLE FEED BUNKS & FENCE BUNKS

SPECIAL MODIFICATION CODES

	Max.	Min.
FF1—Roof, 10' wide LF	500 LF	5 LF
FF2—Mech. feeder, automatic . . LF	500 LF	5 LF
FF3—Mech. feeder, manual LF	500 LF	5 LF
FF4—Concrete apron, 10' wide . . LF	500 LF	5 LF
Add for Stock Waterer:		
FF5—Cattle Qty.		
FF6—Hog or sheep Qty.		
FF7—Combination cattle & hog . . Qty.		

STEEL GRAIN BINS STRUCTURE TYPE CODES

AG1—Steel grain bin, w/o drying bin . . Diam. x Hgt.
AG2—Steel grain bin, with drying bin . . Diam. x Hgt.

Maximum Size Minimum Size

275,000 bushels	1,000 bushels
275,000 bushels	1,000 bushels

POULTRY HOUSES STRUCTURE TYPE CODES

	Max.	Min.
AH1—1s frame or metal Dim. or SF	20,000 SF	50 SF
AH2—2s frame or metal Dim. or SF	20,000 SF	50 SF
AH3—3s frame or metal Dim. or SF	20,000 SF	50 SF
AH4—1s concrete block Dim. or SF	20,000 SF	50 SF
AH5—2s concrete block Dim. or SF	20,000 SF	50 SF
AH6—3s concrete block Dim. or SF	20,000 SF	50 SF

POULTRY HOUSES MODIFICATION CODES

1. Insulation first floor
2. Insulation second floor
3. Insulation third floor
4. Earth floor
5. Single pitch roof

POULTRY HOUSES SPECIAL MODIFICATION CODES

FB1—Water connection Qty.
FB2—Roof ventilator Qty.

BUNKER SILOS STRUCTURE TYPE CODE

AK1—Bunker silo Hgt. x LF

Maximum Size

3,000 LF

Minimum Size

10 LF

LEAN TO STRUCTURE TYPE CODE

	Max.	Min.
AL1—1s lean to Dim. or SF	2,500 SF	10 SF

LEAN TO MODIFICATION CODE

1. Earth floor

MILK HOUSES & MILKING PARLORS STRUCTURE TYPE CODES

	Max.	Min.
AM1—Attached, CB milk house Dim. or SF	2,000 SF	50 SF
AM2—Attached, glazed tile milk house . Dim. or SF	2,000 SF	50 SF
AM3—Det., CB milk house Dim. or SF	2,000 SF	50 SF
AM4—Det., glazed tile milk house Dim. or SF	2,000 SF	50 SF
AM5—Concrete block milking parlor . . Dim. or SF	2,000 SF	50 SF
AM6—Glazed tile milking parlor Dim. or SF	2,000 SF	50 SF

MILK HOUSES & MILKING PARLORS MODIFICATION CODES

1. Metal roof
2. Wood shingle
3. Composition roof
4. No heating

MILK HOUSES & MILKING PARLORS SPECIAL MODIFICATION CODES

FM1—Water heater Qty.
FM2—Exhaust fan Qty.

AGRICULTURAL (con't.)

POTATO STORAGE & TOBACCO BARN STRUCTURE TYPE CODES

	Max.	Min.
AO1—Potato storage, underground Dim. or SF	25,000 SF	500 SF
AO2—Potato storage, above ground . . . Dim. or SF	25,000 SF	500 SF
AO3—Tobacco barn Dim. or SF	15,000 SF	500 SF

POTATO STORAGE & TOBACCO BARN MODIFICATION CODES

1. No lighting
2. Concrete floor

POTATO STORAGE & TOBACCO BARN SPECIAL MODIFICATION CODES

- FO1—Ventilating fan, 24" Qty.
FO2—Ventilating fan, 36" Qty.

POLE FRAME BUILDINGS STRUCTURE TYPE CODES

	Max.	Min.
AP1—Four side, closed, mtl. pole bldg. . Dim. or SF	20,000 SF	200 SF
AP2—Four side, closed, wd. pole bldg. . Dim. or SF	20,000 SF	200 SF
AP3—One side, open, mtl. pole bldg. . . Dim. or SF	20,000 SF	200 SF
AP4—One side, open, wd. pole bldg. . . Dim. or SF	20,000 SF	200 SF
AP5—Four side, open, mtl. pole bldg. . . Dim. or SF	20,000 SF	200 SF
AP6—Four side, open, wd. pole bldg. . . Dim. or SF	20,000 SF	200 SF

POLE FRAME BUILDINGS MODIFICATION CODES

1. Truss roof, span to 50'
2. Concrete floor
3. Insulation
4. Wood lining

POLE FRAME BUILDINGS SPECIAL MODIFICATION CODES

- FP1—14' x 12' slide door Qty.
FP2—14' x 10' slide door Qty.
FP3—14' x 8' slide door Qty.
FP4—16' x 7' overhead door . . . Qty.
FP5— 9' x 7' overhead door . . . Qty.

QUONSET BUILDINGS STRUCTURE TYPE CODE

	Max.	Min.
AQ1—Quonset building Dim. or SF	20,000 SF	800 SF

QUONSET BUILDING MODIFICATION CODES

1. Lighting
2. Asphalt floor
3. Concrete floor

GRANARIES STRUCTURE TYPE CODE

	Max.	Min.
AR1—Granary Dim. or SF	5,000 SF	200 SF

GRANARIES MODIFICATION CODES

1. Wood storage bin
2. Metal wall
3. Metal roof
4. Wood ventilating duct
5. No lighting
6. Pier foundation

SILOS STRUCTURE TYPE CODES

	Max.	Min.
AS1—Concrete stave, with roof Diam. x Hgt.	75,000 bushels	1,500 bushels
AS2—Concrete stave, without roof Diam. x Hgt.	75,000 bushels	1,500 bushels
AS3—Butler LMS silo Diam. x Hgt.	100,000 bushels	1,500 bushels
AS4—Porcelain silo Diam. x Hgt.	200,000 bushels	3,000 bushels
AS5—Prefabricated steel silo Diam. x Hgt.	100,000 bushels	1,500 bushels
AS6—Prefab. steel silo (high moisture) . Diam. x Hgt.	100,000 bushels	1,500 bushels

SILOS MODIFICATION CODES

1. 17' automatic unloader
2. 20' automatic unloader
3. 25' automatic unloader
4. 17' raised arm auger
5. 20' raised arm auger
6. 25' raised arm auger

TRENCH SILOS STRUCTURE TYPE CODES

AT1—Concrete or plank trench silo Depth x LF
AT2—Dirt trench silo Depth x LF

Maximum Size	Minimum Size
3,000 LF	10 LF
3,000 LF	10 LF

SWINE FARROWING BARN STRUCTURE TYPE CODE

	Max.	Min.
AV1—Swine farrowing barn Dim. or SF	20,000 SF	200 SF

SWINE FARROWING BARN MODIFICATION CODE

1. 25% concrete pit area
2. 100% concrete pit area

AGRICULTURAL (con't.)

SWINE FINISHING/CONFINEMENT BARN STRUCTURE TYPE CODES

		Max.	Min.
AW1—Swine finishing barn	Dim. or SF	20,000 SF	200 SF
AW2—Swine confinement barn	Dim. or SF	20,000 SF	200 SF

SWINE FINISHING/CONFINEMENT BARN

MODIFICATION CODES
1. 25% concrete pit area
2. 100% concrete pit area

PREFABRICATED STEEL BUILDINGS STRUCTURE TYPE CODE

		Max.	Min.
AX1—Prefabricated steel building	Dim. or SF	20,000 SF	200 SF

PREFABRICATED STEEL BUILDINGS

MODIFICATION CODES
1. Lighting
2. Asphalt floor
3. Concrete floor

SLURRY SYSTEMS STRUCTURE TYPE CODES

AY1—Circular slurry system	Gallons
AY2—Rectangular slurry system	Gallons

Maximum Size	Minimum Size
500,000 gallons	20,000 gallons
300,000 gallons	10,000 gallons

MISCELLANEOUS

RESIDENTIAL GREENHOUSES STRUCTURE TYPE CODES

		Maximum Size	Minimum Size
GH1—Wood frame, glass walls	Dim. or SF	1,000 SF	20 SF
GH2—Pipe or metal frame, glass walls . .	Dim. or SF	1,000 SF	20 SF
GH3—Wood frame, plastic covered	Dim. or SF	1,000 SF	20 SF

BOAT HOUSES STRUCTURE TYPE CODES

		Maximum Size	Minimum Size
RB1—Frame or CB boat house	Dim. or SF	5,000 SF	100 SF
RB2—Masonry boat house	Dim. or SF	5,000 SF	100 SF

BOAT DOCKS STRUCTURE TYPE CODES

		Maximum Size	Minimum Size
RD1—Light wood deck, light posts	Dim. or SF	3,500 SF	15 SF
RD2—Med. wd. deck, wd. girders bolted	Dim. or SF	3,500 SF	15 SF
RD3—Heavy wood deck, heavy piling . .	Dim. or SF	3,500 SF	15 SF

TENNIS COURTS STRUCTURE TYPE CODES

TC1—Asphalt tennis court	Qty.
TC2—Concrete tennis court	Qty.
TC3—Clay tennis court	Qty.

PAVING

CI1—Asphalt or blacktop paving	SF
CI2—Concrete paving	SF

MV01 through MV99 — for Sound Value or Salvage Value of Miscellaneous Structures.

COMMERCIAL/INDUSTRIAL DATA COLLECTION FORM**TABLE OF CONTENTS**

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STANDARD WEST VIRGINIA COMMERCIAL/INDUSTRIAL PROPERTY RECORD CARD

OWNER'S NAME & MAILING ADDRESS

LEGAL DESCRIPTION

010	COUNTY	DISTRICT	MAP	PARCEL NO.	SPECIAL ID	OF	CARD NO.
101	ROUTING NO.	102	CLASS	103	TAX CLASS	104	LAND USE MULT
106	PARTIAL	107	LIVING UNITS	108	NEIGHBORHOOD		
110	NUMBER	SUFFIX	STREET NAME				
170	COUNTY	DISTRICT	MAP	PARCEL NO.	SPECIAL ID		

SALES DATA			
MO	YR	TYPE	AMOUNT
201			
202			
203			

ENTRANCE INFORMATION			
MONTH	DATE	YEAR	ENTR. CODE
451			
452			
453			

SUMMARY OF VALUES			
TOTAL VALUE	LAND	BUILDINGS	LAND & BLDGS.
471			
472			

RECORD OF OWNERSHIP			
RESENT	OWNER	DATE	PRICE
REVISOR			

LAND DATA & COMPUTATIONS									
LOT	DELETED	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH	ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR	LAND VALUE
299	DELETE 300-379								
300									
301									
302									
303									
304									
305									
306									
307									
308									
309									
310									
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323									
324									
325									
326									
327									
328									
329									
330									

PARKING AVAILABILITY			
TYPE	QUANTITY	PROXIMITY	
0 NONE	0 NONE	0 FAR	
1 OFF STREET	1 MINIMUM	1 NEAR	
2 ON STREET	2 ADEQUATE	2 ADJACENT	
3 ON & OFF STREET	3 ABUNDANT	3 ON SITE	
4 PARKING DECK			

19 DELETE 600-628

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466

DEFINITION OF TERMS

Following is an explanation of the terms as they are used throughout the specifications.

Characters — refer to the letters, digits, and symbols which make up the data to be entered on the data collection form.

Alpha Character — letter

Numeric Character — digit

Symbol Character — calculation signs, etc.

Character positions — refer to the blank dashes (underscores) on the data collection form where data is to be entered.

Right Justified — the last character position must be filled with the last character of the entry.

Left Justified — the first character position must be filled with the first character of the entry.

OWNERSHIP

OWNERSHIP & MAILING ADDRESS — Space is provided to enter the name or names of the property owners and the mailing address to which the tax bills are forwarded. This information is obtained from existing client records and is generally entered on the data collection form by a computer lineprinter. Depending upon particular project requirements, other data, such as mortgagor codes, deed information, sales etc., may also be entered in this area.

LEGAL DESCRIPTION — Space is provided to enter the legal description of the property. This information is obtained from existing records and is generally entered on the data collection form by a computer lineprinter.

PARCEL IDENTIFICATION

The parcel identification consists of a county, district, map, parcel, and if applicable, a special ID number. The parcel ID is a unique number which is the basis of identifying all parcels. The inventory of parcel numbers should be strictly monitored, therefore only certain designated personnel should be authorized to create, delete, or alter parcel numbers.

- (010) **COUNTY** — Required entry. Space is provided to enter a two digit numeric code identifying a particular county. A county number must be entered on every data collection form. A complete listing of West Virginia county numbers can be found in the Appendix of this manual.

DISTRICT — Required entry. Space is provided to enter a two digit numeric code identifying a particular political jurisdiction. A district number must be entered on every data collection form.

MAP — Required entry. Space is provided to enter four numeric and/or alpha characters used to denote the division of properties generally defined on an individual tax map. A map number must be entered on every data collection form.

PARCEL NO.

Prefix — Required entry. Four character positions to the left of the decimal point are provided to enter numeric or alpha characters denoting the individual parcels located within a tax map. This is a right justified entry - all character positions must be filled in. Use leading zeros when necessary.

Suffix — Optional entry. The four character positions to the right of the decimal point are for entering numeric and/or alpha characters denoting a suffix to the parcel number when applicable. When activated, the suffix entry should be right justified. If manually entered, all character positions should be filled in. Use leading zeros if necessary.

010				0510.0001		OF
	COUNTY	DISTRICT	MAP	PARCEL NO.	SPECIAL ID	CARD NUMBER

SPECIAL ID — Optional entry. Space is provided to enter a code number to identify undivided interest, county court splits, and permanent buildings on leased land.

The first character position is reserved for a numeric code identifying the type of ownership division. The possibilities are . . .

- 1 Building on leased land
- 3 Undivided part interest
- 6 County Court split

No other entries are permissible. The three suffix positions are not to be used.

010					3	OF
	COUNTY	DISTRICT	MAP	PARCEL NO.	SPECIAL ID	CARD NUMBER

CARD NUMBER — Required entry. Character positions are provided to enter two sets of two numeric characters each. The last two positions are reserved to enter the total number of cards required to list the parcel and the first two positions are reserved to enter the sequential number assigned to each particular card . . . i.e., for parcels requiring one card, enter 01 of 01; for parcels requiring two cards, enter 01 of 02 on the first card and 02 of 02 on the second card; for three cards, 01 of 03, 02 of 03, 03 of 03, etc., up to 01 of 99 and 99 of 99. A card number must be entered on every data collection form. This data is to be duplicated on all input records. All character positions must be filled in. Use leading zeros if necessary.

Note: Multiple Sequence Cards. Normally, it will be necessary for the data collector to create extra cards to accommodate additional structures encountered at the property. Certain legal and identification data is required to be entered by the data collector on all multiple sequence cards. In addition to the normal listing and descriptive data, the data collector should include:

Owner's name — as shown on the first card

Parcel ID — *exactly* as shown on the first card

- (101) ROUTING NUMBER — Optional entry. Character positions are provided to enter three numeric characters - ranging from 001 to 999 - to the left of the decimal point, and two numeric characters - ranging from 01 to 99 - to the right of the vertical hash mark, denoting the sequential routing number assigned to each parcel of property. The character positions to the right of the hash mark are provided to facilitate the identification of property splits . . . the first split from a property being identified as 01, the second as 02, etc.

Consult your supervisor for specific location applications.

Note: For parcels requiring multiple card listing, the *same* routing number must be entered on each card.

- (102) CLASS — Required entry. A character position is provided to enter the general property class of the subject parcel. The basis for classification is the most predominant present-day use. If the parcel is unused, the basis for classification would depend upon the anticipated use, or the use for which it is zoned.

Enter R RESIDENTIAL to indicate one to four family residential use.

Enter A APARTMENT to indicate multi-family use . . . five or more families.

Enter F FARM to indicate rural properties, generally defined by a minimum acreage requirement, and usually but not necessarily devoted to agriculture.

Enter C COMMERCIAL to indicate properties devoted to trade, services, and recreational use.

Enter I INDUSTRIAL to indicate properties devoted to the manufacturing and/or processing of products.

Enter X EXEMPT to indicate non-taxable properties.

Enter U UTILITY to indicate properties devoted to the production of public utility commodities or services under the control of governmental agencies such as the Public Utility Commission.

A class must be entered on every data collection form.

Note: For multiple sequence forms, the class must be the same for all cards in a series.

(103) **TAX CLASS** — Required entry. A character position is provided to enter the appropriate numeric or alpha tax class.

- Enter 2 to indicate all property owned, used and occupied by the owner exclusively for residential purposes; all farms, including land used for horticulture and grazing, occupied and cultivated by their owners or bona fide tenants.
- Enter 3 to indicate all real and personal property situated outside of municipalities, exclusive of Class 2.
- Enter 4 to indicate all real and personal property situated inside of municipalities, exclusive of Class 2.
- Enter C to indicate property SPLIT BY COUNTY COMMISSION for classification purposes.
- Enter N to indicate exempt or non-taxable property.
- Enter A to indicate operating public utility property.
- Enter S to indicate property sold to the state.

(104) **LAND USE** — Required entry. Character positions are provided to enter a three digit numeric code denoting the present use of each particular parcel of land. A land use code must be entered on all data collection forms. In the case of multiple land uses on the same parcel, enter the land use code which is most representative of the improvements listed on that particular data collection form and enter a check mark [✓] in the bracket provided.

Note: Appropriate land use codes may be found in the Appendix of this manual.

(105) **NRP (Not Real Property)** — Optional entry. A character position is provided to enter a check mark [✓] to denote a mobile home or other improvement that should be considered personal property rather than real property because of its current situation, i.e., improvement on leased land.

(106) **PARTIAL** — Optional entry. A character position is provided to enter the alpha character "Y" to denote that the subject parcel has a partially completed dwelling located on it. If this condition does not exist, simply leave the entry blank.

Note: For parcels requiring multiple card listing, the partial code "Y" must be entered on each card.

(107) **LIVING UNITS** — Optional entry. A character position is provided to denote the amount of living units which exist in the subject dwelling. Enter the amount of living units.

A living unit is defined as any room or group of rooms designed as the living quarters of one family or household, equipped with cooking and toilet facilities and having an independent entrance from a public hall or from the outside.

Note: A single family residence contains one living unit, and the correct entry would be 1.

Note: If the parcel is vacant or contains only auxiliary improvements, simply leave the entry blank.

(108) **NEIGHBORHOOD** — Optional entry. Character positions are provided to enter three numeric characters ranging from 001 to 999 to the left of the vertical hash mark to denote a specific neighborhood identification number. A character position is provided to the right of the vertical hash mark to enter an additional digit, 1 to 9, to denote the creation of a subneighborhood within a neighborhood subsequent to the initial neighborhood delineation. For example, neighborhood 200 is being re-defined as neighborhood 200/1 and 200/2. If the subject property's neighborhood identification

- 

110 1525 ANN WASHINGTON ST
NUMBER SUF DIR STREET NAME

110 ROUTE 52
NUMBER SUF DIR STREET NAME



- (170) **PARCEL TIE BACK COMMERCIAL/INDUSTRIAL** — Optional entry. In many cases, commercial or industrial properties involve a number of parcels for one major complex. It will be necessary for the commercial/industrial data collector to enter the parcel ID of the primary parcel on all associated parcels of a single economic complex. This entry indicates that the noted parcels should be valued as a single economic unit. No entry, of course, will be made in Field 170 for the primary parcel. This field should not be used for residential or rural parcels.

RECORD OF OWNERSHIP – Optional entry.

Space is provided to enter information on the present and previous owner of the parcel.

OWNER — Enter last name first. If there are multiple owners, enter the owner with the largest percentage interest. If all owners share equally, enter the owner whose last name comes first alphabetically.

DATE — Enter the month and year that the parcel was sold and the deed recorded.

PRICE — Enter the consideration that was paid for the parcel.

DEED BOOK — Enter the deed book or will book number in which the transfer was recorded.

PAGE — Enter the page number of the deed book in which the transfer was recorded.

(201-203) SALES DATA — Optional entry.

Space is provided to enter the data for three sales. The data is arranged in vertical columns. All the data should be listed from top to bottom, allowing one line for each sale. All sales entries will be processed.

DATE — Character positions are provided to enter two sets of two numeric characters each . . . the number of the month and the last two digits of the year of the sale. Each character position must be filled in. Use leading zeros if necessary.

TYPE — Refers to the distinction between a type of sale involving LAND only, as opposed to a sale involving both LAND AND BUILDINGS or just BUILDING(S) only. Three alternatives are provided. Enter the code which is representative of the sale. Only one code may be entered.

- Enter 1 LAND to indicate that the sale involved land only.
- Enter 2 L & B to indicate that the sale involved both land and buildings.
- Enter 3 BUILDING to indicate that the sale involved a building(s) only. For example, buildings on leased land or high rise condominiums.

AMOUNT (SALE PRICE) — Character positions are provided to enter up to eight numeric characters (up to \$99,999,999). It is not necessary to fill in each character position. Use the character positions to the right and omit leading zeros.

SOURCE — Refers to the source of the sales data entered in this section. Four alternatives are provided. Enter the code which is most representative of the source. Only ONE code may be entered.

- Enter 1 BUYER to indicate that the information was obtained from the grantee - or buyer.
- Enter 2 SELLER to indicate that the information was obtained from the grantor - or seller.
- Enter 3 AGENT to indicate that the information was obtained from an agent representing a buyer or seller.
- Enter 4 OTHER to indicate that the information was obtained from conveyance fee, similar transfer records, or any other source.

SALES VALIDITY CODES

Space is provided to enter one of nine numeric codes. This numeric code will be keypunched for computer process and MUST be entered on the data collection form.

- Enter 0 to indicate the sale can be considered an "arms length" transaction (a valid sale).
- Enter 1 to indicate that the sale involved more than one parcel.
- Enter 2 to indicate that the property was not exposed to the open market or that the marketing time for the property could be considered abnormal.
- Enter 3 to indicate that the highest and best use of the property has changed since the sale or that construction and/or demolition of improvements have taken place since the transaction occurred.

- Enter 4 to indicate that the parties of the transaction were either related individuals or corporations.
- Enter 5 to indicate that the cause of the transaction was either a liquidation of assets or a forced sale.
- Enter 6 to indicate that the sale involved abnormal financing or that the transaction was a land contract arrangement.
- Enter 7 to indicate that the amount shown is a construction cost only used for verification of cost schedules.
- Enter 8 to indicate that the sale included an excessive amount of personal property or any other situation that would make the sale NOT an "arms length" transaction.
- Enter 9 to indicate that the sale is invalidated as of its entry on the file.

If further explanation is needed, consult your project supervisor.

DELETE (D) — Space is provided to enter an alpha character "D" to be used for removing (deleting) invalid sales which had previously been entered in the sales history file as valid, i.e., further investigation shows that a sale that has been previously encoded as valid is actually invalid.

(299-380) LAND DATA & COMPUTATIONS — Required field.

There are five categories of land entries — NONE, LOTS, SQUARE FEET, ACREAGE, and GROSS. Each category is comprised of a number of *coded*, land-type descriptions, such as "Primary Site," "Secondary Site," etc.

Each entry is preceded by a field number or line number. Immediately following the field number is a space to enter the code number of the land-type (within the category) involved in that particular entry.

		299	DELETE 300-379	LAND DATA & COMPUTATIONS									
0	NONE	300		ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE
LOTS		301		---	---	---		351					
1	REGULAR LOT	302		---	---	---		352					
2	REAR LOT	303		---	---	---		353					
3	IRREGULAR LOT	304		---	---	---		354					
4	WATERFRONT	304		---	---	---		354					
SQUARE FEET		311		---	---	---	SQ. FT.	361					
1	PRIMARY SITE	312		---	---	---	SQ. FT.	362					
2	SECONDARY SITE	312		---	---	---	SQ. FT.	362					
3	RESIDUAL	313		---	---	---	SQ. FT.	363					
4	WATERFRONT	314		---	---	---	SQ. FT.	364					
5	UNDEVELOPED	314		---	---	---	SQ. FT.	364					
ACREAGE		321		---	---	---	ACRES	371					
1	HOMESITE	322		---	---	---	ACRES	372					
2	TILLABLE	322		---	---	---	ACRES	372					
3	PASTURE	323		---	---	---	ACRES	373					
4	WOODLAND	324		---	---	---	ACRES	374					
5	WASTELAND	324		---	---	---	ACRES	374					
6	PRIMARY SITE	325		---	---	---	ACRES	375					
7	SECONDARY SITE	325		---	---	---	ACRES	375					
8	RESIDUAL	326		---	---	---	ACRES	376					
9	WATERFRONT	326		---	---	---	ACRES	376					
0	UNCLASSIFIED	327		---	---	---	ACRES	377					
GROSS		327		---	---	---	ACRES	377					
1	IRREGULAR LOT	328		---	---	---	ACRES	378					
2	SITE VALUE	329		---	---	---	ACRES	379					
3	RESIDUAL	329		---	---	---	ACRES	379					
4	WATERFRONT	330		---	---	---	ACRES	379					
0	MINUS ROW	330		---	---	---	ACRES	379					

(299) **DELETE** — This is a computer file maintenance entry and normally will not be utilized on the field card. The purpose of the DELETE is to remove all data previously entered in the computer for lines 300 to 379.

This action is initiated by circling the field number 299. As all parcels will require some type of land entry, a group land DELETE (299) action must also contain new land data information desired.

- (300) **NONE** — Use for cases where no land value is applicable for that parcel or card. Enter the code descriptor "0" when applicable. Normal cases requiring no land descriptor:
- A - Multiple-sequence cards — normally all land data is recorded on the first card of a multiple series. All other cards in the series (2 of 2) should be entered as no land.
 - B - Building on leased land — if the card represents a building value only parcel, enter as no land.
 - C - Condominiums — in many cases, the land for condominiums is owned in common and no attempt is made to segregate a land or structure value.

(301-304) LOTS

Use for all lot computations. Enter the proper code number (1 to 4 inclusive). Complete the corresponding areas of each entry . . . actual frontage, effective frontage, and effective depth. Space is provided for four entries.

- 1 **Regular Lot** — Either an interior lot, i.e., bordered on two sides by adjacent lots, or a corner lot located at a street intersection with frontage on two sides.
- 2 **Rear Lot (Minus Lot)** — Lot without street or road frontage. Access is from an adjacent parcel.
- 3 **Irregular Lot** — Lot which is highly irregular in shape, such as a cul de sac.
- 4 **Waterfront** — Lot with waterfront access.

Note: Effective frontage and effective depth are determined by applying the lot sizing procedures found in the Appendix of this manual.

All character positions in actual frontage, effective frontage, and effective depth must be filled in. Use leading zeros if necessary.

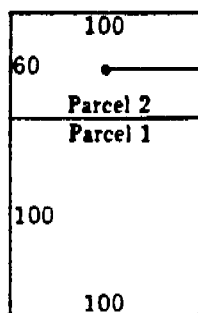
The unit price will be calculated against the effective frontage and the effective depth.

REGULAR LOT/IRREGULAR LOT/WATERFRONT — Use for normal lot computations. Enter the code number 1, 3, or 4. Complete the corresponding area for each entry . . . actual frontage, effective frontage, and effective depth.

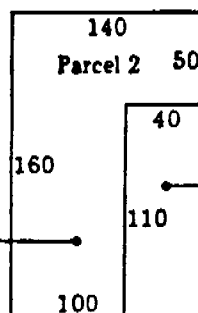
		299	DELETE 300-379 LAND DATA & COMPUTATIONS									
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR	LAND VALUE
LOTS		301	1	121.1	121	150	351	—	—	—	[] — %	—
1	REGULAR LOT	302	1	150.3	150	120	352	—	—	—	[] — %	—
2	REAR LOT	303	1	137.9	138	100	353	—	—	—	[] — %	—
3	IRREGULAR LOT	304	4	100.0	100	150	354	—	—	—	[] — %	—
4	WATERFRONT											

REAR LOT (MINUS LOT) — Use for rear lot computations only. This entry must always be used in conjunction with a Regular Lot. The procedure is as follows -

- 1) Enter the front and rear lot as in Regular Lot. Enter the code number 1. Proceed in the same manner as prescribed for Regular Lot.
- 2) Enter the front lot (the Minus Lot) in the entry line immediately below the Regular Lot. Enter the code number 2. Proceed in the same manner as prescribed for Regular Lot.



Example A



Example B

Example A

		299	DELETE 300-379									LAND DATA & COMPUTATIONS				
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE			
LOTS		301	1	100.0	100	160	351	— 1 —			— [] —	%				
1 REGULAR LOT		302	2	100.0	100	100	352	— 1 —			— [] —	%				
2 REAR LOT		303	—	— .	—	—	353	— 1 —			— [] —	%				
3 IRREGULAR LOT		304	—	— .	—	—	354	— 1 —			— [] —	%				
4 WATERFRONT																

Example B

		299	DELETE 300-378										LAND DATA & COMPUTATIONS									
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE									
LOTS		301	1	100.0	140	160	351	— 1 —			3	[—] 05 %										
1 REGULAR LOT		302	2	040.0	040	110	352	— 1 —			3	[—] 05 %										
2 REAR LOT		303	—	—	—	—	353	— 1 —			—	[] — %										
3 IRREGULAR LOT		304	—	—	—	—	354	— 1 —			—	[] — %										
4 WATERFRONT			—	—	—	—		— 1 —			—	[] — %										

Note: A rear lot - minus lot will always take two entries.

The same influence factor must be used on the Rear Lot - Minus Lot as was used on the regular lot.

(311-314) SQUARE FEET

Use for square foot computations. Enter the proper code number (1 to 5 inclusive) and the corresponding square foot area for that land type. Space is provided for four possible entries and each entry will accommodate a size up to 99,999,999 square feet.

- 1 Primary Site — lot improved with a major structure, such as a dwelling. Normally the typical or zoned base lot size for the neighborhood.
- 2 Secondary Site — extra buildable lot or lots.
- 3 Residual — all excess land considered not an actual or potential building site.
- 4 Waterfront — improved or vacant building site with waterfront access.
- 5 Undeveloped — unimproved or vacant building site. Normally similar to improved lots within the neighborhood.

SQUARE FEET	311	1	32500	SQ. FT.	361	---	---	---	INFLUENCE FACTORS	---	[]	---	%
1 PRIMARY SITE	312	2	10700	SQ. FT.	362	---	---	---	1. UNIMPROVED	---	[]	---	%
2 SECONDARY SITE	313	---	---	SQ. FT.	363	---	---	---	2. EXCESSIVE FRONTAGE	---	[]	---	%
3 RESIDUAL	314	---	---	SQ. FT.	364	---	---	---	3. TOPOGRAPHY	---	[]	---	%
4 WATERFRONT													
5 UNDEVELOPED													

(321-329) ACREAGE

Use for acreage computations. Enter the proper code (0 to 9 inclusive) and the corresponding acreage size for that land type. Space is provided for nine possible entries and each entry will accommodate up to 99,999.99 acres. Leading zeros are not required, but all character positions must be right justified. *Example:* 10 acres would be 10.00

- * 1 Homesite — acreage allocation for a dwelling site.
- * 2 Tillable — number of acres of cleared land capable of growing crops.
- * 3 Pasture — number of acres of cleared land not economically suitable for growing crops, but suitable for grazing of livestock.
- * 4 Woodland — number of acres of uncleared wooded land.
- 5 Wasteland — number of acres of land not suitable for building sites, agricultural, or forestland use. Normally restricted to swampland, ravines, etc.
- 6 Primary Site — similar to square feet definition.
- 7 Secondary Site — similar to square feet definition.
- 8 Residual — similar to square feet definition.
- 9 Waterfront — similar to square feet definition.
- * 0 Unclassified/Undeveloped — an unimproved or vacant building site.
- T Timber — unimproved timberland.

ACREAGE	321	1	1.00	ACRES	371	---	---	---	4. SHAPE OR SIZE	---	[]	---	%
1 HOMESITE	322	2	127.50	ACRES	372	---	---	---	5. ECONOMIC	---	[]	---	%
2 TILLABLE	323	3	45.30	ACRES	373	---	---	---	6. RESTRICTIONS - NONCONFORMING	---	[]	---	%
3 PASTURE	324	5	1.00	ACRES	374	---	---	---	7. ECONOMIC MISIMPROVEMENT	---	[]	---	%
4 WOODLAND	325	---	---	ACRES	375	---	---	---	8. FREQUENT FLOODING	---	[]	---	%
5 WASTELAND	326	---	---	ACRES	376	---	---	---	9. CORNER/ALLEY (+)	---	[]	---	%
6 PRIMARY SITE	327	---	---	ACRES	377	---	---	---	0. VIEW (+)	---	[]	---	%
7 SECONDARY SITE	328	---	---	ACRES	378	---	---	---					
8 RESIDUAL	329	---	---	ACRES	379	---	---	---					
9 WATERFRONT													
0 UNCLASSIFIED													

* Refer to the Appendix for our description of grade.

(330) GROSS

Use to (1) Site value Irregular Lots, Residual Land, Waterfront, and any other such sites for which you cannot, or do not wish to show computations, or (2) Make a gross value deduction for utility, right of ways, and other similar property obstructions, (code 0). Enter the proper code number. Enter the gross sound value. Space is provided for one entry of a maximum of nine whole numbers - up to \$999,999,999.

- 1 Irregular Lot
- 2 Site Value
- 3 Residual
- 4 Waterfront
- 0 Minus R.O.W.

Note: The site value in this entry will be added to or deducted from the other land entries in arriving at the total land value. Codes 1 to 4, inclusive, can be used *without* other land entries. Code 0 can only be used *with* other land entries, and providing that the total amount deducted does not exceed the sum of the other entries.

GROSS	
1	IRREGULAR LOT
2	SITE VALUE
3	RESIDUAL
4	WATERFRONT
0	MINUS R.O.W.
330	1 000

(301-329) INFLUENCE FACTORS

Each land entry, with the exception of the "Gross" entry, provides two character positions for entering up to two separate one-digit influence factor codes, a bracket in which to enter either a plus (+) or minus (-) symbol, and two character positions to enter the corresponding influence factor as a percentage to be added to (plus) or deducted from (minus) the calculated land value for each entry. Up to two (any combination of two) influence factors may be used with each entry. In entries where a single factor is used, enter the factor in the first character position to the left and leave the second character position blank.

- Enter 1 (-) to indicate comparative value loss attributable to a lack of improvements.
- Enter 2 (-) to indicate comparative value loss attributable to excessive frontage in relation to utility.
- Enter 3 (-) to indicate comparative value loss attributable to topographical features.
- Enter 4 (-) to indicate comparative value loss (over and above the adjustment considered in lot sizing procedures) attributable to the shape or size of the lot in relation to its utility.
- Enter 5 (-) to indicate comparative value loss attributable to physical economic detriments influencing the site, i.e., a dwelling next to a landfill.
- Enter 6 (-) to indicate comparative value loss attributable to restrictions regulating its use.
- Enter 7 (-) to indicate comparative value loss attributable to economic misimprovement (either under-improvement or over-improvement) of the site.
- Enter 8 (-) to indicate comparative value loss attributable to frequent flooding.
- Enter 9 (+) to indicate comparative value enhancement attributable to corner and/or alley influence.

Enter 0 (+) to indicate comparative value enhancement attributable to the capability of the site to provide an appealing and desirable view.

Note: Both character positions provided for the percentage of enhancement or loss factor must be filled in. Use leading zeros if necessary.

		299	DELETE 300-379 LAND DATA & COMPUTATIONS										
0	NONE	300	—	ACTUAL FRONTAGE	EFFECTIVE FRONTAGE	EFFECTIVE DEPTH		ACTUAL UNIT PRICE	DEPTH FACTOR	EFFECTIVE UNIT PRICE	INFLUENCE FACTOR		LAND VALUE
LOTS		301	1	150.3	150	125	351	— —			3	[-] 05 %	
1	REGULAR LOT	302		— •			352	— —			—	[] — %	
2	REAR LOT												
3	IRREGULAR LOT	303		— •			353	— —			—	[] — %	
4	WATERFRONT	304		— •			354	— —			—	[] — %	

(351-379) ACTUAL UNIT PRICE

Normal project procedure will accommodate a system of unit land rates by type to be computer assessed and applied via a table of appropriate land rates by neighborhood. Therefore, in most cases no entry will be necessary in the unit price section. However, if it is determined that the table rate is not appropriate for the subject parcel, an override land rate may be entered by encoding the correct rate in the field directly opposite the appropriate land type, i.e., unit price override 363 applies to the land data recorded in Field 313 of the SQUARE FEET section. All unit price entries should be entered right-justified with all positions to the right of the decimal in the sq. ft. area filled in.

PROPERTY FACTORS

(400) **TOPOGRAPHY** — Required entry. Refers to the topographical features of the subject property. Seven alternatives are provided. Enter a check mark [✓] in the space provided to the immediate right of the numeric code which is most representative of the subject property. Only one code may be checked in entries 1 through 3.

- Check 1 LEVEL to indicate the subject property is level to the access street.
- Check 2 ABOVE STREET to indicate the property is above the street level.
- Check 3 BELOW STREET to indicate that the property is below street level.

Of the following group, only one code may be checked.

- Check 4 ROLLING to indicate the property is comprised of many small hills.
- Check 5 STEEP to indicate the property has excessive grade as compared to access roadway.
- Check 6 LOW to indicate the property has a low terrain.
- Check 7 SWAMPY to indicate wet spongy land, marsh or bog.

(401) **UTILITIES** — Required entry. Refers to services which are available to the property. These can be private or public. Six alternatives are available and up to three codes may be checked. Enter a check mark [✓] in the space provided to the immediate right of the numeric codes which are most representative of the subject property.

- Check 1 ALL PUBLIC to indicate all public utilities - to include water, sewer, gas, and electric - are available.

- Check 2 PUBLIC WATER to indicate public water is available to the property.
- Check 3 PUBLIC SEWER to indicate public sewer is available to the property.
- Check 4 WELL to indicate that the *only* water available to the property is a private well.
- Check 5 SEPTIC to indicate *only* private sewer (septic tank) is available to the property.
- Check 6 GAS to indicate natural gas is available to the subject property.

Note: If code 1 is checked, no other code or combination of codes may be checked.

Note: For vacant, woodland tracts, write in none and 7 and check 7.

- (402) **STREET OR ROAD** — Required entry. Refers to the primary fronting street or the street providing the most immediate access to the subject property and the features which exist at the property. Enter a check mark in the space provided to the immediate right of the numeric codes which are representative of the subject property. Six alternatives are provided. Only one entry should be made for codes 1 through 5. Code 6 may be checked in addition to one code 1-5.

- Check 1 PAVED to indicate concrete, blacktop, or a comparably surfaced street.
- Check 2 SEMI-IMPROVED to indicate a gravel or comparably semi-improved street.
- Check 3 DIRT STREET to indicate an existing street or road which has no surface improvements in evidence.
- Check 4 PROPOSED to indicate that a street does not actually exist, but is planned (and approved) for the future. Commonly referred to as a "paper street."
- Check 5 LANDLOCKED to indicate a property without access to any type of street or road.
- Check 6 SIDEWALK to indicate the presence of a paved sidewalk available for public use.

- (410) **PARKING AVAILABILITY** — Required entry. Refers to the type, quantity, and proximity of parking available to the subject property. Enter the numeric code which is most representative of the subject property.

TYPE

- Enter 0 NONE to indicate no parking is available.
- Enter 1 OFF STREET to indicate that off street parking is available.
- Enter 2 ON STREET to indicate that on street parking is available.
- Enter 3 ON & OFF STREET to indicate that both on and off street parking facilities are available.
- Enter 4 PARKING DECK to indicate that the primary source of parking for the subject property is a parking deck or garage.

QUANTITY

- Enter 0 NONE to indicate that no parking is available.
- Enter 1 MINIMUM to indicate that the quantity of parking available is minimal and inadequate to support the property.
- Enter 2 ADEQUATE to indicate that the quantity of parking available is sufficient and adequate to support the property.
- Enter 3 ABUNDANT to indicate a quantity of available parking which is more than sufficient to support the property.

PROXIMITY

- Enter 0 FAR to indicate that no parking is available or that the proximity of available parking to the subject property is far enough away to be a detriment to the income producing capabilities of the property.
- Enter 1 NEAR to indicate that the proximity of available parking to the subject property is near enough to cause no detriment to the income producing capabilities of the property.
- Enter 2 ADJACENT to indicate that the proximity of available parking is very close or bordering the property.
- Enter 3 ON SITE to indicate that the parking availability is located on the subject parcel itself.

BUILDING PERMIT RECORD — Optional entry. Space is provided to record building permit information. This information should include the date the permit was issued, the permit number, the amount of the permit, and the purpose of the permit.

(415) LOCATION & FRONTING — Required entry. One choice is permitted in each category.

LOCATION — Refers to the neighborhood type that the subject property is located within. Ten alternatives are provided. Enter a check mark [✓] in the space provided to the immediate right of the numeric code which is most representative of the subject property. Only one code may be checked. Normally only 6 - Neighborhood or Spot (Res Area) will apply to dwellings in a basically residential area.

- Check 1 CENTRAL BUSINESS DISTRICT to indicate the core area in the center of a city in which is concentrated the major retail, financial, governmental, professional, and services activities of the city. In many instances, these boundaries have already been established or defined by city planners or other agencies.
- Check 2 PERIMETER CENTRAL BUSINESS DISTRICT to indicate the outer boundaries of the Central Business District or core area and in which the concentration of major mercantile activity is significantly less pronounced.
- Check 3 BUSINESS CLUSTER to indicate a cluster or number of commercial properties grouped together due to some attracting force such as a major intersection of interstate highways or a major shopping mall.
- Check 4 MAJOR STRIP to indicate the type of commercial development wherein the major thoroughfares are bordered by an almost continuous row or strip of retail stores and allied service establishments.
- Check 5 SECONDARY STRIP to indicate row or strip type commercial development bordering secondary arteries.
- Check 6 NEIGHBORHOOD or SPOT (Res Area) to indicate —
A - For commercial properties - individual or scattered commercial establishments located in basically residential areas.
B - Dwelling located in a primarily residential area.
- Check 7 COMMERCIAL-INDUSTRIAL PARK to indicate a controlled park-like development designed to accommodate specific light industrial and mercantile properties and containing the required utilities, streets, and other appurtenances.

- Check 8 INDUSTRIAL SITE to indicate land or land and improvements adaptable for industrial use and not located in an established industrial park. Normally a combination of land, improvements, and machinery intended for the assembling, processing, and manufacturing of products from raw materials or fabricated parts or for the production of natural resources.
- Check 9 APARTMENT/CONDOMINIUM COMPLEX to indicate the property is an apartment or condominium complex site.
- Cross out 8 and write in 0, add "/MINE SITE" next to "INDUSTRIAL SITE," and enter a check in the space provided to indicate the property is a MINE SITE including one or more of the following: portal/shaft area, parking lots, water treatment facilities, mine fan areas, gob piles, and/or preparation plant sites.

FRONTING — Refers to the type of primary fronting street and a descriptive feature of that street. Nine alternatives are provided. Enter a check mark in the space provided to the immediate right of the numeric code which is most representative of the subject property. Codes 7 or 8 or both may be checked to indicate a descriptive feature of that street if it applies. Code 9 should be checked only for dwellings or scattered commercial property located on a primarily residential street.

- Check 1 CENTRAL BUSINESS DISTRICT to indicate a major artery located within the Central Business District or core area.
- Check 2 MAJOR THOROUGHFARE to indicate a highly traveled major artery not located within the Central Business District. Many traffic lights and strip commercials are in evidence.
- Check 3 SECONDARY ARTERY to indicate moderately traveled secondary arteries typically found in mixed residential and commercial neighborhoods.
- Check 4 MEDIAN SEPARATION to indicate that the primary fronting street has a section or strip down the center of the highway dividing opposing lanes of traffic. It may be a narrow concrete buffer, or a wider landscaped strip.
- Check 5 FRONTAGE/SERVICE ROAD to indicate a local street paralleling a limited access highway and built to service abutting properties and to gather and control vehicles entering or leaving the limited access highway.
- Check 6 ONE-WAY STREET to indicate that the primary fronting street has a traffic flow in only one direction.
- Check 7 RIVER ACCESS to indicate that the subject property contains river access for barges that deliver and remove freight.
- Check 8 RAIL ACCESS to indicate that the subject property contains a railroad spur track to which a railroad delivers and removes freight.
- Check 9 RESIDENTIAL to indicate the property is a dwelling on an isolated commercial property located on a primarily residential street.

Note: Only one choice is permitted for codes 1, 2, 3, 5, 6, and 9. Codes 4, 7, and 8 may only be checked as additional codes.

(451-453) ENTRANCE INFORMATION — Required entry

Space is provided to enter the data for three calls to the property. The data is arranged in vertical columns. All the data should be listed from top to bottom, allowing one line for each attempt to gain entrance.

DATE — Character positions are provided to enter three sets of two numeric characters each: the number of the month, the day, and the last two digits of the year.

ENTR. CODE — One character position is provided to enter one of five numeric entrance codes denoting if entrance was gained or not, and the current status of the entrance information.

- Enter 1 to indicate that entrance (inspection) was gained.
- Enter 2 to indicate that both entrance (inspection) and information were refused by a responsible occupant.
- Enter 3 to indicate that it was necessary to estimate the property for miscellaneous reasons.
- Enter 4 to indicate that a door hanger was left at the property for response by a responsible occupant.
- Enter 5 to indicate that the parcel is vacant or contains only auxiliary improvements and no responsible occupants are available.

INFO CODE — One character position is provided to enter one of three numeric codes to indicate the responsible occupant from whom the data was obtained.

- Enter 1 to indicate owner.
- Enter 2 to indicate tenant.
- Enter 3 (OTHER) to indicate that a responsible occupant not mentioned above was contacted or that no contact was made, or is not applicable, as in the case of a vacant lot.

IDENTIFICATION — Three character positions are provided to enter the initials or employee number of the data collector making the call at the property. An entry must be made on each data collection form.

(471, 472) NOTES — Optional entry

Space is provided to note any pertinent facts or unusual occurrences during listing of the property. Further explanation of listing data, i.e., sales information, etc., may also be noted. Notes should be short and to the point. Two lines of thirty characters each are provided.

SUMMARY OF VALUES — Optional entry

This section of the card will be utilized to summarize all values on the data collection form. It will be utilized mainly by appraisal personnel for manual pricing, and not by data collectors.

COMMERCIAL/INDUSTRIAL BUILDING DATA (Back Side of the Card)

There are four distinct divisions of the form to be completed —

1. General Building Data
2. Interior/Exterior Data
3. Building Other Features - Attached Improvements
4. Yard Improvements - Secondary Buildings

A building is broken down into sections. Building sections are separate due to differing story height, or due to major differences in type and quality of construction. A section can share a common wall or part of a common wall with another section or several sections, but otherwise could stand alone as a separate building.

Building sections are broken down into interior/exterior lines. An interior/exterior line is defined as that portion of a building section having all identical characteristics (except From - To) found in the interior/exterior data category of the data collection form. In other words, an interior/exterior section line consists of those stories in a building section having the following identical characteristics —

1. Dimensions (width x length or square feet)
2. Perimeter
3. Use Type Code
4. Wall Height
5. Exterior Wall Material
6. Construction Type
7. Interior Finish Percent
8. Partitions
9. Heating System Type
10. Air Conditioning Type
11. Plumbing
12. Sprinkler System Type and Percent
13. Physical Condition
14. Functional Utility

GENERAL BUILDING DATA

The information for the general building data portion of the form must be completed for every building structure type described.

600 GENERAL BLDG. DATA		
1		
BLDG	YR BUILT	NO UNITS
STRUCT TYPE	GRADE	NO IDENT UNITS

BUILDING — Space is provided to enter a two digit number denoting the “building number” to be described. Building numbers should begin with 01, and a sequential order followed. Both character positions must be filled in. Use leading zeros if necessary.

YEAR BUILT — Space is provided to enter the year in which the building structure type was completed.

Note: If the owner or tenant does not know the actual year, enter your best estimate possible, based on known years of similar properties in the immediate locality. A year built **MUST** be entered for each structure type.

NUMBER OF UNITS — Space is provided to enter a three digit number denoting a distinctive type of measurable unit utilized to describe certain structure type codes. All character positions must be filled in. Use leading zeros if necessary. The following are structure type code and the types of units to be described.

STRUCTURE TYPE CODE	STRUCTURE TYPE	MEASURABLE UNITS
211	Apartment, Garden	Number of Living Units
212	Apartment, High Rise	Number of Living Units
314	Hotel/Motel High Rise	Number of Rooms
315	Hotel/Motel Low Rise	Number of Rooms
316	Nursing Home	Number of Beds
317	Boarding/Rooming House	Number of Rooms
336	Car Wash - Manual	Number of Bays
337	Car Wash - Automatic	Number of Bays
338	Parking Garage/Deck	Number of Cars
363	Legitimate Theatre	Number of Seats
364	Motion Picture Theater	Number of Seats
365	Cinema/Theater	Number of Seats
381	Bowling Alley	Number of Alleys
385	Tennis Club - Indoor	Number of Courts
386	Racquet Club - Indoor	Number of Courts
395	Trucking Terminals	Number of Bays
396	Mini Warehouse	Number of Rentable Units
640	Hospital	Number of Beds

STRUCTURE TYPE CODES — Space is provided to enter the three-digit numeric structure type code which denotes the purpose of construction. See the following page for three-digit numeric codes which should be utilized.

Note: When a building section has been constructed for multiple purposes of use, the predominant structure type code should be chosen.

GRADE — Do not enter anything in this item, unless specifically instructed by your supervisor. This may be the case with service stations and fast food franchises.

NUMBER OF IDENTICAL UNITS — Space is provided to enter the total number of identical building and structure type units. Utilize the character positions to the right. Enter 01 - 99.

STRUCTURE TYPE CODES AND/OR LAND USE CODES

Land Use Codes Only*

LAND USE	CODE	LAND USE	CODE
RESIDENTIAL		COMMERCIAL(con't.)	
Living Oriented		Miscellaneous	
Residential Vacant Land	100	Regional Shopping Mall	341
Residential 1 Family	101	Community Shopping Center	342
Residential 2 Family	102	Neighborhood Shopping Center	343
Residential 3 Family	103	Strip Shopping Center	344
Residential 4 Family	104	Discount Department Store	345
Mixed Residential/Commercial	105	Department Store	346
Condominium (Common element)	106	Supermarket	347
Condominium (Fee simple)	107	Convenience Food Market	348
Mobile Home	108	Medical Office	349
Auxiliary Improvements	109*	Bank	351
Unsound Residential Structure	110*	Savings Institution	352
Active Farm	112	Office Building Low Rise 1-4	353
Inactive Farm	113	Office Building High Rise 5 & up	354
Lg. Vac. Tracts w/Unknown Potential	123	Office Condominium	355
Apartments		Retail Condominium	356
Apartment Vacant Land	200*	Funeral Home	361
Res. Structure on Apt. Value Land	201*	Veterinary Clinic	362
Apartments Garden (3 story & under)	211	Legitimate Theatre	363
High Rise Apartments	212	Motion Picture Theater	364
Mobile Home Park	213*	Cinema/Theater	365
COMMERCIAL		Radio, TV or Motion Picture Studio	366
General Commercial Vacant Land	300*	Social/Fraternal Hall	367
Residential Structure on		Hangar	368
Commercial Value Land	301*	Day Care Center	369
Unsound Commercial Structure	310*	Greenhouse/Florist	370
Hotel/Motel High Rise	314	Multi-Purpose	
Hotel/Motel Low Rise	315	Downtown Row Type	371
Nursing Home	316	Retail - Single Occupancy	373
Boarding/Rooming House	318	Retail - Multi Occupancy	374
Mixed Residential/Commercial	319	Sport & Health	
Food & Beverages		Bowling Alley	381
Restaurant	321	Skating Rink	382
Food Stand	323	Health Spa	383
Fast Food	325	Swimming - Indoor Pool	384
Ice House	326	Tennis Club - Indoor	385
Bar/Lounge	327	Racquet Club - Indoor	386
Night Club/Dinner Theatre	328	Country Club (w/o golf course)	387
Automotive Oriented		Club House	388
Auto Dealer Full Service	331	Country Club (with golf course)	389
Auto Service Garage	332	Amusement Park	390*
Service Station with Bays	333	Miscellaneous Storage	
Service Station without Bays	334	Cold Storage Facility	391
Truck Stop	335	Lumber Storage	392
Car Wash (manual)	336	Auxiliary Improvement C/I	393*
Car Wash (automatic)	337	Truck Terminal	395
Parking Garage/Deck	338	Mini Warehouse	396
Parking Miscellaneous	339*	Office/Warehouse	397
		Warehouse	398
		Warehouse, Prefab.	399

LAND USE	CODE
INDUSTRIAL	
Vacant Industrial	400*
Manufacturing/Processing	401
Research & Development	405
Aircraft Engine	411*
Aluminum & Foil Mfg.	412*
Asphalt Plant	413*
Automobile Parts Mfg.	414*
Bakery	415*
Bottling Plant	416*
Broom Mfg.	417*
Candy Mfg.	418*
Cement Mfg.	419*
Concrete Mfg.	420*
Chemical Plant	421*
Clay Products	422*
Clothing Mfg. (exc. leather & rubber)	423*
Coal Processing Plant	424*
Compressor Station (not pub. util.)	425*
Dairy	426*
Dental & Medical Lab Mfg.	428*
Electronic Components Prods. Mfg.	429*
Electrical Equipment Mfg.	430*
Feed & Flower Mfg.	431*
Foundry Products	432*
Food Processing	433*
Glass Mfg.	434*
Glass Mfg. using special tools	435*
Grain & Milling Prod. Mfg.	436*
Ice Plant	437*
Leather Prod. Mfg.	438*
Liquified Natural Gas Plant	439*
Logging, Cutting of Timber	440*
Machinery & Equipment Mfg.	441*
Meat Packing & Slaughterhouse	442*
Metal Working	443*
Mining, Deep	444*
Mining, Strip	445*
Natural Gas Extracting Facility	446*
Nickle Mfg.	447*
Newspaper Plant	448*
Oil & Gas Pipeline (not pub. util.)	449*
Optical Mfg.	450*
Paint Mfg.	451*
Paper Finishing & Converting	452*
Petroleum Refinery	453*
Pipeline Mfg.	454*
Plastics Products Mfg.	455*
Plastics Products Mfg. w/special tools	456*
Print Shop	457*
Pulp & Paper	458*

LAND USE	CODE
INDUSTRIAL (con't.)	
Quarries, Stone & Gravel, Limestone, Sandstone, Shale and Clay	459*
Railroad Car Mfg.	460*
Rubber Mfg. - "Tire Recapping"	461*
Shoe Mfg.	462*
Steel Mill	463*
Steam Generating Plant	464*
Saw Mills - "Permanent"	465*
Saw Mills - "Temporary"	466*
Textile Mfg.	467*
Tobacco Products Mfg.	468*
Woodworking Shop	469*
Wire Products Mfg.	470*
Jewelry, Silverware and Plated Ware, Musical Instruments, Toys, Amusements, Sporting and Athletic Goods, Pens, Pencils and Other Office and Artist's Materials, Costume Jewelry, Notions and etc.	471*
Institutional & Special Purpose Buildings	
Vacant Exempt Land	600*
Cemetery	601*
Post Office	602*
Federal/State Building	603*
Other Miscellaneous Exempt	604*
Recreational/Health	610
Library	611
School	612
College & University	613
Religious	620
Auditorium	630
Hospital	640
Police or Fire Station	660
Correctional	670
Cultural Facilities	680
Rail/Bus/Air Terminal	690
Communication	
Utility Vacant Land	700*
Telephone Equipment Building	710
Telephone SRV Garage	715
Radio/TV Transmitter Building	720

* Land Use Codes Only

INTERIOR/EXTERIOR DATA

In describing the various portions of a building section, the concept of interior/exterior lines should be used. For example, a portion of a building section several stories high is considered to be an interior/exterior line if all of the following variables have the same content.

Dimensions (width x length or square feet)

Perimeter

Use Type

Wall Height

Exterior Wall Material

Construction Type

Interior Finish Percent

Partitions

Heating System Type

Air Conditioning Type

Plumbing

Sprinkler System Type and Percent

Physical Condition

Functional Utility

INTERIOR - EXTERIOR DATA																						
NO	SEC NO	LEVELS		DIMENSIONS		USE TYPE	WL HT	EXT WLS	CONS TYPE	NO	INTER FINISH	PTNS	HTG AC	PLBG	SPRINK	SF RATE	PHYS COND	FUNC UTIL FACT	AGE FACT	UNADJUSTED RCN	% GOOD	UNADJUSTED RCN L D
		FROM	TO	SIZE	PERIM																	
011										021												
012										022												
013										023												
014										024												
015										025												
016										026												
017										027												
018										028												

SECTION NUMBER — Space is provided to enter a one-digit number denoting the “section number” of the building being described. Section numbers should begin with 1 and a sequential order followed.

LEVELS (From) — Space is provided to enter a two-digit alpha/numeric code. This field may be used in conjunction with the next field for interior/exterior lines consisting of several stories.

- Enter B1 to indicate first basement.
- Enter B2 to indicate sub basement.
- Enter B3 to indicate sub sub basement. (up to B5 available)
- Enter C1 to indicate first crawl space.
- Enter M1 to indicate first mezzanine (balcony).
- Enter M2 to indicate second mezzanine (balcony).
- Enter M3 to indicate third mezzanine (balcony). (up to M9 available)
- Enter A1 to indicate attic.
- Enter P1 to indicate penthouse. (up to P3 available)
- Enter E1 to indicate enclosure. (up to E9 available)
- Enter 01-01 to indicate first story.
- Enter 02-75 to indicate second through seventy-fifth story.

LEVELS (To) — Space is provided to enter a two-digit alpha/numeric code which is to be used in conjunction with the "From" entry. The same two digit alpha/numeric codes apply for both the "From" and "To" fields.

Note 1: When making entries to the "From" and "To" fields, do not mix codes.

Note 2: The numeric characters used with crawl space, mezzanines, attics, penthouses, and enclosures are for identification, not to indicate the floor or level where each item is located. For instance, if two enclosures were to be described on the first floor, they would be designated E1 to E1 and E2 to E2. Renumbering should begin when going to another floor.

Note 3: Mezzanine and enclosure listings should follow the listing of the floor they are found on. That is, if there is a mezzanine located on the first floor of a building, all the basic description of that first floor should be followed (underneath) by the mezzanine description.

Note 4: Attic levels should follow the next highest floor level.

Note 5: Penthouses should follow the top floor.

Note 6: The first floor must always be entered as a separate line entry (01 to 01).

The following are examples of acceptable entries:

INTERIOR - EXTERIOR DATA																				
NO	SEC NO	LEVELS		DIMENSIONS			USE TYPE	WL HT	EXT WLS	CONS TYPE		NO	INTER FINISH	PTNS	HTG AC	PLBG	SPRINK	SF RATE	PHYS COND	FUN UTIL FAC
		FROM	TO	SIZE	PERIM															
011		B	1 B 2									021								
012		0	1 0 1									022								
013		M	1 M 1									023								
014		0	2 0 5									024								
015		P	1 P 1									025								
016												026								
017												027								
018												028								

Entry 1 indicates there is a basement and identical sub basement.

Entry 2 indicates that the first story forms a unique interior/exterior line.

Entry 3 indicates there is a mezzanine.

Entry 4 indicates that the second story through the fifth story are identical.

Entry 5 indicates there is a penthouse.

The above example entries illustrate all types of correct usage of the "From" and "To" fields. An entry must always occur in each field for each line utilized.

The following is an example of unacceptable entries.

INTERIOR - EXTERIOR DATA											
NO	SEC NO	LEVELS		DIMENSIONS		USE TYPE	WL HT	EXT WLS	CONS TYPE	NO	INTER FINISH
		FROM	TO	SIZE	PERIM						
611		C	B	1						621	
612		Q	M	1						622	
613		B	P	1						623	
614		Q	I	03						624	
615										625	
616										626	
617										627	
618										628	

Entry 1 This entry creates the question, "Is there a sub basement?"
This type of entry should not be used.

Entry 2 This entry creates the question, "Is there a second story, third story, etc.?"
This type of entry should not be used.

Entry 3 This entry creates the question, "How many floors are there in between?"
This type of entry should not be used.

Note: These entries are not only confusing, but would not form unique interior/exterior lines.

DIMENSIONS

Size — Enter either the dimensions (width and length) or square foot area of the level being described. To enter the dimensions, character positions are provided for eight characters: three numeric characters denoting the width, one multiplication (x) symbol, and four numeric characters denoting the length. The multiplication symbol must always be entered in the fourth character position from the left (within the two vertical hash marks). All character positions must be filled in. Use leading zeros if necessary.

To enter the square foot area, character positions are provided to enter eight numeric characters (up to 99,999,999 square feet). Utilize the character positions to the right. Leading zeros are not necessary.

Notes: Do not enter the total square footage area for all stories of the interior/exterior line.

Use 75% of the first floor area for 1½ story buildings.

Perimeter — Space is provided to enter the effective perimeter of the interior/exterior line of the building section being described. Enter the sum of all exterior wall measurements around the base of the interior/exterior line to the nearest foot. Utilize the character positions to the right.

Notes: When a common wall separates two sections, take the wall with that section which corresponds to the height of the wall. If both sections are the same height, take the wall with either one of the two sections, but not both.

When an open area separates two sections do not use this open area in calculating the effective perimeter.

When a common wall separates the building from an adjacent parcel under different ownership, take the length of the common wall times 60% for both parcels to calculate effective perimeter.

USE TYPE – Space is provided to enter a three digit numeric code denoting the *current use* of the interior/exterior line.

Note: The current use may differ from the structure type.

The following three digit codes should be utilized:

011	Apartment
012	Hotel
023	Dormitory
021	Motel
025	Dwelling Conversion - Office
026	Dwelling Conversion - Sales
027	Dwelling
031	Restaurant
032	Department Store
033	Discount Store/Market
034	Retail Store
035	Tavern/Bar
036	Bar/Lounge
037	Cafeteria
038	Convenience Store
041	Mini Warehouse
042	Hangar
043	Manufacturing
044	Light Manufacturing
045	Warehouse
046	Auto Showroom/Office
047	Auto Parts/Service
048	Tennis Club
049	Racquetball Court
050	Skating Rink (Ice or Roller)
051	Bank/Savings Institution
052	Medical Center
053	Office Building
054	Nursing Home
055	School
056	Hospital
057	Library
058	Funeral Home
061	Auditorium/Theatre
062	Cinema
063	Religious Institution
064	Social/Fraternal Hall
070	Service Station with bays
071	Service Station - Conversion Retail
072	Service Station - Conversion Storage
073	Service Station without bays
074	Car Wash - Manual
075	Car Wash - Automatic
081	Multi-Use, Apartment
082	Multi-Use, Office
083	Multi-Use, Sales
084	Multi-Use, Storage
085	Enclosure
086	Support Area
088	Restroom/Locker Room Facility
090	Parking Garage
091	Unfinished Residential Basement
095	Covered Mall
100	Fast Food (see detailed list)
990	Parking Upper Deck

CODE RELATIONSHIPS

STRUCTURE TYPE CODE	BASIC STRUCTURE CODE	CONSTRUCTION TYPE CODE	NORMAL USE TYPE CODE
101-104-Residential 1-4 Family	10	1	027-Dwelling
105-Mixed Residential/Commercial Built as Residential	10	1	025-Dwelling Conversion Office 026-Dwelling Conversion Sales
106-107-Condominium	10	1	027-Dwelling
211-Apartments, Garden (3 story and under)	2	1	011-Apartment
212-Apartments, High Rise	1	2 or 3	011-Apartment
314-Hotel/Motel, High Rise	1	2 or 3	012-Hotel 021-Motel
315-Hotel/Motel, Low Rise	2	1 or 2	012-Hotel 021-Motel
316-Nursing Home	2	1 or 2	054-Nursing Home
318-Boarding & Rooming House	10	1	081-Multiple-Use Apartment
319-Mixed Residential/Commercial Built as a Commercial	3	1 or 2	034-Retail Store 082-Multi-Use Office 081-Multi-Use Apartment
321-Restaurant	3	1 or 2	031-Restaurant 037-Cafeteria
323-Food Stand	3	1	031-Restaurant
325-Franchise Food	9	1**	100 (Series)-Food Franchise
326-Ice House	3	1	035-Tavern/Bar
327-Bar/Lounge	3	1 or 2	035-Tavern/Bar 036-Bar/Lounge
328-Night Club/Dinner Theatre	3	1 or 2	031-Restaurant
331-Auto Dealer Full Service	4	1, 2, or 4	046-Auto Showroom/Office 047-Auto Parts/Service
332-Auto Service Garage	4	1 or 2	047-Auto Parts/Service
333-Service Station with Bays	3	1 or 2	070-Service Station w/Bays
334-Service Station without Bays	3	1 or 2	071-Service Station-Conv. Retail 072-Service Station-Conv. Storage 073-Service Station w/o bays

STRUCTURE TYPE CODE	BASIC STRUCTURE CODE	CONSTRUCTION TYPE CODE	NORMAL USE TYPE CODE
335-Truck Stop	4	1 or 2	070-Service Station w/Bays 073-Service Station w/o Bays 043-Auto Parts/Service 081-Multi-Use Apartment (sleeping areas)
336-Car Wash (manual)	7	1 or 4	074-Car Wash (manual)
337-Car Wash (auto)	4	1 or 2	075-Car Wash (automatic)
338-Parking Garage/Deck	4	2 or 3	090-Parking Garage 990-Top, Open Level Parking Deck
341-Regional Shopping Mall	3	2	Sectionalized as to Use
342-Community Shopping Center	3	1 or 2	Sectionalized as to Use
343-Neighborhood Shopping Center	3	1 or 2	Sectionalized as to Use
344-Strip Shopping Center	3	1 or 2	034-Retail
345-Discount Department Store	3	1 or 2	033-Discount Store/Market
346-Department Store	3	2 or 3	032-Department Store
347-Supermarket	3	1 or 2	033-Discount Store/Market
348-Convenience Food Market	3	1	038-Convenience Store
349-Medical Office Building	8	1 or 2	052-Medical Center
351-Bank	5	2 or 3	051-Bank/Savings Institution
352-Savings Institution	5	1 or 2	051-Bank/Savings Institution
353-Office Building - Low Rise	5	1 or 2	053-Office Building
354-Office Building - High Rise	8	2 or 3	053-Office Building
355-Office Condominium	5	2 or 3	053-Office Building
356-Retail Condominium	5	1 or 2	034-Retail Store
361-Funeral Home	2	1	058-Funeral Home
362-Veterinary Clinic	3	1	082-Multi-Use Office 084-Multi-Use Storage
363-Legitimate Theater	6	1 or 2, or 3	061-Auditorium/Theater
364-Motion Picture Theater	6	1 or 2	061-Auditorium/Theater
365-Cinema/Theater	6	1 or 2	062-Cinema

STRUCTURE TYPE CODE	BASIC STRUCTURE CODE	CONSTRUCTION TYPE CODE	NORMAL USE TYPE CODE
366-Radio, TV or Movie Studio	4	1 or 2	061-Auditorium/Theater
367-Social/Fraternal Hall	3	1 or 2	064-Social/Fraternal Hall
368-Hangar	4	2 or 4	042-Hangar
369-Day Care Center	3	1	025-Dwelling Conversion 082-Multi-Use Office 083-Multi-Use Sales
370-Greenhouse	4	1	084-Multi-Use Storage
371-Downtown Row Type	3	1	034-Retail 081-Multi-Use Apartment 082-Multi-Use Office 083-Multi-Use Sales 084-Multi-Use Storage
373-Retail - Single Occupancy	3	1	034-Retail 081-Multi-Use Apartment 082-Multi-Use Office 084-Multi-Use Storage
374-Retail - Multi-Occupancy	3	1	034-Retail 081-Multi-Use Apartment 082-Multi-Use Office 084-Multi-Use Storage
381-Bowling Alley	4	1 or 2	083-Multi-Use Sales
382-Skating Rink	4	1 or 2	050-Skating Rink (Ice or Roller)
383-Health Spa	5	1 or 2	082-Multi-Use Office
384-Swimming - Indoor Pool	4	2	095-Covered Mall
385-Tennis Club - Indoor	4	2 or 4	048-Tennis Club
386-Racquet Club - Indoor	3	1 or 2	049-Racquet Club
387-Country Club	5	1	082-Multi-Use Office
388-Club House	3	1	083-Multi-Use Sales
389-Country Club with Golf Course	5	1	082-Multi-Use Office
391-Cold Storage Facilities	4	1 or 2	045-Warehouse
392-Lumber Storage	7	1 or 4	084-Multi Use Storage
395-Truck Terminal	4	1 or 2	045-Warehouse 082-Multi-Use Office

STRUCTURE TYPE CODE	BASIC STRUCTURE CODE	CONSTRUCTION TYPE CODE	NORMAL USE TYPE CODE
396-Mini Warehouse	4	1 or 4	045-Warehouse
397-Office/Warehouse	4	1 or 2	045-Warehouse 053-Office 082-Multi-Use Office
398-Warehouse	4	1 or 2	045-Warehouse
399-Prefab. Processing Warehouse	7	4	045-Warehouse
401-Manufacturing	4	1 or 2	043-Manufacturing or 044-Light Mfg. 082-Multi-Use Office
405-Research & Development	5	2 or 3	044-Light Manufacturing 082-Multi-Use Office
610-Recreation/Health	5	1 or 2	As per Specific Use
611-Library	5	1 or 2	057-Library
612-School	5	1 or 3*	055-School
613-College/University	5	1 or 3*	055-School 013-Dormitory
620-Religious	5	1 or 2	063-Religious Institution
630-Auditorium	6	2 or 3	061-Auditorium/Theater
640-Hospital	5	2 or 3	056-Hospital
660-Police or Fire Station	5	2 or 3	082-Multi-Use Office 047-Auto Parts/Service
670-Correctional	5	3	082-Multi-Use Office
680-Cultural Facilities	5	2 or 3*	061-Auditorium/Theater 053-Office Building
690-Rail/Bus/Air Terminal	5	2 or 3	061-Auditorium/Theater
710-Telephone Equipment Building	4	2 or 3	045-Warehouse 043-Manufacturing
715-Telephone Garage Service	4	2	045-Warehouse 082-Multi-Use Office
720-Radio/TV Transmitter Building	4	1 or 2	045-Warehouse

* Older structure occasionally No. 1

** Specialized schedules

The construction type codes are suggested guidelines, and may not always apply as given.

FOOD FRANCHISES

Use Type	Grade (Cost Modifier)	Use Type	Grade (Cost Modifier)
103 Bonanza	C	146 Ponderosa Steak House	B-
105 Burger King	B	151 Rax	A+
107 Captain D's Seafood Restaurant	B-	152 Red Lobster	B
109 Church's Fried Chicken	A	165 Shakey's	A-
111 Dairy Queen	B-	166 Shoney's	B+
115 Dunkin Donuts	B	167 Sizzler Family Steak House	B-
116 Hardee's	A-	170 Steak and Ale	A
117 Howard Johnson's	A	173 Steak and Egg	C
118 International House of Pancakes	A	180 Taco Bell	A
122 Gino's	B	185 Waffle House	B
128 Kentucky Fried Chicken	B	187 Wendy's	A-
135 Long John Silver's Seafood Restaurant .	B-	190 Western Sizzlin Steak House	B-
137 Mister Donut	C+	193 Arthur Treacher's	B-
138 McDonald's	A+	195 Bob Evans	B-
143 Pizza Hut	B+	196 Arby's (New Style)	A+

WALL HEIGHT — Space is provided to enter a two-digit number denoting the height of an interior/ exterior line story to the nearest foot. Both character positions must be filled in. Use leading zeros if necessary. This measurement should be made from floor to floor and *not* from floor to ceiling.

Note: Parapets should not be included in this measurement.

Note: Gable-type roofs should be measured to the eaves. Other roof types, such as shed or sawtooth should be averaged to compute the wall height to the roof line.

EXTERIOR WALL MATERIAL — Space is provided to enter a two-digit numeric code denoting the exterior wall material of an interior/exterior line. Enter 00 - 16.

Enter 00	NONE to indicate the absence of an exterior wall material.
Enter 01	BRICK or STONE to indicate a brick or stone veneer.
Enter 02	FRAME to indicate an exterior wall of wood, aluminum siding, composition siding or shingles on sheathing.
Enter 03	CONCRETE BLOCK to indicate a masonry wall consisting of concrete compressed into the shape of a block and allowed to harden.
Enter 04	BRICK & CONCRETE BLOCK to indicate that at least one-third of the exterior walls are of a brick or concrete block material and the rest of the exterior walls are of the other material.
Enter 05	TILE to indicate a hard earthenware block which has been hard burned and molded such as terra cotta.
Enter 06	MASONRY & FRAME to indicate that at least one-third of the exterior walls are of a frame or masonry (brick or stone) material and the rest of the exterior walls are of the other material.
Enter 07	METAL, LIGHT to indicate walls constructed of metal panels on wood or steel frame.
Enter 08	METAL, SANDWICH to indicate walls constructed of a core of insulation covered on both sides by metal panels.
Enter 09	CONCRETE LOAD BEARING to indicate a concrete wall which supports a part of the building, usually a floor or roof.
Enter 10	CONCRETE NON-LOAD BEARING to indicate a concrete curtain wall which does not support the roof or floor.
Enter 11	GLASS to indicate walls of non-supporting glass panels set in metal frame.
Enter 12	GLASS & MASONRY to indicate walls of non-supporting glass set in Brick or Concrete backup.
Enter 13	ENCLOSURE to indicate a wood stud or concrete block office or sales enclosure wall in the interior of a building.
Enter 14	CONCRETE TILT-UP to indicate concrete wall sections that are cast horizontally and tilted or lifted into position.
Enter 15	SOLAR GLASS to indicate a high quality tinted heat absorbent glass set in metal frame.
Enter 16	ASBESTOS CORRUGATED RIGID to indicate a rigid corrugated asbestos sheet on wood or steel frame.

- Notes:* 1. Exterior wall material for basement, crawl space, and/or entries with use code 090 will always be entered as code 00 - None, except when use code 090 is in a basement, then code 09 must be entered.
2. Exterior wall material for enclosures should always be entered as Code 13 enclosure.
3. Exterior wall material for mezzanines must be entered as either code 00 - None or code 13 - Enclosure.

CONSTRUCTION TYPE — Space is provided to enter a one-digit numeric code denoting the type of construction of an interior/exterior line. (See appendix for illustrations.)

- Enter 1 WOOD JOIST to indicate walls formed by wood framing of studs or posts.
- Enter 2 FIRE RESISTANT (Steel Frame) to indicate a rigidly connected frame of steel carrying all external and internal loads and stresses to the foundation.
- Enter 3 FIREPROOF (Reinforced Concrete) to indicate a rigidly connected frame of steel carrying all external and internal loads and stresses to the foundation. Incombustible materials are applied to protect structural components of the building so that it can withstand a complete burnout of contents without structural damage. Also, to indicate a frame consisting of concrete which is strengthened by embedding iron or steel bars, rods or mesh into it.
- Enter 4 LIGHT STEEL to indicate a frame formed by steel columns and posts of light-weight construction.

Note: For crawl space always enter const. type 1 and make no further entries on that line. All other const. types must have all spaces entered, with zeros if necessary and applicable Phys. Const. and Func. Utility. Mezzanines and all Use Type 990 entries required construction type 0.

INTERIOR FINISH % (PERCENT) — Space is provided to enter the extent of interior finish expressed in a percent. Consideration should be given to the floors, ceilings and walls. All character positions must be filled in. Use leading zeros if necessary.

Note: Consideration should be given to the structure type code previously entered. For example, you would not expect to find the same extent of interior finish in a warehouse that you would find in a professional building.

PARTITIONS — Space is provided to enter a one-digit numeric code denoting the extent of partitioning of walls within the interior/exterior building line.

- Enter 0 NONE to indicate that there are no partitions at all.
- Enter 1 BELOW NORMAL to indicate that only a few partitions have been constructed and that most similar structures have a few more partitions than the subject structure.
- Enter 2 NORMAL to indicate that the subject structure has about the same extent of partitioning that is found in similar structures.
- Enter 3 ABOVE NORMAL to indicate that the subject structure has rather extensive partitioning when compared to similar structures used for the same purpose.

Note: The extent of partitioning should always be compared to what could be considered normal for structures having the same use. The use type code should be considered. For example, a structure that was built as a hotel, but is now used as an office building, will probably have more extensive partitions (3 ABOVE NORMAL) than a structure built as an office building and used as an office building.

HEATING SYSTEM TYPE — Space is provided to enter a one-digit numeric code denoting the predominant heating system type utilized within the interior/exterior line.

- Enter 0 to indicate NONE.
- Enter 1 to indicate HOT AIR, either forced or gravity.
- Enter 2 to indicate HOT WATER or STEAM, both single and dual circulation types.
- Enter 3 to indicate UNIT HEATERS, SPACE HEATERS.
- Enter 4 to indicate ELECTRIC, either baseboard, floor or ceiling.
- Enter 5 to indicate the presence of a HEAT PUMP.
- Enter 6 to indicate SOLAR.

AIR CONDITIONING TYPE — Space is provided to enter a one-digit numeric code denoting the type of air conditioning existent within the interior/exterior line.

- Enter 0 to indicate NONE.
- Enter 1 to indicate CENTRAL.
- Enter 2 to indicate UNIT REAL PROPERTY.

Note: Window air conditioners are not considered real property and should be considered as (0) NONE.

PLUMBING — Water — Space is provided to enter a one-digit numeric code denoting the extent and adequacy of the plumbing and piping system within the interior/exterior lines.

- Enter 0 to indicate NONE.
- Enter 1 to indicate BELOW NORMAL.
- Enter 2 to indicate NORMAL.
- Enter 3 to indicate ABOVE NORMAL.

Note: Consideration must be given to the structural use. For example, motels naturally have more extensive plumbing systems than retail stores.

SPRINKLER SYSTEM TYPE — Space is provided to enter a one-digit numeric code denoting the type of sprinkler system existent within the interior/exterior line.

- Enter 0 NONE to indicate the absence of a sprinkler system.
- Enter 1 WET to indicate an overhead system of pipes containing pressurized water and fitted with valves which open automatically at certain temperatures.
- Enter 2 DRY to indicate a system like the wet type except that the water is held in a storage reservoir until the time of activation.
- Enter 3 OTHER to indicate an overhead system of pipes containing a pressurized liquid, usually a chemical substance, which is fitted with valves that open automatically at certain temperatures.

Note: The majority of sprinkler systems utilized today are the wet variety.

SPRINKLER % (PERCENT) — Space is provided to enter a one-digit numeric code denoting the floor area of the interior/exterior line protected by a sprinkler system expressed as a fraction. Enter the code which is most representative of the interior/exterior line.

- Enter 1 to indicate 1/4 (one-fourth).
- Enter 2 to indicate 1/2 (one-half).
- Enter 3 to indicate 3/4 (three-fourth).
- Enter 4 to indicate FULL.

Note: Enter 0 to indicate the absence of a sprinkler system.

SQUARE FOOT RATE — Do not utilize the entry. It is for manual pricing purposes only.

PHYSICAL CONDITION — Space is provided to enter a one-digit numeric code denoting the physical condition of the interior/exterior line in relation to its age of completion. Consideration should include foundation, frame, exterior walls, roof, heating, air conditioning, lighting, and electrical systems, plumbing, sprinkler system, internal walls and floor finish.

- Enter 1 POOR to indicate that the interior/exterior line is structurally unsound. Major structural elements require replacement. The interior is in a dilapidated condition and does not appear suitable for use.
- Enter 2 FAIR to indicate that the interior/exterior line shows marked wear and deterioration but the property is usable for commercial or industrial purposes. It could be characterized as needing work.
- Enter 3 NORMAL to indicate that the interior/exterior line shows only minor signs of physical deterioration due to "wear and tear". There are few indications of deferred maintenance and no significant repairs or replacements are necessary.
- Enter 4 GOOD to indicate that the interior/exterior line is in new or "like new" condition. There are no deficiencies in material or construction and no signs of deferred maintenance.
- Enter 5 RENOVATED to indicate that a major renovation or rehabilitation of the interior/exterior line has taken place. The effective age of the interior/exterior line has been altered to that of a much newer building in good condition. The amount of work done to enhance the appearance and structural soundness of the interior/exterior line is far in excess of that required for normal maintenance.

FUNCTIONAL UTILITY FACTOR — Space is provided to enter a one-digit numeric code denoting the functional utility of the interior/exterior line. Functional utility may be defined as the ability of the interior/exterior line to perform the function for which it is intended. It is the combined effect on marketability of the condition, utility, and desirability of the property. Consideration should be given to architecture, design and layout, sizes and types of rooms, and performance standards. Enter 0 - 4 multiple choice:

BASEMENT:

- Enter 0 NONE to indicate that the basement has very little possibility of being utilized to any great degree. May be low posted and/or dirt floor. May be wet.
- Enter 1 POOR to indicate that the basement is capable of being only partially utilized due to height, size, ingress and egress, etc. Has no elevator service.
- Enter 2 FAIR to indicate that the basement may be capable of being utilized for dead storage, etc., but lacks good elevator service, although it may have old cable controlled type.
- Enter 3 NORMAL to indicate that the basement is capable of being fully utilized with good movement of materials to first floor level by elevator or other mechanical means;
- Enter 4 GOOD to indicate that an exceptional utilization of entire basement area is possible. May house all or part sales, secondary office space, lounge, function rooms, kitchen, etc. Must be served by modern elevator.

FIRST FLOOR:

- Enter 0 NONE to indicate that no possible present or future usefulness exists.
- Enter 1 POOR to indicate that the first floor exhibits very little possible utility at present or in the future due to shape, layout, size, construction, etc.

- Enter 2 FAIR to indicate that there may be excessive wasted space due to shape and size. Headroom and/or bay size is less than adequate. Problems exist with ingress or egress.
- Enter 3 NORMAL to indicate that the first floor layout provides for nearly full utilization of space. There is sufficient headroom and bay size to fulfill the function for which it is intended.

Note: Most first floor areas will fall into this classification.

- Enter 4 GOOD to indicate that the first floor has exceptional utilization due to layout, ingress and egress. There is little or no wasted floor area and a maximum of net leasable space exists.

SECOND FLOOR:

- Enter 0 NONE to indicate that the second floor has no present or future utilization.
- Enter 1 POOR to indicate that the second floor has a low percentage of net leasable to gross floor area. The plumbing and lighting are obsolete. It may have small bays or be low posted. The overall layout is poor and no elevator service exists. There is no off-street parking available in the immediate area.
- Enter 2 FAIR to indicate that the second floor has excessive hallways, stairwells, elevator shafts, etc., which result in a lower percentage of net leasable space. There may be an older type manually operated elevator or none at all. There is still proper ingress and egress but little off-street parking is available in the area.
- Enter 3 NORMAL to indicate that the second floor layout provides for nearly full utilization of space with normal hall and stair well areas. A self-service elevator is available. There is adequate off-street parking available in the immediate area.
- Enter 4 GOOD to indicate that the second floor has exceptional utilization. There is little or no wasted floor area. A modern self-service elevator is available. There is more than adequate off-street parking available in the immediate area.

ABOVE SECOND FLOOR:

Use the same guidelines as SECOND FLOOR except to consider that on buildings with no elevator, the higher you go, the less desirable the space becomes.

It would be highly unlikely, in any building, to progress upward floor by floor and have the functional utility increase. For example, if the second floor is classified as FAIR, it would not be likely for the third floor to be NORMAL.

AGE FACTOR — Do not utilize this entry. It is for manual pricing purposes only.

UNADJUSTED REPLACEMENT COST NEW — Do not utilize this entry. It is for manual pricing purposes only.

% (PERCENT GOOD) — Do not utilize this entry. It is for manual pricing purposes only.

UNADJUSTED REPLACEMENT COST NEW LESS DEPRECIATION — Do not utilize this entry. It is for manual pricing purposes only.

SUB TOTAL — Do not utilize this entry. It is for manual pricing purposes only.

COUNTY MODIFIER — Do not utilize this entry. It is for manual pricing purposes only.

GRADE FACTOR — Do not utilize this entry. It is for manual pricing purposes only.

BUILDING OTHER FEATURES -- ATTACHED IMPROVEMENTS

There are numerous types of building other features and attached improvements which may be encountered on commercial and industrial properties. The most common of these have been coded and included on the data collection form. The inclusion of all possible items is considered impractical however, the ability to collect data on uncoded items has been provided for. In this situation the data collector should enter the structure code MS1 (miscellaneous structure) and enter a flat dollar amount in the measurement 1 column.

BUILDING OTHER FEATURES -- ATTACHED IMPROVEMENTS																	
NO	LINE	STRUCT CODE	FLAT + / -	MEASUREMENT 1	MEASUREMENT 2	IDENT UNITS	COST	% GOOD	NO	LINE	STRUCT CODE	FLAT + / -	MEASUREMENT 1	MEASUREMENT 2	IDENT UNITS	COST	% GOOD
601									606								
602									606								
603									607								
604									608								

LINE NUMBER — Space is provided to enter a one-digit number (1 to 8) denoting the "interior/exterior line number" of the building section in which the building other feature or attached improvement being described is located. The interior/exterior line number equates to the following preprinted data processing field codes.

611 = 1
 612 = 2
 613 = 3
 614 = 4
 615 = 5
 616 = 6
 617 = 7
 618 = 8

Note: It is extremely important to enter the correct interior/exterior line number in which the building other feature or attached improvement is located because the other feature or attached improvement will be depreciated in the same manner as the interior/exterior line. For the following building other features or attached improvements the interior/exterior line number should always correspond with the first floor of the building section:

Elevator, electric freight
 Elevator, electric passenger
 Elevator, hydraulic freight
 Elevator, hydraulic passenger
 Escalator
 Store Front, wood frame
 Store Front, average metal
 Store Front, elaborate

STRUCTURE CODE — Space is provided to enter a three-digit alpha/numeric structure code denoting the type of building other feature or attached improvement being described.

FLAT VALUE (+ or --) — Space is provided to enter a plus (+) or minus (--) sign to denote the addition or deduction of a flat dollar amount which would then be entered in the Measurement 1 column. If the flat value field is *not utilized, this entry must be left blank*. Consult your supervisor for instructions on possible uses of this field.

MEASUREMENT 1/MEASUREMENT 2 — Space is provided to enter the appropriate measurements of the structure code being described. Utilize the character positions to the right.

NUMBER IDENTICAL UNITS — Space is provided to enter the total number of identical building other features or attached improvement units. Utilize the character positions to the right.

COST — Do not utilize this entry. It is for manual pricing purposes only.

PERCENT (%) GOOD — Do not utilize this entry. It is for manual pricing purposes only.

BUILDING OTHER FEATURES/ATTACHED IMPROVEMENTS DETAILED CHART

The following is a detailed chart listing of all possible building other features and attached improvements. The chart also relates corresponding structure codes, necessary field entries (yes), and appropriate measurement units including the correct fields in which to enter them.

BUILDING OTHER FEATURES – ATTACHED IMPROVEMENTS

DESCRIPTION	Line Number	Structure Code	Flat Value (+/-)	Meas 1	Meas 2	Number Identical Units
Aerial Walkway	Yes	AW1	—	Width	Length	Yes
Atrium (Cover Only)	Yes	AT1	—	Width	Length	Yes
Atrium (Walls)	Yes	AT2	—	Lineal Ft.	Height	Yes
Bank Canopy, Drive In	Yes	BC1	—	Width	Length	Yes
Bank Vault (Money)	Yes	BE1	—	Fir Width	Fir Length	Yes
Bank Vault (Record Storage)	Yes	BE2	—	Fir Width	Fir Length	Yes
Bank Vault Door (Circ, Money)	Yes	BE3	—	—	—	Yes
Bank Vault Door (Rect, Money)	Yes	BE4	—	—	—	Yes
Bank Vault Door (Rcd Stor)	Yes	BE5	—	—	—	Yes
Bank Night Deposit Chute	Yes	BE6	—	—	—	Yes
Bank Drive-In Window	Yes	BE7	—	—	—	Yes
Bank Service Window	Yes	BE8	—	—	—	Yes
Bank Drive-In Teller Booths	Yes	BE9	—	Fir Width	Fir Length	Yes
Bank Pneumatic Tube	Yes	BE0	—	—	—	Yes
Basement Top	Yes	BT1	—	Width	Length	Yes
Canopy Only	Yes	CP5	—	Width	Length	Yes
Canopy, Roof/Slab	Yes	CP6	—	Width	Length	Yes
Canopy, Service Station Economy	Yes	CP7	—	Width	Length	Yes
Canopy, Service Station Average	Yes	CP8	—	Width	Length	Yes
Canopy, Service Station Good	Yes	CP9	—	Width	Length	Yes
Carport	Yes	RC1	—	Width	Length	Yes
Covered Mall	Yes	CM1	—	Width	Length	Yes
Craneways, Light	Yes	CW1	—	Length	—	Yes
Craneways, Medium	Yes	CW2	—	Length	—	Yes
Craneways, Heavy	Yes	CW3	—	Length	—	Yes
Dock Level Floors	Yes	DL1	—	Width	Length	Yes
Elevator, Electric Freight	Yes	EL1	—	See example	See example	Yes
Elevator, Electric Passenger	Yes	EL2	—	See example	See example	Yes
Elevator, Hydraulic Freight	Yes	EL3	—	See example	See example	Yes
Elevator, Hydraulic Passenger	Yes	EL4	—	See example	See example	Yes
Escalator (stair width 32")	Yes	EL5	—	Ft. of rise	1	Yes
Escalator (stair width 48")	Yes	EL6	—	Ft. of rise	1	Yes
Enclosed Entry	Yes	EE1	—	Width	Length	Yes
2 Fireplace, 1 opening	Yes	FI1	—	—	—	Each
2 Fireplace, 2 opening	Yes	FI2	—	—	—	Each
2 Fireplace, 3 opening	Yes	FI3	—	—	—	Each
Garage, 1 story, Attached Frame	Yes	RG1	—	Width	Length	Yes
Garage, 1 story, Attached Masonry	Yes	RG2	—	Width	Length	Yes

NOTE: If a non-rectangular shape is encountered for a building other feature or attached improvement that requires width and length, it is permissible to enter the total square foot area in Measurement 1, and a right justified 1 in Measurement 2.

- 1 Dock Level Floors should not exist for collection purposes if there is a basement under the structure being described.
- 2 Fireplaces to be collected only on apartment structures.

BUILDING OTHER FEATURES – ATTACHED IMPROVEMENTS
(con't.)

DESCRIPTION	Line Number	Structure Code	Flat Value (+/-)	Meas 1	Meas 2	Number Identical Units
Greenhouse, Economy	Yes	GH1	—	Width	Length	Yes
Greenhouse, Average	Yes	GH2	—	Width	Length	Yes
Greenhouse, Good	Yes	GH3	—	Width	Length	Yes
Loading Dock, Steel or Concrete	Yes	LD1	—	Width	Length	Yes
Loading Dock, Wood	Yes	LD2	—	Width	Length	Yes
Loading Dock, Interior	Yes	LD3	—	Width	Length	Yes
Truck & Train Wells	Yes	LD4	—	Width	Length	Yes
Dock Levelers	Yes	LD5	—	—	—	Yes
OPEN AREAS						
High Rise Apartments and hotels	Yes	OA1	—	Width	Length	Yes
Garden Apartments, motels & dwellings	Yes	OA2	—	Width	Length	Yes
Stores and restaurants	Yes	OA3	—	Width	Length	Yes
Industrial & warehouses	Yes	OA4	—	Width	Length	Yes
Banks & Offices (Low rise)	Yes	OA5	—	Width	Length	Yes
Theaters & Auditoriums	Yes	OA6	—	Width	Length	Yes
Lt. Metal Buildings	Yes	OA7	—	Width	Length	Yes
High Rise Office Building	Yes	OA8	—	Width	Length	Yes
Overhead Doors, Wood or Metal	Yes	OD1	—	Width	Height	Yes
Overhead Doors, Rolling Steel	Yes	OD2	—	Width	Height	Yes
Overhead Doors, Mtr Op, Wd or Mtl	Yes	OD3	—	Width	Height	Yes
Overhead Doors, Mtr Op, Rolling Stl	Yes	OD4	—	Width	Height	Yes
Patio, Concrete	Yes	LP3	—	Width	Length	Yes
Patio, Asphalt	Yes	LP4	—	Width	Length	Yes
Patio, Flagstone, Sand Base	Yes	LP5	—	Width	Length	Yes
Patio, Flagstone, Concrete Base	Yes	LP6	—	Width	Length	Yes
Patio, Brick	Yes	LP7	—	Width	Length	Yes
Indoor Pool	Yes	SC2	—	Width	Length	Yes
Porch, Open	Yes	RP1	—	Width	Length	Yes
Porch, Enclosed	Yes	RP2	—	Width	Length	Yes
Porch, Open Upper Deck	Yes	RP3	—	Width	Length	Yes
Porch, Enclosed Upper	Yes	RP4	—	Width	Length	Yes
Porch, Covered	Yes	RP5	—	Width	Length	Yes
Porch, Screened	Yes	RP6	—	Width	Length	Yes
Porch, Covered Upper	Yes	RP7	—	Width	Length	Yes
Porch, Screened Upper	Yes	RP8	—	Width	Length	Yes
Roof, Monitor	1st floor	MR1	—	Lineal ft.	Height	Yes
Roof, High Bay	1st floor	MR2	—	Lineal ft.	Height	Yes
Store Front, Wood Frame	Yes	SF1	—	Length	1	Yes
Store Front, Average Metal Frame	Yes	SF2	—	Length	1	Yes
Store Front, Elaborate	Yes	SF3	—	Length	1	Yes

BUILDING OTHER FEATURES – ATTACHED IMPROVEMENTS
(con't.)

DESCRIPTION	Line Number	Structure Code	Flat Value (+/-)	Meas 1	Meas 2	Number Identical Units
Tunnel	Yes	TU1	—	Width	Length	Yes
Tunnel, Utility	Yes	TU2	—	Width	Length	Yes
Utility Building, Frame	Yes	RS1	—	Width	Length	Yes
Utility Building, Metal	Yes	RS2	—	Width	Length	Yes
Utility Building, Brick or Stone	Yes	RS3	—	Width	Length	Yes
Miscellaneous Structure	Yes	MS1	Yes	Value	1	Yes
MODIFICATION CODES						
Sprinkler System (Wet Pipe)	Yes	SS1	—	Sq. Ft.	1	Yes
Sprinkler System (Dry Pipe)	Yes	SS2	—	Sq. Ft.	1	Yes
Air Conditioning (Central)	Yes	AC1	—	Sq. Ft.	1	Yes
Air Conditioning (Unit)	Yes	AC2	—	Sq. Ft.	1	Yes

- (609) **APARTMENT DATA** — Space is provided to enter the number (001 to 999) of efficiency, 1 bedroom, 2 bedroom and 3 bedroom apartments for apartment buildings. When utilized, all character positions must be filled in. Use leading zeros if necessary.

Note: The number entered should be for one identical unit only. If more than one identical unit is present, the computer will multiply the number of each apartment type by the number of identical units.

- (610) **PARKING DATA** — Space is provided to enter the number (0001 to 9999) of covered and uncovered parking spaces allocated to apartment buildings.

Note: The number entered should be for one identical unit only. If more than one identical unit is present, the computer will multiply the number of covered and uncovered spaces by the number of identical units.

YARD IMPROVEMENTS AND/OR SECONDARY BUILDINGS

Up to six (6) segments of yard improvements/secondary buildings per parcel may be entered. There are numerous types of yard improvements or secondary buildings which may be encountered on commercial and industrial properties. The most common of these have been coded and included on the data collection form. The inclusion of all possible items is considered impractical, however the ability to collect data on uncoded items has been provided for. See chart entry MS1.

699 DELETE 711-716 YARD IMPROVEMENTS AND / OR SECONDARY BUILDINGS										
NO	STRUCTURE CODE	FLAT +/-	DIMENSIONS SIZE	IDENT UNITS	PHYS COND	FUNC UTIL	YEAR BUILT	% GOOD	RCN	RCNLD
711										
712										
713										
714										
715										
716										
TOTAL										

STRUCTURE CODE — Space is provided to enter a three-digit alpha/numeric structure code denoting the type of yard improvement or secondary building being described.

FLAT VALUE (+ or -) — Space is provided to enter a plus (+) or minus (-) sign to denote the addition or deduction of a flat dollar amount which would then be entered in the Dimensions column. If the flat value field is *not utilized*, this entry must be left blank. Consult your supervisor for instructions on possible uses of this field.

DIMENSIONS — Size -- Enter either the dimensions (width and length) or square foot area of the item being described.

To enter the dimensions, character positions are provided to enter eight characters . . . three numeric characters denoting the width, one multiplication (x) symbol and four numeric characters denoting the length. The multiplication symbol must always be entered in the fourth character position from the left (within the two vertical hash marks). All character positions must be filled in. Use leading zeros if necessary.

To enter the square foot area of the item, character positions are provided to enter eight numeric characters (up to 99,999,999 square feet). Utilize the character positions to the right. Leading zeros are not necessary.

NUMBER IDENTICAL UNITS -- Space is provided to enter the total number of identical yard improvements or secondary buildings. Both character positions must be filled in. Use leading zeros if necessary.

Note: When activating the Flat Value (+ or -) column for any entry, the amount entered in the Dimensions area will be used as the RCNLD for that line entry (times the Number of Identical Units). The Year Built, Physical Condition and Functional Utility must be entered, but are used as descriptive data only.

PHYSICAL CONDITION -- Space is provided to enter a one-digit numeric code denoting the physical condition of the yard improvement or secondary building being described.

Enter	1	POOR to indicate that the yard improvement or secondary building is in a dilapidated condition. It could be characterized as "beyond repair".
Enter	2	FAIR to indicate that the yard improvement or secondary building shows signs of deferred maintenance, but the improvement does contribute to the commercial or industrial operation. The improvement could be characterized as "needing work".
Enter	3	NORMAL to indicate that the yard improvement or secondary building shows only minor signs of physical deterioration due to "wear and tear". There are few indications of deferred maintenance.
Enter	4	GOOD to indicate that the yard improvement or secondary building shows no signs of deferred maintenance. It could be characterized as in new or "like new" condition.
Enter	5	RENOVATED to indicate that the yard improvement or secondary building has undergone major renovation or rehabilitation. Despite the actual age of the improvement, the effective age has been altered to a much newer improvement in good condition. The amount of work done to enhance the appearance and/or structure soundness of the improvement is far in excess of that required for normal maintenance.

Note: Deferred maintenance may be defined as desirable repairs and rehabilitation that will require immediate expenditures. It does not necessarily imply inadequate prior maintenance.

FUNCTIONAL UTILITY — Space is provided to enter a one-digit numeric code denoting the functional utility of the yard improvement or secondary building. Functional utility may be defined as the ability of the improvement to assist the property to perform the function for which it is intended. Consideration should be given to design, size and performance standards.

- Enter 0 NONE to indicate that the yard improvement or secondary building adds nothing to the ability of the property to perform the function for which it is intended. It can in no way be considered serviceable.
- Enter 1 POOR to indicate that the yard improvement or secondary building adds little to the ability of the property to perform the function for which it is intended. Major renovation is necessary to allow the improvement to make an adequate contribution to service.
- Enter 2 FAIR to indicate that the yard improvement or secondary building adds to the ability of the property to perform the function for which it is intended, but the effect is minimal.
- Enter 3 NORMAL to indicate that the yard improvement or secondary building adds an adequate amount to the ability of the property to perform the function for which it is intended.
- Enter 4 GOOD to indicate that no functional deficiencies exist for the yard improvement of secondary building and that the improvement is well suited to aid the ability of the property to perform the function for which it is intended.

YEAR BUILT OR INSTALLED — Space is provided to enter the date in which the yard improvement or secondary building was constructed or installed. For example, 1976 . . . enter 76.

% (PERCENT GOOD) — Optional entry. Space is provided to enter the data collector's judgment of remaining percent good for the yard improvement or secondary building being described. Percent good and depreciation are complements of each other. Therefore, an improvement which is estimated to have 35% depreciation as of a given time is said to be 65% (condition) good. In this way, the calculated % Good can be overridden by entering the data collector's estimate of the % good. However, the year built, physical condition, and functional utility factors must still be entered.

Note: The purpose of this entry is for override purposes only.

REPLACEMENT COST NEW — Do not utilize this entry. It is for manual pricing purposes only.

REPLACEMENT COST NEW LESS DEPRECIATION — Do not utilize this entry. It is for manual pricing purposes only.

YARD IMPROVEMENTS/SECONDARY BUILDING DETAILED CHART

The following is a detailed chart listing all possible yard improvements and secondary buildings. The chart also relates corresponding structure codes, necessary field entries (yes), and appropriate measurement units, including the correct fields in which to enter them.

YARD IMPROVEMENTS/SECONDARY BUILDINGS

DESCRIPTION	Struct. Code	Flat Value (+/-)	Dimensions	Number Identical Units	Cond.	Funct. Utility	Yr. Built	% Good	Repl. Cost
Bank Canopy, Drive In	BC1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Bank Vault (Money)	BE1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Bank Vault (Record Storage)	BE2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Bank Vault Door (Circ, Money)	BE3	—	—	Yes	Yes	Yes	Yes	—	—
Bank Vault Door (Rect, Money)	BE4	—	—	Yes	Yes	Yes	Yes	—	—
Bank Vault Door (Rcd Stor)	BE5	—	—	Yes	Yes	Yes	Yes	—	—
Bank Night Deposit Chute	BE6	—	—	Yes	Yes	Yes	Yes	—	—
Bank Drive-In Window	BE7	—	—	Yes	Yes	Yes	Yes	—	—
Bank Service Window	BE8	—	—	Yes	Yes	Yes	Yes	—	—
Bank Drive-In Teller Booth	BE9	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Bank Pneumatic Tube	BE0	—	—	Yes	Yes	Yes	Yes	—	—
Canopy only	CP5	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Canopy, Roof/Slab	CP6	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Canopy, Roof/Serv. Station Economy	CP7	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Canopy, Service Station Average	CP8	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Canopy, Service Station Good	CP9	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Carport	RC1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Drive-In, Theater Screen	DT1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Drive-In, Speakers	DT2	—	—	Yes	Yes	Yes	Yes	—	—
Drive-In, Heaters	DT3	—	—	Yes	Yes	Yes	Yes	—	—
Fence, Chain Link	AP1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Fence, Picket	AP2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Fence, Stockade	AP3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Fence, Post & Rail	AP4	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Fence, Basketweave	AP5	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Fence, Brick/Stone Wall	AP6	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Garage, Detached Frame	RG4	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Garage, Res. Detached Masonry	RG5	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Greenhouse - Economy	GH1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Greenhouse - Average	GH2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Greenhouse - Good	GH3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Lights, Merc Va, Wall Mtd Fld	LT1	—	—	Yes	Yes	Yes	Yes	—	—
Lights, Incand, Wall Mtd Fld	LT2	—	—	Yes	Yes	Yes	Yes	—	—
Lights, Fluor, Pole & Brk Inc	LT3	—	—	Yes	Yes	Yes	Yes	—	—
Lights, Incan, Pole & Brk Inc	LT4	—	—	Yes	Yes	Yes	Yes	—	—
Lights, Merc Va, Pole & Brk Inc	LT5	—	—	Yes	Yes	Yes	Yes	—	—
Paving, Asphalt Parking	PA1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Paving, Service Station	PA2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Paving, Concrete Parking Average	PC1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Paving, Concrete Heavy Duty	PC2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Paving, Concrete Mat./Slab	PC3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—

YARD IMPROVEMENTS/SECONDARY BUILDINGS
(con't.)

DESCRIPTION	Struct. Code	Flat Value (+/-)	Dimensions	Number Identical Units	Cond.	Funct. Utility	Yr. Built	% Good	Repl. Cost
Plumbing Fixture	PB1	—	—	Yes	Yes	Yes	Yes	—	—
Restroom Structure (Frame or CB)	TR1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Restroom Structure (Brick or Stone)	TR2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Service Station Attendant's Booth Steel/Glass on Masonry	GS3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Service Station Attendant's Booth Stucco/Glass on Frame	GS4	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Shed, Machinery	SH1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Shed, Aluminum	SH2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Shed, Finished Metal	SH3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Shed, Quonset	SH4	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Lumber Shed, Frame, 2 sides open	SH5	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Lumber Shed, Frame, 4 sides open	SH6	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Swimming Pool, Commercial	SC1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Tennis Court, Asphalt	TC1	—	—	Yes	Yes	Yes	Yes	—	—
Tennis Court, Concrete	TC2	—	—	Yes	Yes	Yes	Yes	—	—
Tennic Court, Clay	TC3	—	—	Yes	Yes	Yes	Yes	—	—
Utility Building, Frame	RS1	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Utility Building, Metal	RS2	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Utility Building, Brick or Stone	RS3	—	SF or Dim	Yes	Yes	Yes	Yes	—	—
Miscellaneous	MS1	Yes	Value Right Justified	Yes	Yes	Yes	Yes	—	—
MODIFICATION CODES									
Air Conditioning (Central)	AC1	—	SF	Yes	Yes	Yes	Yes	—	—
Air Conditioning (Unit)	AC2	—	SF	Yes	Yes	Yes	Yes	—	—
Sprinkler System (Wet Pipe)	SS1	—	SF	Yes	Yes	Yes	Yes	—	—
Sprinkler System (Dry Pipe)	SS2	—	SF	Yes	Yes	Yes	Yes	—	—

TOTAL OTHER IMPROVEMENTS

This section of the data collection form may be utilized in numerous ways. Since it is not expected that every parcel should be appraised by computer-assisted techniques, it is necessary to allow for the value of manually appraised properties to be integrated into the system. This is done by use of the TOTAL OTHER IMPROVEMENTS category. This category may also be utilized to add or deduct a flat dollar amount from the overall improvement value of the parcel.

690	TOTAL OTHER IMPROVEMENTS	M O B I L E _ H O M E _ S I T E S _ _ _	+ -	_ _ _ , 3 8 5 , 0 0 0

DESCRIPTION -- Space is provided to enter up to twenty characters to describe the manually appraised property or to explain the reason for an addition or deduction of a flat dollar amount.

+ / - -- Space is provided to enter a plus (+) or minus (-) sign to denote the addition or deduction of value.

VALUE -- Space is provided to enter a dollar value amount up to \$999,999,999. Utilize the character positions to the right. Omit leading zeros.

ECONOMIC DATA FORM

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COLE • LAYER • TRUMBLE COMPANY / APPRAISERS

DEAR SIR:

A REAPPRAISAL OF ALL PROPERTY IS NOW BEING CONDUCTED IN YOUR COMMUNITY TO ESTABLISH CURRENT AND EQUITABLE VALUES FOR ASSESSMENT PURPOSES.

AS AN OWNER, OR MANAGER, OF COMMERCIAL PROPERTY YOU ARE AWARE THAT ECONOMIC FACTORS AS WELL AS PHYSICAL ASPECTS OF THE PROPERTY HAVE AN EFFECT UPON ITS VALUE. IN ORDER THAT OUR APPRAISERS MAY ESTABLISH A FAIR AND JUST APPRAISAL OF YOUR PROPERTY WE WOULD APPRECIATE YOUR SUPPLYING THE ECONOMIC INFORMATION WHICH PERTAINS TO YOUR PROPERTY IN THE APPROPRIATE SPACES PROVIDED ON BOTH SIDES OF THIS FORM.

YOU MAY BE ASSURED THE INFORMATION YOU SUPPLY WILL BE STRICTLY CONFIDENTIAL. IT WILL BE USED, AND RETAINED BY THE APPRAISERS. IT WILL NOT BE FILED WITH THE PROPERTY RECORDS OR EXPOSED TO INSPECTION BY THE PUBLIC.

**PROPERTY DATA FOR
ADDRESS OR BUILDING KNOWN AS**

Oliver Building

VERY TRULY YOURS
COLE-LAYER-TRUMBLE COMPANY

MARKET DATA	PURCHASED LAND ONLY FOR \$ _____ IN 19 _____	PURCHASED LAND & BUILDINGS FOR \$ <u>345,000</u> IN 19 <u>59</u>	LAND SIZE _____
	PLEASE INDICATE THE AMOUNT IF ANY, OF THE PURCHASE PRICE PAID FOR CONSIDERATIONS OTHER THAN REAL ESTATE.		
	ITEMS _____ AMOUNT \$ _____		

COST DATA	1. ALL COST SHOULD INCLUDE LABOR, MATERIALS, ARCHITECTURAL FEES, AND BUILDERS OVERHEAD AND PROFIT. 2. BUILDING COSTS SHOULD INCLUDE THE STRUCTURE, AND ALL MECHANICAL FEATURES SUCH AS ELECTRIC, PLUMBING, HEATING, AIR CONDITIONING, SPRINKLER, AND ELEVATORS. 3. SITE IMPROVEMENTS REFER TO FEATURES SUCH AS SITE PREPARATION, UTILITY SERVICES, AND LANDSCAPING. 4. IF COST INCLUDES ITEMS NOT CONSIDERED REAL ESTATE, PLEASE INDICATE UNDER COMMENTS THE ITEMS AND THE COSTS				
	COST	YEAR	COST	YEAR	COMMENTS
SITE IMPROVEMENTS					
BUILDINGS					
ADDITIONS TO ORIGINAL BLDG.					
PAVING					
OTHER YARD ITEMS					
TOTAL					

REMODELING DATA	PLEASE INDICATE THE SCOPE AND COST OF SIGNIFICANT REMODELING			
	YEAR	DESCRIPTION	COST	COST PAID BY OWNER TENANT
	1960	<i>New elevator & interior repairs</i>	\$42,600	X
	1971	<i>General improvements & decorating of non tenant areas</i>	\$22,000	X

LEASE DATA	PLEASE INDICATE TERMS OF MAJOR LEASE AGREEMENTS							
	TENANTS	LENGTH OF LEASE	YEAR EXPIRES	GUARANTEED RENTAL	OVERAGE TERMS	AVERAGE ANNUAL RENT (LAST 3 YEARS)	RENEWAL AND/OR PURCHASE OPTIONS	RENEWAL RATE
	<i>Elite Jewelers</i>	<i>10 yr.</i>	<i>1975</i>	<i>\$27,000</i>	<i>None</i>	<i>\$27,000</i>	<i>1-5 yr.</i>	<i>Same</i>
	<i>Office leases vary from 2 years to 5 years</i>							

OTHER DATA	PLEASE STATE ANY ADDITIONAL INFORMATION YOU FEEL IS PERTINENT TO INSURE A FAIR AND EQUITABLE APPRAISAL OF YOUR PROPERTY

OPERATING STATEMENT

Frank Agent

513-478-5100

TAXING DISTRICT M-37

PARCEL I. D. 04-016-235

SUBMITTED BY

TELEPHONE NO.

GROSS ANNUAL INCOME			
COMMERCIAL BUILDINGS FOR 19 <u>70</u>		19 <u>71</u>	
B			
FIRST FLOOR	RETAIL	27000	27000
	OFFICE		
	WAREHOUSE		
	PARKING		
UPPER FLOORS	RETAIL		
	OFFICE	74290	75905
	APARTMENT		
	WAREHOUSE		
OTHER	PARKING		
	REIMBURSED OPERATING EXPENSE		
	MISCELLANEOUS		
	TOTAL	101290	102905

APARTMENT BUILDINGS FOR 19 <u>70</u>			
TYPE	NO.	\$ PER MO	ITEMS FURNISHED
EFFICIENCY	— @ —	—	☐ HEATING
	— @ —	—	☐ AIR CONDITIONING
	— @ —	—	☐ ELECTRIC
1 BEDROOM	— @ —	—	☐ WATER
	— @ —	—	☐ RANGE
	— @ —	—	☐ REFRIGERATOR
2 BEDROOM	— @ —	—	☐ DISHWASHER
	— @ —	—	☐ DISPOSAL
	— @ —	—	☐ CARPET
3 BEDROOM	— @ —	—	☐ DRAPES
	— @ —	—	☐ FURNITURE
	— @ —	—	☐ —
JANITOR/MANAGER	— @ —	—	ANNUAL INCOME @ 100% OCCUP
GARAGE/CARPORT	— @ —	—	ANNUAL VAC. & CREDIT LOSS
OTHER INCOME	— @ —	—	ACTUAL ANNUAL INCOME

ANNUAL EXPENSES			
ANALYSIS		19 <u>70</u>	19 <u>71</u>
MANAGEMENT	FEE	5064	5145
	COMMISSIONS	—	—
	LEGAL AND ACCOUNTING	420	420
GENERAL	PAYROLL TAXES	763	787
	GROUP INSURANCE	—	—
	BUILDING SUPPLIES	850	817
	RUBBISH REMOVAL	918	918
CLEANING	MISCELLANEOUS	227	243
	WAGES	9895	10137
	SUPPLIES	1757	1838
UTILITIES	CONTRACT SERVICES	240	262
	ELECTRIC	8073	8126
	HEATING	3305	3294
	WATER	778	783
ELEVATOR	AIR CONDITIONING	See Heating & Electric	
	BUILDING MUSIC	411	411
	WAGES AND UNIFORMS	—	—
CONSTRUCTION	REPAIRS AND SERVICE	3992	3992
	DECORATING	395	0
FIXED EXPENSE	REPAIRS AND MAINTENANCE	5146	27391 (1)
	INSURANCE	Paid by Owner	
	REAL ESTATE TAXES	8233	8233
	OTHER TAXES - CORP.	617	564
	DEPRECIATION	18050	17280
	INTEREST	16871	16296
TOTAL	LAND RENT	None	None
	TOTAL	86005	106937
		36693	37173

PLEASE DO NOT USE THE SPACE BELOW — FOR APPRAISERS USE ONLY

POTENTIAL GROSS INCOME	4500 S.F. @ 6.00	107750
LESS VACANCY AND CREDIT LOSS	19000 S.F. @ 4.25	
EFFECTIVE GROSS INCOME		102905
LESS OPERATING EXPENSES		37173
LESS RESERVES FOR REPLACEMENTS		—
NET INCOME BEFORE CAPITAL RECAPTURE		65732
IMPUTABLE TO LAND	72010 x 11.2 %	— 8065
IMPUTABLE TO BUILDING	x 18.2 %	
RESIDUAL LAND/BUILDING	316850 x 18.2 %	\$ 57667
INDICATED PROPERTY VALUE	388860 16.9	65732
APPRAISED VALUE	385260 17.1	65732

NOTES

(1) \$27391. includes Capital Improvements

Return..... 9.0
 R. E. Taxes.... 2.2 (5.42 x 40% Assessment)
 11.2
 Recapture..... 3.0 (33 1/3 years remaining life)
 Insurance..... 1.0
 Reserves,
 Repairs &
 Maint..... 3.0
 18.2

PURPOSE AND FORMAT

There is no space provided on the property record card to record economic data related to income producing properties. The primary reason for this is to maintain control of public access to income and expense information submitted, in confidence, to the appraiser by the property owners or agents thereof. When required the data is to be recorded on the Economic Data Form especially designed for this purpose.

The form consists of two sides. The front is composed of an explanation to the taxpayer and specific designated areas to enter Sales, Costs, Remodeling, Lease and Other Economic Data. The back side provides for the listing of Income and Operating Expenses along with space reserved for the appraiser's capitalization computations and notes.

The form can either be left with, or mailed to, the property owner. For this reason it is designed to be both self-explanatory and comprehensive. Since it is to be completed by property owners and their agents, as well as the appraiser, it is obvious that it must be readily understood and easy to follow. It may be less obvious, but no less important that the form be comprehensive enough to enable the person completing it to enter specific data in adequate detail.

The extensiveness of the form then is to simplify, rather than to complicate its usage. The fact that space is provided to enter information does not necessarily mean that all the items must be completed for every type of property. The appraiser must exercise good judgment and *common sense* in selecting those items which are pertinent to the valuation of the property.

I & E DATA

The collection of income and expense data is an essential phase in the valuation of commercial properties. The appraiser is primarily concerned with the potential earning power of the property. His objective is to estimate its expected income. It behooves the lister to provide him with the information required to do so. If the lister is to perform this function satisfactorily, he should have a thorough and workable understanding of some of the major analytical considerations which must be given to income and expense data.

QUESTIONS RELATING TO INCOME DATA

- A. Was the reported income produced entirely by the subject property? Very often the rental will include an amount attributable to one or more additional parcels of real estate. In this case, it would be necessary to obtain the proper allocations of rent.
- B. Was the income attributable to the subject property as it physically existed at the time of the appraisal or did the appraisal include the value of leasehold improvements and remodeling for which the tenant paid in addition to rent? If so, it may be necessary to adjust the income to reflect economic rent.
- C. Does the reported income represent a full year's return? It is often advisable to obtain both monthly and annual amounts as a cross-check.
- D. Does the income reflect current economic rent? Is either part or all of the income predicated on old leases? If so, what are the provisions for renewal options and rates?
- E. Does the reported income reflect 100% occupancy? What percentage of occupancy does it reflect? Is this percentage typical of this type of property, or is it due to special non-recurring causes?
- F. Does the income include rental for all marketable space? Does it include an allowance for space, if any, which is either owner or manager occupied? Is the allowance realistic?
- G. Is the income attributable directly to the real estate and conventional amenities? Is some of the income derived from furnishings and appliances? If so, it will be necessary to adjust the income or make provisions for reserves to eventually replace them, whichever local custom dictates.
- H. In many properties an actual rental does not exist because the real estate is owner occupied. In this event it is necessary to obtain other information to provide a basis to estimate economic rent. The information required pertains to the business

operation using the property. Proper analysis of the annual operating statements of the business including gross sales or receipts can provide an accurate estimate of economic rent. Information requirements for a few of the more common property uses are as follows:

- Retail Stores: The annual net gross sales. (Gross sales less returned merchandise.)
- Hotels and Motels: The annual operating statement of the business. If retail or office space is leased in these properties, obtain the actual rent paid.
- Theaters: The annual gross receipts (including admissions and concessions) and seating capacity.
- Automobile Parking: The annual gross receipts.

OPERATING EXPENSE CONSIDERATIONS

The appraiser must consider only those expenses which are applicable to the cost of ownership. Any portion of the expenses incurred either directly or indirectly by the tenant need not be considered. Reimbursed expenses can only be considered when the amount of reimbursement is included as income. Each expense item must stand the test of both legitimacy and accuracy. How do they compare with the established guide lines and norms: Are they consistent with the expenses incurred by comparable properties?

- A. **MANAGEMENT** refers to the cost of administration. These charges should realistically reflect what a real estate management company would actually charge to manage the property. If no management fee is shown on the statement, a proper allowance must be made by the appraiser. On the other hand, if excessive management charges are reported, as is often the case, the appraiser must disregard the reported charges and use an amount which he deems appropriate and consistent with comparable type properties. The cost of management bears a relationship with the risk of ownership and will generally range between 4 to 10% of the gross income.
- B. **GENERAL** expenses in that they include such items as the cost of services and supplies not charged to a particular category, unemployment and F. I. C. A. taxes, Workmen's Compensation, and other employee insurance plans are legitimate deductions.

Miscellaneous expenses is the "catch-all" category for incidentals. This item should reflect a very nominal percentage of the income. If the expenses reported seem to be excessive, the appraiser must examine the figures carefully in order to determine if they are legitimate expenses, and if so, to allocate them to their proper category.

- C. **CLEANING** expenses are legitimate charges. They are for such items as general housekeeping and maid service and include the total cost of labor and related supplies. All or a portion of the cleaning services may be provided by outside firms working on a "contract" basis. Cleaning expenses vary considerably and are particularly significant in operations such as offices and hotels. "Rule of the thumb" norms for various operations are made available through national management associations. The appraiser should have little difficulty in establishing local guide lines.
- D. **UTILITIES** are generally legitimate expenses and if reported accurately need very little reconstruction by the appraiser, other than to determine if the charges are consistent with comparable properties. Local utility companies can provide the appraiser with definite guide lines.

Heat and Air Conditioning costs are often reported separately and in addition to utilities. The expenses would include the cost of fuel other than the above mentioned utilities, and may include, especially in large installations, the fireman's wages, the cost of related supplies, inspection fees, and maintenance charges. These are generally legitimate costs and the same precautions prescribed for "utilities" are in order.

- E. **ELEVATOR** expenses including the wages and uniforms of elevator attendants, and the cost of repairs and services are legitimate deductions. Repairs and services are generally handled through service contracts and can be regarded as fairly stable annual recurring expenses.
- F. **CONSTRUCTION** expenses include the costs of decorating, repairs, and maintenance as follows:
1. **Decorating** and minor alterations are necessary to maintain the income stream of many commercial properties. In this respect they are legitimate expenses. However, careful scrutiny of these figures is required. Owners tend to include the cost of major alterations and remodeling which are, in fact, capital expenditures and, as such, are not legitimate operating expenses.
 2. **Repairs and Maintenance** expenses reported for any given year may not necessarily be a true indication of the average or typical annual expense for these items. For example, a statement could reflect a substantial expenditure for a specific year (possibly because the roof was replaced and/or several items of deferred maintenance were corrected); yet the statement for the following year may indicate that repairs and maintenance charges were practically nil. It is necessary for the appraiser to either obtain complete economic history on each property in order to make a proper judgment as to the average annual expenses for these items or include a proper allowance in the building capitalization rate to cover these annual expenses. Since it is neither possible

nor practical to obtain enough economic history on every property, the latter method is generally used and the amounts reported for repairs and maintenance are not deducted as an expense item. Careful consideration must be given to the allowance used in the building capitalization rate as the cost of repairs and maintenance for commercial buildings will vary considerably depending on age, condition, the general quality of construction, and local labor costs.

Note that custodian charges such as wages of janitors, watchmen, doormen, porters, etc., must always be analyzed to determine if they are consistent with current wages. Consideration has to be given to the living quarters occupied by such employees. The economic rent attributable to the space should be included in the income estimate. The costs incurred in providing this space and other remunerations should be deducted as an expense item.

G. **FIXED** expenses include those items which show no or very little variation from year to year. It is practical to treat these items individually.

1. **Insurance.** As was the case of some other expense items, the amount reported for insurance in any given year may not be indicative of the actual annual expense. Many owners obtain the more economical 3-year coverage plans and expense the entire premium in one year. Furthermore, many owners obtain "blanket" coverage for more than one building and fail to make the proper allocations of cost. It is generally more effective for the appraiser to establish his own guide lines. He must be careful to include only items applicable to real estate. Fire extended coverage, and owner's liability are the main insurance expense items. Separate coverages on different components of the building such as elevators and plate glass are also legitimate expenses. This factor is usually built into the building capitalization rate; however, in some instances, it will be necessary to adjust the rate to reflect unusual conditions related to specific properties.
2. **Real Estate Taxes.** In making appraisals for tax purposes, the appraiser will find it more convenient to exclude the actual amount reported for real estate taxes. Since future taxes will be based upon his appraised value, he can readily provide for this expense item by including it in his capitalization rate.
3. **Other Taxes.** Expenses reported in this category such as income taxes, corporate taxes and franchise taxes, usually do not pertain to the real estate and should, therefore, be disregarded.
4. **Depreciation.** The appraiser provides for this expense by the recapture rate which he includes in his building capitalization rate. The amount reported for depreciation is a "bookkeeping figure" which the owner uses for Internal Revenue purposes and should not be considered in the income approach. In newer properties, this figure may provide an accurate indication of the original cost.

5. **Interest.** Interest on borrowed capital is not a legitimate expense. All property is appraised as if it were "free and clear". It makes no difference to the appraiser whose money is used for purchasing the property. If a portion of the investment is borrowed capital, the owner of the fee (the property) is entitled only to a return on that portion of the property he owns, while the return on the balance of the investment is assigned to the holder of the mortgage. Interest paid for borrowed capital is not a deductible expense since interest on the total investment, as normal return, is considered in the capitalization rate.
6. **Land Rent.** Land rent is paid in lieu of purchasing the land and is generally not considered an expense item in the capitalization process. It is, however, a significant item in that it may have a direct bearing upon the market value of a property. Land leases have the tendency to influence value of property upward or downward depending upon whether or not they are favorable or unfavorable to a prospective buyer. It is, therefore, advisable to obtain the amount and terms of all leases whenever possible.

It is evident at this point that there are some expense items listed on our form which the appraiser should disregard. The question may come up, then, why ask for the information if we do not intend to use it? The answer is that our expense form is designed to accommodate property owners and/or accountants. Their records include these categories, and if space is not provided to enter these items on the form, they have the tendency to either lump all of them under "Miscellaneous" or to include them in other categories, making it very difficult for the appraiser to abstract the legitimate deductions.

REPLACEMENT COST SCHEDULES AND TABLES
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Agricultural

Institutional

Commercial/Industrial

ESTIMATING REPLACEMENT COST NEW

The informed buyer is not justified in paying anything more for a property than what it would cost him to acquire an equally desirable substitute property. Likewise, the upper limit of value of most improvements is the cost of reproducing an equally desirable substitute improvement. It follows, then, that a uniform starting point for an Equalization Program is to determine the Replacement Cost New of each and every improvement.

REPLACEMENT COST

Replacement Cost is the current cost of producing an improvement of equal utility to the subject property; it may or may not be the cost of reproducing a replica property. The distinction being drawn is one between Replacement Cost, which refers to a substitute property of equal utility, as opposed to *Reproduction Cost*, which refers to a substitute replica property.

The Replacement Cost of an improvement includes the total cost of construction incurred by the builder, whether preliminary to, during the course of, or after completion of its construction. Among these are materials, labor, all sub-contracts, builder's overhead and profit, architectural and engineering fees, consultation fees, survey and permit fees, legal fees, taxes, insurance and the cost of interim financing.

PRICING SCHEDULES

Pricing schedules and related cost tables are included in this manual to assist the appraiser in arriving at accurate estimation of Replacement Cost New. They have been developed by applying unit-in-place costs to the construction of specified hypothetical or model buildings. Application of the schedules involves the selection of the model which most nearly resembles the subject building and adjusting its price to compensate for all significant variations.

Pricing schedules are included for various types of Residential, Agricultural, Institutional, Commercial and Industrial structures.

Cost adjustments for the variations which are most frequently encountered in a particular type building are included. Adjustments for other variations may be made by using either the Other Feature Cost Tables or other appropriate schedules.

SELECTING THE PROPER QUALITY GRADE

The quality of materials and workmanship is the one most significant variable to be considered in estimating the replacement cost of a structure. Two buildings may be built from the same general plan, each offering exactly the same facilities and with the same specific features, but with widely different costs due entirely to the quality of materials and workmanship used in their construction. For instance, the cost of a dwelling constructed of high quality materials and with the best of workmanship throughout can be more than twice that of one built from the same floor plan, but with inferior materials and workmanship.

The schedules included in this manual have been developed to provide the appraiser with a range of grades comprehensive enough to distinguish all significant variations in the quality of materials and workmanship which may be encountered; the basic specifications for each grade as to the type of facility furnished remain relatively consistent throughout, and the primary criterion for establishing the grade being the overall quality of materials and workmanship.

The majority of buildings erected fall within a definite class of construction, involving the use of average quality of materials with average quality of workmanship. This type of construction being the most common, it can readily be distinguished by the layman as well as the professional appraiser. Consequently, better or inferior quality of construction can be comparatively observed. The quality grading system and pricing schedules in this manual are keyed to this obvious condition; the basic grade being representative of that cost of construction using average quality of materials with average quality workmanship. The four principal Quality Grade classifications are as follows:

Grade A Excellent Quality

Grade B Good Quality

Grade C Average Quality

Grade D Fair Quality

To cover the entire range of construction quality, two additional Quality Grade classifications must be established: "*AA*" Grade, incorporating the very best quality of materials and workmanship, and "*E*" Grade, incorporating the cheapest and most inferior quality of materials and workmanship.

The above six established grades or classes of quality will cover the entire range of construction from the cheapest to the finest of quality.

The general quality specifications for each grade are as follows:

AA Grade	Buildings generally having an outstanding architectural style and design, constructed with the finest quality materials and workmanship throughout. Superior quality interior finish and built-in features. Deluxe heating system and high grade plumbing and lighting fixtures.
A Grade	Architecturally attractive buildings constructed with excellent quality materials and workmanship throughout. High quality interior finish and built-in features. Deluxe heating system and very good grade plumbing and lighting fixtures.
B Grade	Buildings constructed with good quality materials and above average workmanship throughout. Moderate architectural treatment. Good quality interior finish and built-in features. Good grade heating, plumbing and lighting fixtures.
C Grade	Buildings constructed with average quality materials and workmanship throughout, conforming with the base specifications used to develop the pricing schedule. Minimal architectural treatment. Average quality interior finish and built-in features. Standard grade heating, plumbing and lighting fixtures.
D Grade	Buildings constructed with economy quality materials and fair workmanship throughout. Void of architectural treatment. Cheap quality interior finish and built-in features. Low grade heating, plumbing and lighting fixtures.
E Grade	Buildings constructed with a very cheap grade of materials, usually "culls" and "seconds" and very poor quality workmanship resulting from unskilled, inexperienced, "do-it-yourself" type labor. Low grade heating, plumbing and lighting fixtures.

By assigning the factor 1.00 to "C" Grade construction, the actual factor either above or below "C" Grade can be illustrated as follows:

AA Grade	2.10
A Grade	1.55
B Grade	1.26
C Grade	1.00
D Grade	.78
E Grade	.50

In order to facilitate using this grading system, and again to promote and maintain uniformity in approach, the value relationship of grade to grade as just described has been incorporated into the development of the base specifications relating to each schedule used in the manual.

Note: the appraiser must exercise extreme caution not to confuse the concepts "quality" and "condition" when selecting the proper grade. This is especially applicable to older buildings, wherein a deteriorated condition can have a noticeable effect on their physical appearance. A building will always retain its initial grade of construction, regardless of its existing deteriorated condition. The Quality Grade ultimately selected must reflect that original built-in quality, and the selection of that grade cannot be influenced in any way by the physical condition of the building.

APPLYING THE PROPER GRADE FACTOR

Grading would be a relatively simple process if all buildings were built to conform to the quality grade specifications outlined above. The fact is, however, that this ideal condition does not exist. It is not unusual for any conventional building to be built incorporating construction qualities that fall between the established grade levels. The grading system in this manual has been designed in such a way as to provide the appraiser with a method for accounting for such variations by establishing intermediate grades.

If the subject building is judged to be of a better or inferior quality than the actual grade levels, a grade factor of plus (+) or minus (—) should be applied, i.e., C+ would be better than a straight "C" Grade, B— poorer than a straight "B" Grade, etc.

There is very rarely any clear cut designation of a specific grade factor. The appraiser will generally select a range, such as C+ to B—, and then weigh the various quality factors exhibited in the construction in order to select the proper factor.

Following the above procedures results in the full range of Quality Grade Factors which are listed below.

AA Plus	(+)	2.50	B Plus	(+)	1.35	D Plus	(+)	.85
AA		2.10	B		1.26	D		.78
AA Minus	(—)	1.85	B Minus	(—)	1.17	D Minus	(—)	.70
A Plus	(+)	1.67	C Plus	(+)	1.08	E Plus	(+)	.60
A		1.55	C		1.00	E		.50
A Minus	(—)	1.45	C Minus	(—)	.92	E Minus	(—)	.40

Note: the quality factor ultimately selected should represent a composite judgment of the overall Quality Grade. Generally, the quality of materials and workmanship is fairly consistent throughout the construction of a specific building; however, since this is not always the case, it is frequently necessary to weight the quality of each major component in order to arrive at the proper "overall" Quality Grade. Equal consideration must also be given to any "Additions" which are constructed of materials and workmanship *inconsistent* with the quality of the main building.

APPLYING THE PROPER COST AND DESIGN FACTOR

Architectural fees, material quantities, labor efficiency, and other factors influencing total construction costs may vary considerably from one building to another, depending upon its particular design. Two dwellings, for instance, showing no marked difference in size and quality may still show a measurable difference in cost, attributable primarily to a difference in design.

In computing the replacement cost of any building, therefore, it is necessary to adjust the cost to account for any features varying significantly from the base specifications from which the pricing schedules were developed.

The pricing schedules included in this manual, unless otherwise specified, have been developed to reflect perimeter-to-area wall ratios of rectangularly shaped buildings, uniform eave lines and roof slopes, overhangs, ceiling heights, and other architectural features most typical of conventional designs.

The adjustment for variations in design must be made by applying a Cost and Design Factor denoting a percentage adjustment of the sub-total replacement cost, i.e., apply a +5% to indicate a 5% increase in the replacement cost, apply a +10% to indicate a 10% increase, etc.

The Cost and Design Factors applicable to dwellings will normally range from 0 to 15%. However, the Cost and Design Factors applicable to special architectural designs may range considerably higher. The selection of the proper Cost and Design Factor is largely a product of the experience and sound judgment of the appraiser, who must have the ability to analyze various construction components and determine the influence of each upon the overall cost.

PRICING SCHEDULES AND COST TABLES

The Pricing Schedules and Cost Tables in this manual are provided to assist the appraiser in arriving at accurate and uniform valuations. Used properly, they should prove to be an invaluable tool. Quality valuations, however, are not the product of schedules and tables themselves, but rather of the appraiser's ability to use them effectively. In order to bring this about, a thorough understanding of the make-up and the capabilities and limitations of each schedule is essential. The appraiser must know the specifications from which the base prices were derived, the composition of the prices, and the proper techniques and procedures for applying the prices. What's more important, the appraiser must be able to exercise good common sense and sound judgment in selecting and using them.

It should also be noted that the schedules and tables in the manual have been developed primarily for mass appraisal and tax equalization purposes. They have, therefore, been designed to provide the appraiser with an uncomplicated, fast, and effective method of arriving at an accurate estimate of replacement costs. In order to maintain simplicity in the schedules, techniques, and procedures, it is often necessary to make certain compromises from a strictly technical and engineering point of view. Extensive effort has been made in developing the schedules to minimize these compromises and limit them to variables which have minimal influence on the final value of the building. The schedules have been designed to reflect actual building costs and practices. Field tests have proven them to be both accurate and reliable, and when applied properly, highly effective in arriving at realistic replacement costs.

GENERAL RESIDENTIAL PRICING SCHEDULES

Quality Grade Specifications and Photographs

Grade AA Residences

Grade A Residences

Grade B Residences

Grade C Residences

Grade D Residences

Grade E Residences

Dwelling Pricing Schedule

General Application

Base Prices

Base Price Adjustments

Additions

Other Features

Other Building and Yard Items

Residential Swimming Pools

Residential Yard Items

BASE SPECIFICATIONS GRADE AA RESIDENCES

Dwellings constructed of the finest quality materials and workmanship, exhibiting unique and elaborate architectural styling and treatment, and having all the features typically characteristic of mansion-type homes.

FOUNDATION — Masonry walls, waterproofed; reinforced concrete footings, drain tile. Full basement.

EXTERIOR WALLS — Shake shingles, stucco and half timber, 3/4" to 7/8" bevel siding, painted with three coats paint; face brick, stone or ashlar granite; 1" D & M sheathing, 2" x 4" wood studs 16" O.C., 1 3/4" or 2 1/4" exterior doors, fine quality wood or metal frame windows. All doors and windows weatherstripped and walls insulated.

ROOF — Gable, hipped or gambrel type, heavy slate, tile, wood shingle roofing or equal. 1" D & M sheathing, 2" x 10" rafters 16" O.C., insulation, ornamental wood cornice, copper flashing, gutters and conductors.

FLOORS — Basement 4" cement floor with monolithic finish on gravel base. Upper floors — 1" clear oak, herringbone or parquet pattern, sanded, filled and varnished including areas with marble, tile, slate, solid vinyl and fine grade of carpet. 1" D & M subfloor or 3/4" plywood on 2" x 12" wood joist 16" O.C. with bridging; steel girders and column supports for first floor. Attic floor and stairs not included in base price.

INTERIOR FINISH — Hardwood or enamel doors and trim throughout, excellent built-in kitchen and china cabinets, broom and linen cabinets with abundant shelving; 2" x 4" wood stud partition walls, plaster and paint on interior walls, ceiling and partitions. High grade decorating, ornamental moldings in main rooms and high grade hardwood paneled rooms. Tiled bathroom with high quality shower doors, and large vanity with laminated plastic or comparable top.

HEATING — Forced warm air, steam, vapor, hot water, radiant or equal with thermostatic controls. Automatic fired furnace or boiler. Exhaust fans in kitchen and bathroom.

PLUMBING — Fine grade vitreous fixtures, copper piping, one bathroom with shower outlet over tub, kitchen sink, water heater, laundry tubs.

LIGHTING — Electric lighting, conduit wiring, fine grade fixtures throughout.

RESIDENCE — Grade AA+



RESIDENCE — Grade AA+

RESIDENCE — Grade AA+



RESIDENCE — Grade AA



RESIDENCE — Grade AA



RESIDENCE — Grade AA



RESIDENCE — Grade AA-



RESIDENCE — Grade AA-

RESIDENCE — Grade AA-



BASE SPECIFICATIONS GRADE A RESIDENCES

Dwellings constructed of excellent quality materials and workmanship, exhibiting outstanding architectural styling and treatment, and having an abundance of built-in features. Architect designed and supervised homes would normally fall into this classification.

FOUNDATION — Masonry walls, waterproofed; concrete footings, drain tile. Full basement.

EXTERIOR WALLS — Shake shingles, $\frac{3}{4}$ " lap siding, stucco, high grade aluminum siding, face brick or native stone. 1" D & M sheathing or 25/32" insulation board; 2" x 4" wood studs 16" O.C., batt insulation; 1 $\frac{3}{4}$ " wood doors and windows weatherstripped, or aluminum frame windows; three coats paint.

ROOF — Gable, hipped or gambrel, stained wood, slate or heavy asphalt shingles, 1" D & M sheathing, 2" x 8" rafters 16" O.C., insulation, boxed cornice, copper flashing, gutters and downspouts.

FLOORS — Basement 4" cement on gravel base. Upper floors 1" first grade oak or equal sanded, filled and varnished and areas with vinyl tile, ceramic tile or carpet; 1" D & M or 5/8" plywood subfloor, 2" x 10" wood joists 16" O.C. with bridging; steel girder and column supports for first floor. Attic floor and stairs not included in base price.

INTERIOR FINISH — Hardwood or high grade enameled doors and trim throughout; good grade built-in kitchen cabinets, broom closet, linen closets and clothes closets. Plaster or drywall interior walls and ceilings, painted or papered. Tiled bathroom with formica vanity top.

HEATING — Forced warm air; steam, vapor, hot water, radiant or equal with thermostatic controls and automatic fired furnace or boiler. Exhaust fan in kitchen and bathroom.

PLUMBING — High grade vitreous fixtures, copper piping, one bathroom with shower over tub, kitchen sink, water heater, laundry tubs.

LIGHTING — Electric lighting, conduit wiring, ample outlets, high grade fixtures throughout.

RESIDENCE — Grade A+



RESIDENCE — Grade A+



RESIDENCE — Grade A+



RESIDENCE — Grade A



RESIDENCE — Grade A



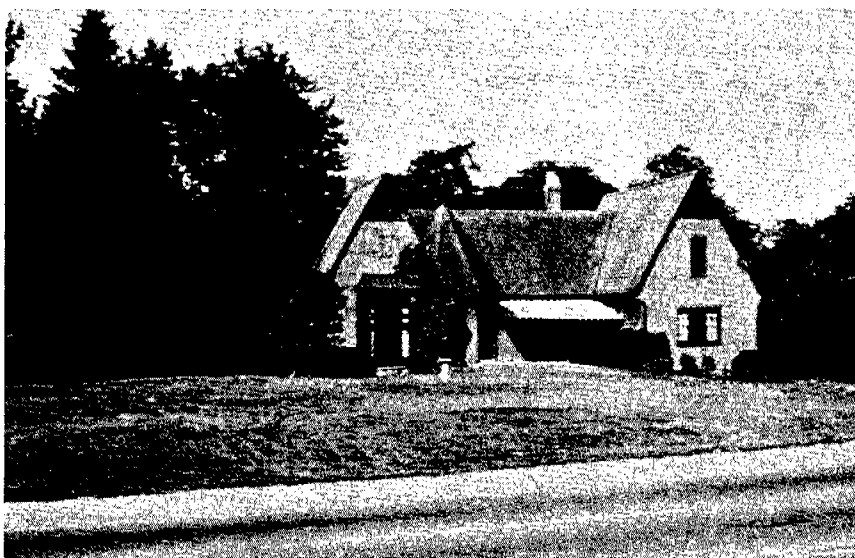
RESIDENCE — Grade A



RESIDENCE — Grade A-



RESIDENCE — Grade A-



RESIDENCE — Grade A-



BASE SPECIFICATIONS GRADE B RESIDENCES

Dwellings constructed of good quality materials and workmanship, exhibiting pronounced architectural styling and treatment, and having an ample amount of built-in features. Custom built tract homes would normally fall into this classification.

FOUNDATION — Masonry or concrete block walls, concrete footings, drain tile. Full basement.

EXTERIOR WALLS — 5/8" lap siding, good grade aluminum or asbestos siding, face brick or native stone veneer; 1" D & M wood sheathing, plywood, or 25/32" insulation board sheathing, 2" x 4" wood studs 16" O.C., batt insulation, 1 3/4" wood doors and 1-3/8" double hung wood windows or aluminum frame windows, two coats exterior paint.

ROOF — Gable, hipped or gambrel type, wood, asphalt shingles, 1" D & M or plywood sheathing, 2" x 6" rafters 16" O.C., insulation, plain cornice, metal flashing, gutters and conductors.

FLOORS — Basement 4" cement on gravel base. Upper floors 1" hardwood sanded and varnished and areas with vinyl asbestos tile, ceramic tile and carpet; 1" D & M subfloor or 5/8" plywood subfloor; 2" x 10" wood joists 16" O.C., timber on steel girder and pipe column supports first floor. Attic floor and stairs not included in base price.

INTERIOR FINISH — Enameled trim, fir or white pine doors, good kitchen cabinets, linen and clothes closets. Drywall or plaster walls and ceilings, papered or painted, tiled bathroom, with formica vanity top.

HEATING — Forced warm air, steam, vapor, hot water, radiant or equal with thermostatic controls and automatic fired furnace or boiler. Exhaust fan in kitchen and bathroom.

PLUMBING — Good grade fixtures, copper piping, one bathroom, kitchen sink, water heater, laundry tubs.

LIGHTING — Electric lighting, BX or non-metallic cable wiring, good grade fixtures throughout.

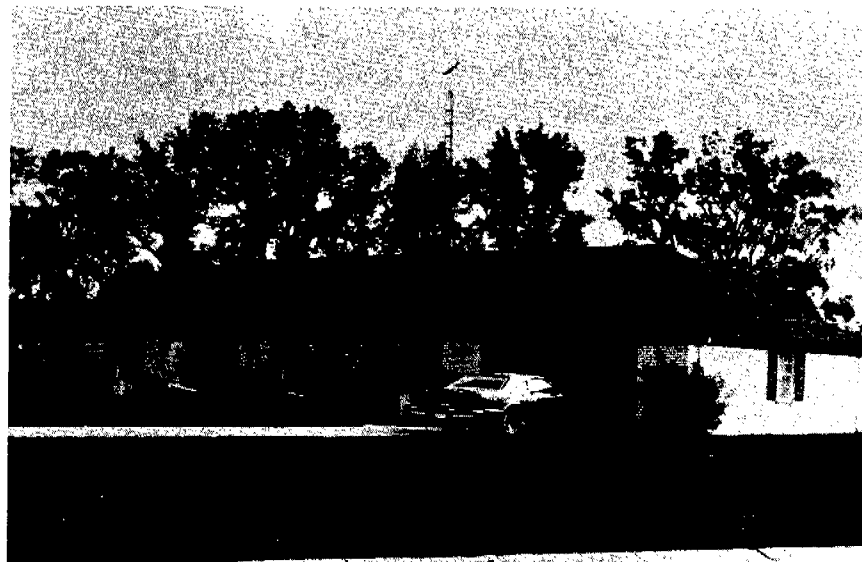
RESIDENCE — Grade B+



RESIDENCE — Grade B+



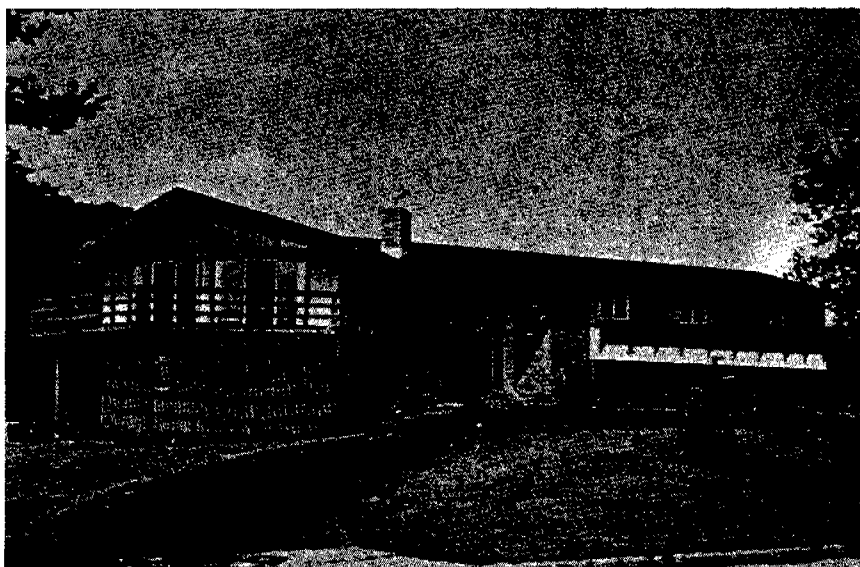
RESIDENCE — Grade B+



RESIDENCE — Grade B



RESIDENCE — Grade B



RESIDENCE — Grade B



RESIDENCE — Grade B-



RESIDENCE — Grade B-



RESIDENCE — Grade B-



BASE SPECIFICATIONS GRADE C RESIDENCES

Dwellings constructed of average quality materials and workmanship, exhibiting moderate architectural styling and treatment, and having a minimal amount of built-in features. Typical tract-built homes would normally fall into this classification.

FOUNDATION — Masonry or concrete block walls and concrete footings. Full basement.

EXTERIOR WALLS — 5/8" lap siding, average grade asbestos or aluminum siding, face brick split rock or native stone veneer; 1" plywood or 1/2" insulation board sheathing, 2" x 4" wood studs, 16" O.C., batt insulation, 1-3/8" wood doors, double hung sash or aluminum frame windows, two coats exterior paint.

ROOF — Gable or hipped, wood, asbestos or asphalt shingles, 1" sheathing, 2" x 6" rafters 16" O.C., plain cornice, galvanized metal flashing, gutters and downspouts.

FLOORS — Basement 4" cement on compacted earth. Upper floors hardwood sanded and varnished and areas with vinyl asbestos tile, ceramic tile and carpet; 1" wood subfloor or 1/2" plywood subfloor, 2" x 8" wood joists 16" O.C., timber or steel beam and lolly column first floor supports. Attic floor and stairs not included in base price.

INTERIOR FINISH — Pine or fir doors and trim enameled or varnished, average quality built-in kitchen cabinets, broom closet, linen and clothes closets. Drywall or plaster walls and ceilings, papered or painted.

HEATING — Forced air, steam, vapor, hot water or radiant with thermostatic controls and automatic fired furnace or boiler. Exhaust fan in kitchen.

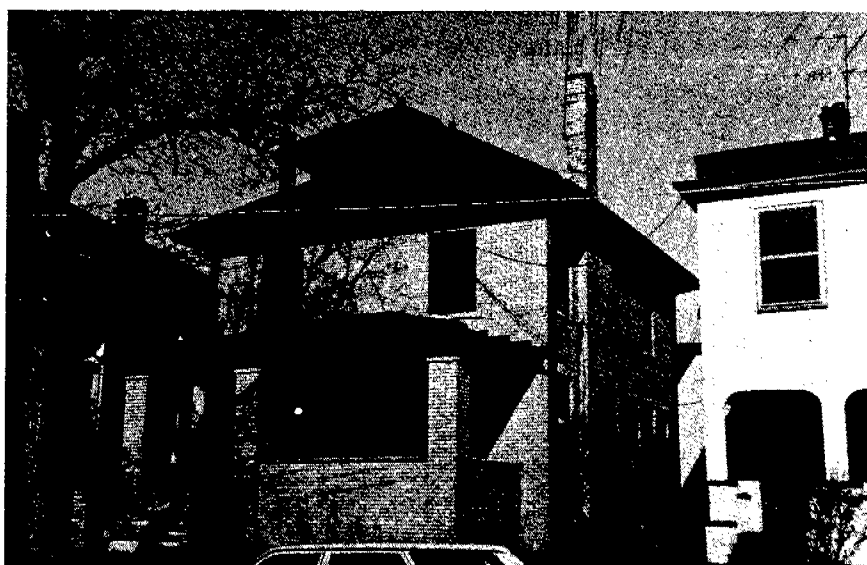
PLUMBING — Average grade fixtures, copper piping, one bathroom, kitchen sink, water heater.

LIGHTING — Electric lighting, non-metallic cable wiring, average grade fixtures.

RESIDENCE — Grade C+



RESIDENCE — Grade C+



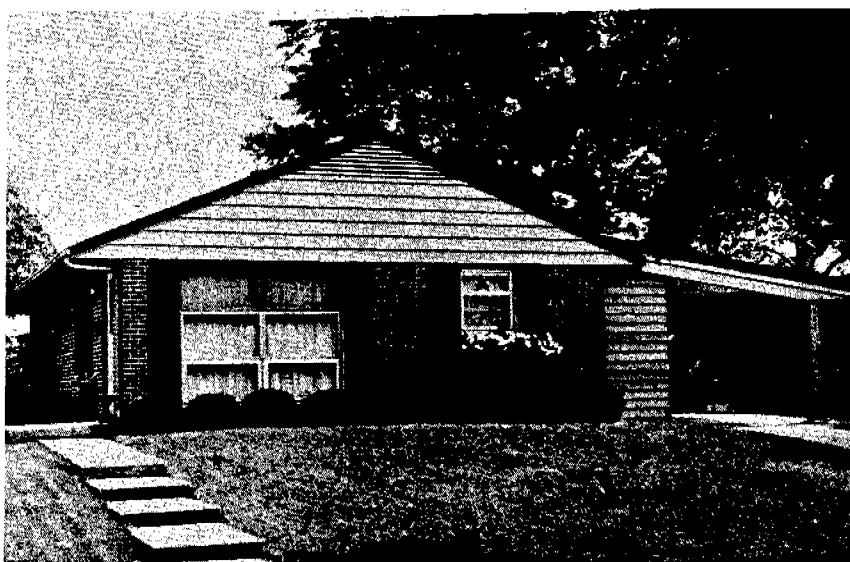
RESIDENCE — Grade C+



RESIDENCE — Grade C



RESIDENCE — Grade C



RESIDENCE — Grade C



RESIDENCE — Grade C-



RESIDENCE — Grade C-

RESIDENCE — Grade C-



BASE SPECIFICATIONS GRADE D RESIDENCES

Dwellings constructed of fair quality materials and workmanship, generally lacking architectural styling and treatment, and having only a scant amount of built-in features. Economy mass built homes would normally fall into this classification.

FOUNDATION — Concrete block walls, concrete footings. Full basement.

EXTERIOR WALLS — 1" drop siding, asbestos or aluminum siding, 4" face brick or split block, ½" insulation board, 2" x 4" studs 16" O.C., 1-3/8" wood doors and double hung wood sash or aluminum frame windows. Two coats exterior paint.

ROOF — Gable or hipped type asphalt shingles, wood sheathing, 2" x 4" rafters 16" O.C., wood cornice, galvanized metal gutters and conductors.

FLOORS — Basement 3" cement on compacted earth. Upper floors 1" plywood flooring with areas of linoleum, asphalt tile or carpet, 2" x 8" wood joist 16" O.C., wood girder and lolly column first floor supports. Attic floor and stairs not included in base price.

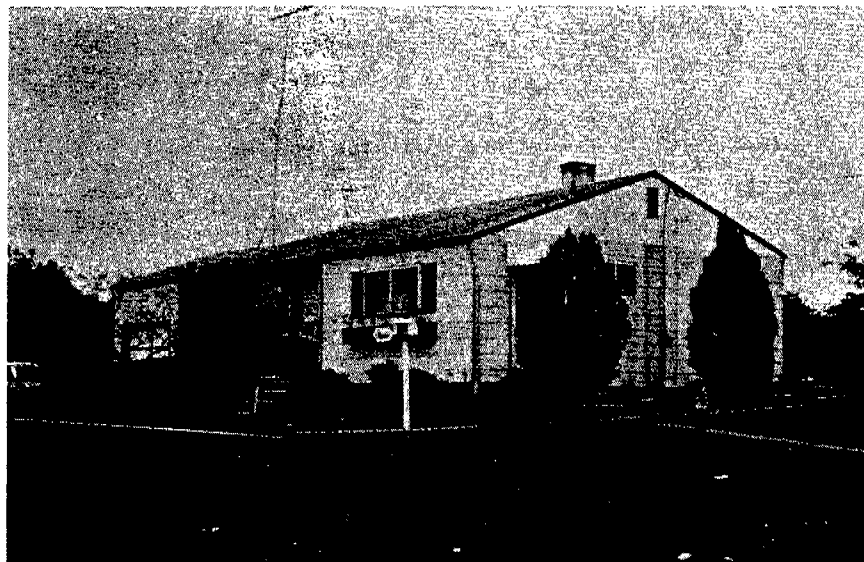
INTERIOR FINISH — Pine doors and trim throughout, drywall or plaster painted walls and ceilings. Cheap kitchen cabinets and clothes closets.

HEATING — Radiant, steam, forced warm air system or equal, with thermostat and automatic fired furnace or boiler.

PLUMBING — Cheap quality piping and fixtures, one bathroom, kitchen sink, water heater.

LIGHTING — Electric lighting, non-metal wiring, scarcity of outlets, and low cost fixtures.

RESIDENCE — Grade D+



RESIDENCE — Grade D+



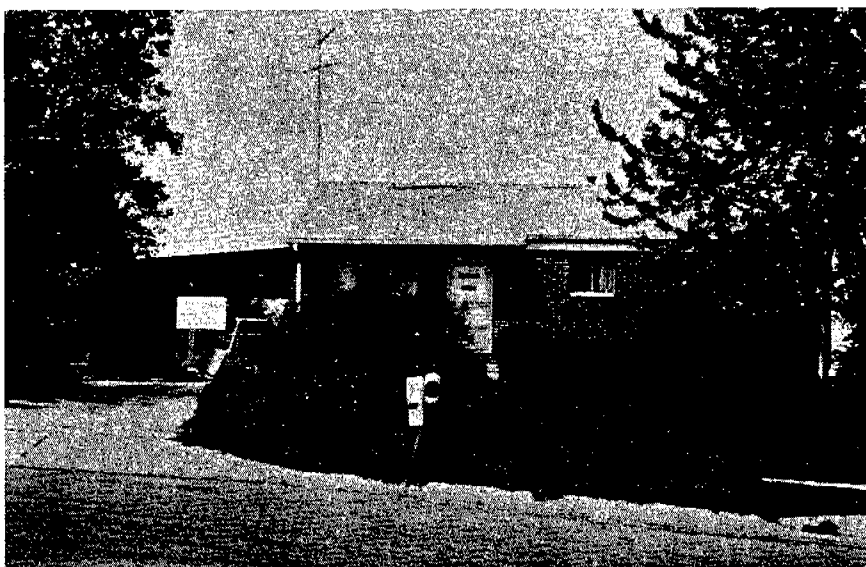
RESIDENCE — Grade D+



RESIDENCE — Grade D



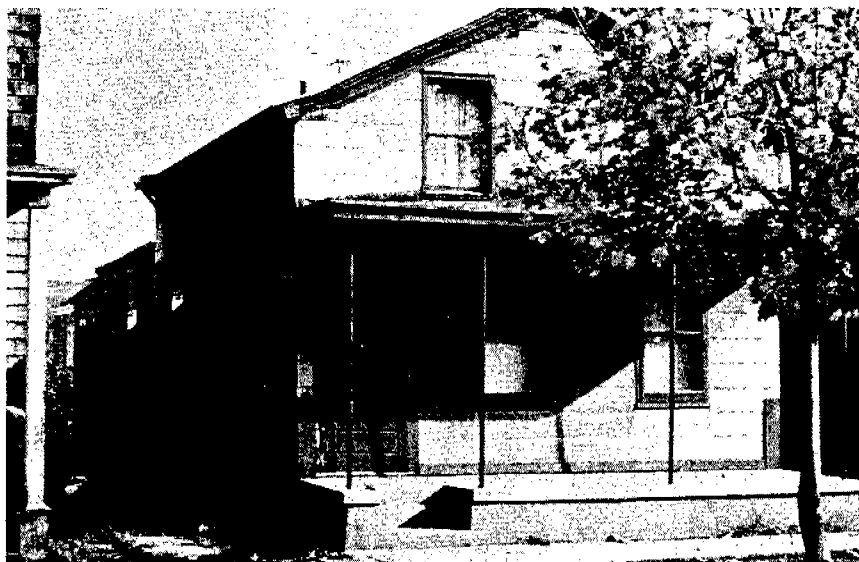
RESIDENCE — Grade D



RESIDENCE — Grade D



RESIDENCE — Grade D-



RESIDENCE — Grade D-



RESIDENCE — Grade D-



BASE SPECIFICATIONS GRADE E RESIDENCES

Dwellings constructed of cheap quality materials and poor workmanship, void of any architectural treatment and built-in features. Normally self built with mechanical contractor assistance.

FOUNDATION — Cement block walls, concrete footings. Full basement.

EXTERIOR WALLS — Drop siding, beveled wood siding no sheathing, asphalt siding or composition roll siding on $\frac{1}{2}$ " insul-board sheathing, 2" x 4" studs 24" O.C., 1-3/8" wood doors and windows, exterior painted.

ROOF — Gable or shed type, roll type, cheap asphalt shingles or metal roofing, 1" sheathing, 2" x 4" wood rafters 24" O.C., no cornice, gutters or conductors.

FLOORS — Basement 3" cement on earth. Upper floors softwood flooring 2" x 8" wood joists 20" O.C., wood girder and column supporting first floor. Attic floor and stairs not included in base price.

INTERIOR FINISH — Cheap pine doors and trim. Cheap kitchen cabinets and closets. Drywall, cheap panel or equal walls and ceilings, painted.

HEATING — Forced warm air system with thermostat control.

PLUMBING — Cheap quality piping and fixtures, one bathroom, kitchen sink, water heater.

LIGHTING — Electric lighting, non-metallic wiring, cheap fixtures, scarcity of outlets.

RESIDENCE — Grade E+

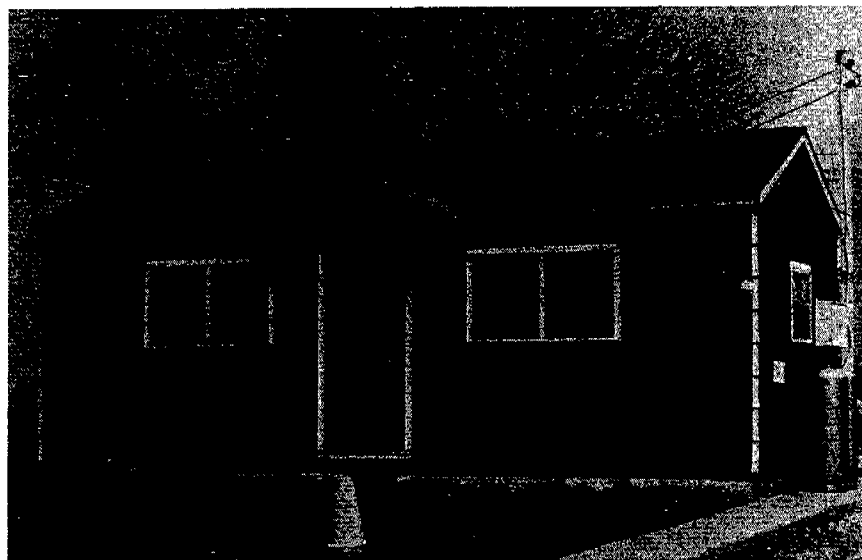


RESIDENCE — Grade E+

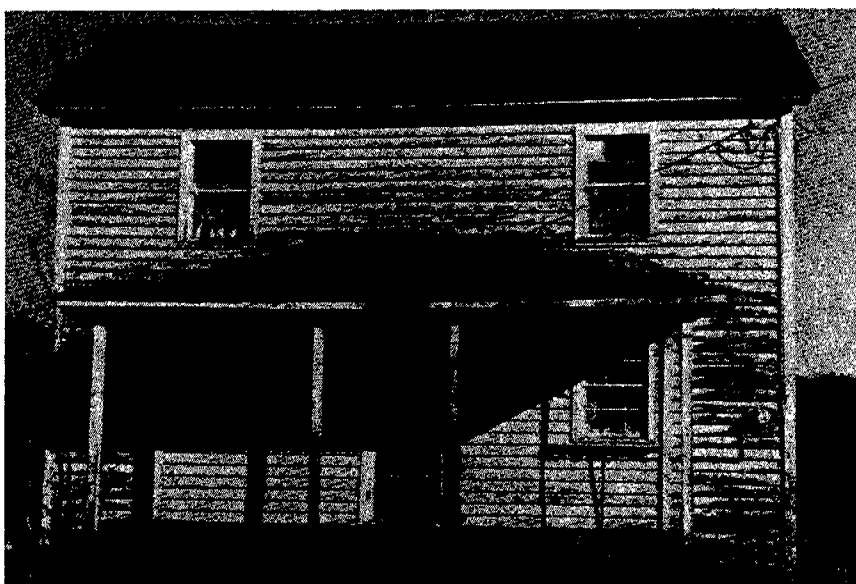
RESIDENCE — Grade E+



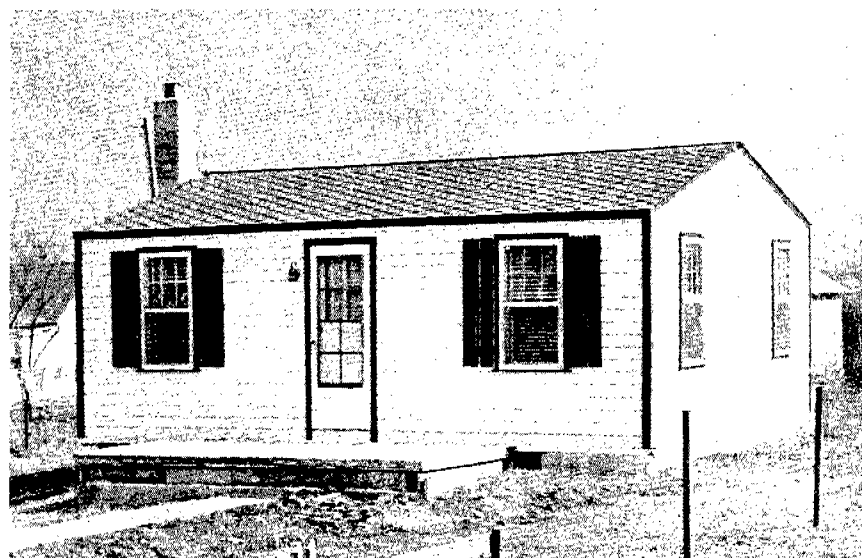
RESIDENCE — Grade E

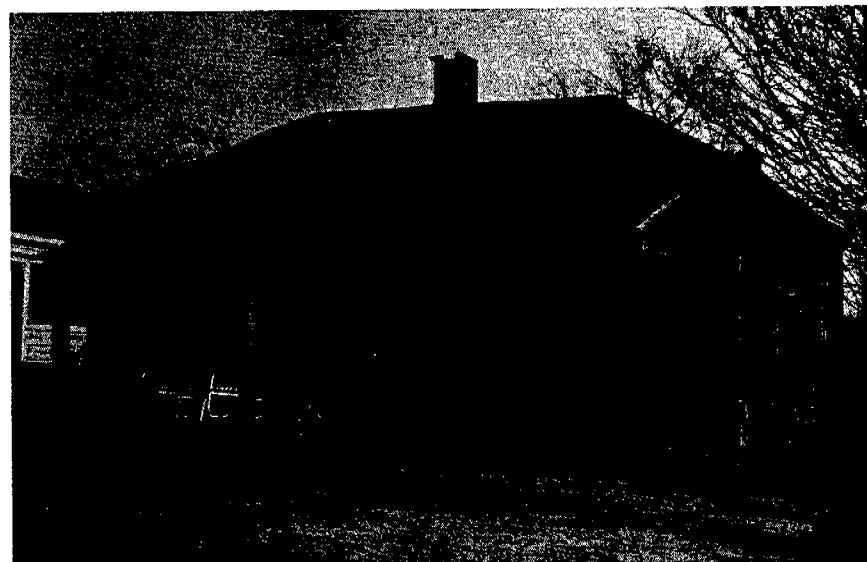


RESIDENCE — Grade E

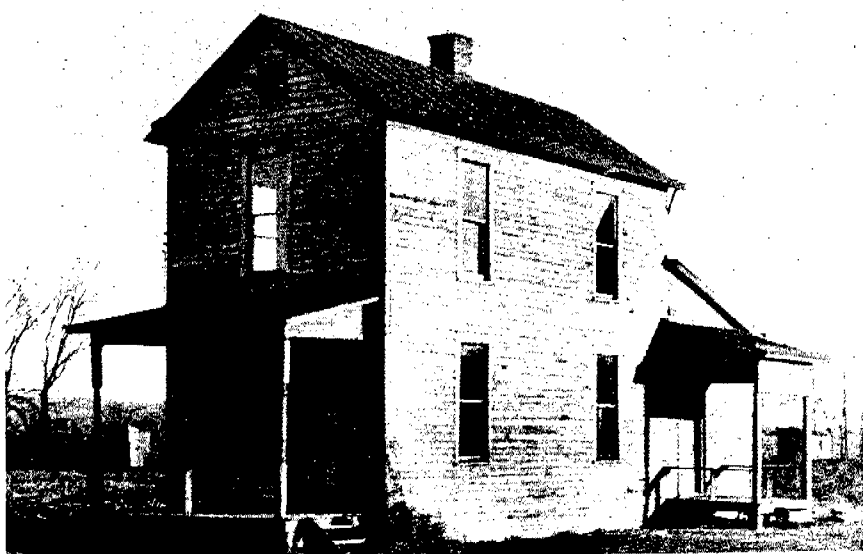


RESIDENCE — Grade E

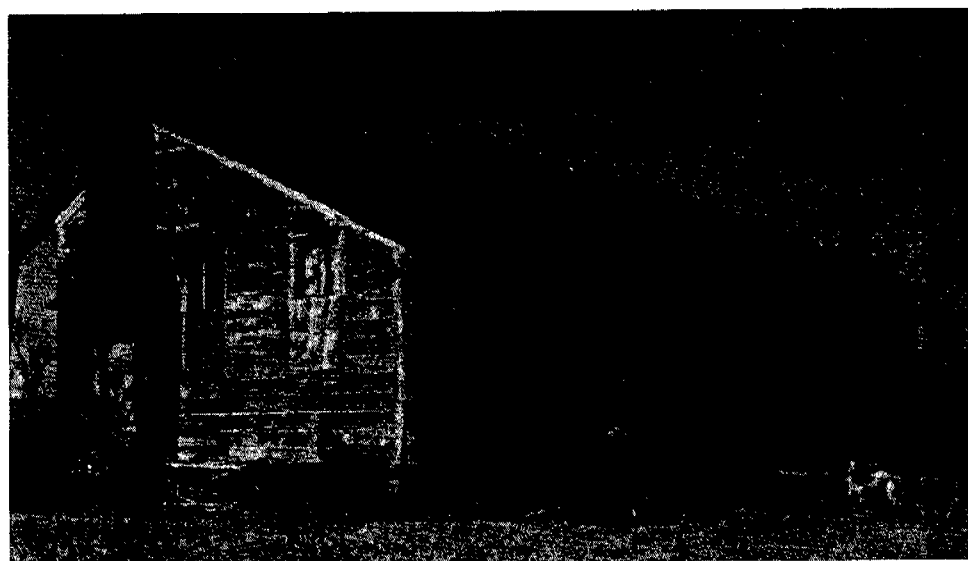




RESIDENCE — Grade E-



RESIDENCE — Grade E-



RESIDENCE — Grade E-

DWELLING PRICING SCHEDULE

The Dwelling Pricing Schedule is to be used for computing the replacement cost new of all single family dwellings, and certain multi-family dwellings not exceeding four living units. "C" Grade base prices are provided for 1 story, 1½ story, 2 story, 2½ story, and 3 story dwellings of frame and masonry exterior wall construction, along with tables of base price adjustments, additions, and other features.

GENERAL APPLICATION

The general application of the pricing schedule is to select the base price which is most representative of the subject dwelling, and to adjust that base price to account for any variations between the subject dwelling and the model. The procedure is as follows:

1. Select the proper *base price* on the basis of exterior wall construction, story height, and ground floor area of the main portion of the dwelling. The following applies . . .
 - a. Round the base ground floor area to the nearest 10 square feet. In rounding, round 1 to 4 square feet, down; and 5 to 9 square feet, up. For example, the area of 1921 to 1924 square feet inclusive would be rounded to 1920 square feet; whereas the area of 1925 to 1929 square feet inclusive would be rounded to 1930 square feet.
 - b. Base prices are given for sizes at 100 square foot intervals; it is, therefore, necessary to interpolate for sizes falling between those intervals. To facilitate this, the pricing schedules show whole dollar increment values between intervals. The base price, then, for a 1564 (rounded to 1560) square foot dwelling, depending upon its story height and wall construction, would be equal to . . .

Base Price for 1500 s.f. + $60/100$ (or .6) x Value Increment between 1500 and 1600 s.f.

- c. Base prices should be rounded to the nearest \$10.
2. Make the necessary *base price adjustments* to account for the following variations from the base specifications:
 - a. **Basement.** The base price includes a full basement. A deduction must be made if the dwelling has no basement, or only a

part basement. The deduction for "no basement" will differ depending upon whether the dwelling is built on a slab or over a crawl space.

- b. **Heating and Air Conditioning.** The base price includes a central heating system. A deduction must be made for "no heating", and an addition must be made for central air conditioning.
- c. **Plumbing.** The base price includes a three-fixture bathroom, a kitchen sink, and a water heater. An addition or deduction must be made for variations in the number of plumbing fixtures.
- d. **Attic.** The base price does not include an attic. An addition must be made for either unfinished, partially finished, fully finished, or fully finished with extra wall height attics.

Note: Adjustments for Basement, Heating and Air Conditioning, and Attics are given in whole dollar values for sizes at 100 square foot intervals. The following applies . . .

- 1) Adjustments are to be priced to the nearest 10 feet. Interpolate when necessary.
 - 2) Adjustments for plumbing are given in points per fixture. Each point is equivalent to a value of \$100.
 - 3) Adjustments are to be priced to the nearest \$10.
3. Add the price for all additions, i.e., features added to the dwelling, such as overhangs, living area additions, porches, attached garages, etc. The addition pricing tables show value points for various square foot areas. Each point is equivalent to a value of \$100. Price all exterior features to the nearest ten square feet shown on the schedule and interpolate. The following applies . . .
- a. **Overhangs . . .** refer to a portion of the living area, either at the first floor or at the upper floor level, which extends (overhangs) beyond the area designated as the "base ground floor area" and does not have a floor below it. Overhangs are priced using the first floor living area addition price.
Note: all overhang areas should be tied together and one price applied to the total overhang area.
 - b. **Additions . . .** refer to a portion of the living area, other than overhangs, which extends beyond and is not included in the area described as the "base ground floor area". For example,

that portion of the upper floor of a two story dwelling which extends over an attached garage or porch, or that portion of the first floor which has no upper floor over it. Living area additions also include those living areas which have been subsequently added to the dwelling, but are not included in the "base ground floor area".

- c. Attached Garages . . . refer to garages attached to, but not included in, the area designated as the "base ground floor area".
- d. Bays . . . refer to a projection, rather than an addition, of the living area of the dwelling, normally including a window or group of windows not included in the area designated as the "base ground floor area". Bays are priced using the first floor living area addition price.
- e. Stoops and Terraces . . . refer to masonry floor construction on fill, elevated above grade level and including a continuous foundation, steps and railing.
- f. Patios . . . refer to outside masonry floor construction at grade level. They may or may not be covered.

Note: covered patios should be priced as canopies over patios and not as open porches; patios significantly elevated above grade level are considered and priced as terraces.

- 4. Compute the price of other specified features from the *other feature* pricing table.
- 5. Sub-total the prices arrived at in Steps 1, 2, 3, and 4, and apply the proper quality grade factor.*
- 6. Apply the proper cost and/or design factor* to the sub-total arrived at in Step 5 to arrive at the replacement cost new of the dwelling.

*Refer to the section on "estimating replacement cost new" for an explanation of the application of grade, cost, and design factors.

Note: The pricing schedules are computer generated utilizing mathematical formulas to generate costs. It is possible to note a slightly different replacement cost new when comparing the usage of computer generated costs against the dwelling pricing schedules appearing in this manual. This is caused by the intricate rounding procedures of the computer and should not be considered an error in the printed schedules or the computer generated value.

DWELLING PRICING SCHEDULE

FRAME BASE PRICES					
AREA	1 Story & Bsmt.	1½ Story & Bsmt.	2 Story & Bsmt.	2½ Story & Bsmt.	3 Story & Bsmt.
300	22540	29170	33450	40080	44370
	2780	3590	4120	4940	5460
400	25320	32760	37570	45020	49830
	2770	3590	4120	4930	5460
500	28090	36350	41690	49950	55290
	2780	3590	4120	4940	5460
600	30870	39940	45810	54890	60750
	2770	3600	4120	4930	5460
700	33640	43540	49930	59820	66210
	2780	3590	4120	4930	5460
800	36420	47130	54050	64750	71670
	2770	3590	4110	4940	5460
900	39190	50720	58160	69690	77130
	2780	3590	4120	4930	5470
1000	41970	54310	62280	74620	82600
	2770	3590	4120	4940	5460
1100	44740	57900	66400	79560	88060
	2780	3590	4120	4930	5460
1200	47520	61490	70520	84490	93520
	2780	3590	4120	4930	5460
1300	50300	65080	74640	89420	98980
	2770	3590	4120	4940	5460
1400	53070	68670	78760	94360	104440
	2780	3590	4110	4930	5460
1500	55850	72260	82870	99290	109900
	2770	3600	4120	4940	5470
1600	58620	75860	86990	104230	115370
	2780	3590	4120	4930	5460
1700	61400	79450	91110	109160	120830
	2770	3590	4120	4940	5460
1800	64170	83040	95230	114100	126290
	2780	3590	4120	4930	5460
1900	66950	86630	99350	119030	131750
	2770	3590	4120	4930	5460
2000	69720	90220	103470	123960	137210
	2780	3590	4110	4940	5460
2100	72500	93810	107580	128900	142670
	2770	3590	4120	4930	5460
2200	75270	97400	111700	133830	148130
	2780	3590	4120	4940	5470
2300	78050	100990	115820	138770	153600
	2770	3590	4120	4930	5460
2400	80820	104580	119940	143700	159060
	2780	3590	4120	4940	5460
2500	83600	108170	124060	148640	164520
	2770	3600	4120	4930	5460
2600	86370	111770	128180	153570	169980
	2780	3590	4110	4930	5460
2700	89150	115360	132290	158500	175440
	2770	3590	4120	4940	5460
2800	91920	118950	136410	163440	180900
	2780	3590	4120	4930	5460
2900	94700	122540	140530	168370	186360
	2770	3590	4120	4940	5470
3000	97470	126130	144650	173310	191830
	2780	3590	4120	4930	5460
3100	100250	129720	148770	178240	197290
	2770	3590	4120	4940	5460
3200	103020	133310	152890	183180	202750
	2780	3590	4110	4930	5460
3300	105800	136900	157000	188110	208210
	2770	3590	4120	4930	5460
3400	108570	140490	161120	193040	213670
	2780	3600	4120	4940	5460
3500	111350	144090	165240	197980	219130
	2770	3590	4120	4930	5470
3600	114120	147680	169360	202910	224600
	2780	3590	4120	4940	5460
3700	116900	151270	173480	207850	230060
	2770	3590	4120	4930	5460
3800	119670	154860	177600	212780	235520
	2780	3590	4110	4930	5460
3900	122450	158450	181710	217710	240980
	2770	3590	4120	4940	5460
4000	125220	162040	185830	222650	246440
	27760	35910	41190	49340	54620
5000	152980	197950	227020	271990	301060

MASONRY BASE PRICES					
AREA	1 Story & Bsmt.	1½ Story & Bsmt.	2 Story & Bsmt.	2½ Story & Bsmt.	3 Story & Bsmt.
300	25020	32670	38140	45890	51240
	3080	4020	4690	5650	6310
400	28100	36690	42830	51540	57550
	3080	4030	4700	5650	6310
500	31180	40720	47530	57190	63860
	3080	4020	4690	5650	6310
600	34260	44740	52220	62840	70170
	3080	4020	4700	5650	6300
700	37340	48760	56920	68490	76470
	3080	4020	4690	5650	6310
800	40430	52780	61610	74140	82780
	3080	4020	4700	5650	6310
900	43510	56800	66310	79790	89090
	3080	4030	4690	5650	6310
1000	46590	60830	71000	85440	95400
	3080	4020	4700	5650	6310
1100	49670	64850	75700	91090	101710
	3080	4020	4690	5650	6300
1200	52750	68870	80390	96740	108010
	3080	4020	4700	5650	6310
1300	55830	72890	85090	102390	114320
	3080	4020	4690	5650	6310
1400	58910	76910	89780	108040	120630
	3080	4030	4700	5650	6310
1500	61990	80940	94480	113690	126940
	3080	4020	4690	5650	6310
1600	65070	84960	99170	119340	133250
	3080	4020	4700	5650	6300
1700	68150	88980	103870	124990	139550
	3080	4020	4690	5650	6310
1800	71230	93000	108560	130640	145860
	3080	4020	4700	5650	6310
1900	74310	97020	113260	136290	152170
	3080	4030	4690	5650	6310
2000	77390	101050	117950	141940	158480
	3080	4020	4700	5650	6310
2100	80470	105070	122650	147590	164790
	3080	4020	4690	5650	6310
2200	83550	109090	127340	153240	171100
	3080	4020	4700	5650	6300
2300	86630	113110	132040	158890	177400
	3080	4020	4690	5650	6310
2400	89710	117130	136730	164540	183710
	3080	4030	4700	5650	6310
2500	92790	121160	141430	170190	190020
	3080	4020	4690	5650	6310
2600	95870	125180	146120	175840	196330
	3080	4020	4700	5650	6310
2700	98950	129200	150820	181490	202640
	3080	4020	4690	5650	6300
2800	102030	133220	155510	187140	208940
	3080	4020	4700	5650	6310
2900	105110	137240	160210	192790	215250
	3080	4030	4690	5650	6310
3000	108190	141270	164900	198440	221560
	3090	4020	4700	5650	6310
3100	111280	145290	169600	204090	227870
	3080	4020	4690	5650	6310
3200	114360	149310	174290	209740	234180
	3080	4020	4700	5650	6300
3300	117440	153330	178990	215390	240480
	3080	4020	4690	5640	6310
3400	120520	157350	183680	221030	246790
	3080	4030	4690	5650	6310
3500	123600	161380	188370	226680	253100
	3080	4020	4700	5650	6310
3600	126680	165400	193070	232330	259410
	3080	4020	4690	5650	6310
3700	129760	169420	197760	237980	265720
	3080	4020	4700	5650	6300
3800	132840	173440	202460	243630	272020
	3080	4020	4690	5650	6310
3900	135920	177460	207150	249280	278330
	3080	4030	4700	5650	6310
4000	139000	181490	211850	254930	284640
	30800	40220	46950	56500	63080
5000	169800	221710	258800	311430	347720

DWELLING PRICING SCHEDULE – BASE PRICE ADJUSTMENTS

BASEMENTS (-)			
AREA	Slab	Crawl Space	Part/Half
300	3120	1680	1370
400	3500	1880	1530
500	3880	2090	1700
600	4270	2290	1870
700	4650	2500	2040
800	5040	2700	2210
900	5420	2900	2380
1000	5800	3120	2540
1100	6190	3320	2710
1200	6570	3530	2880
1300	6950	3730	3050
1400	7340	3940	3220
1500	7720	4150	3380
1600	8100	4360	3550
1700	8490	4560	3720
1800	8870	4760	3890
1900	9260	4970	4060
2000	9640	5170	4230
2100	10020	5390	4390
2200	10410	5590	4560
2300	10790	5800	4730
2400	11170	6000	4900
2500	11560	6200	5070
2600	11940	6410	5230
2700	12330	6620	5400
2800	12710	6830	5570
2900	13090	7030	5740
3000	13480	7240	5910
3100	13860	7440	6080
3200	14240	7640	6240
3300	14630	7860	6410
3400	15010	8060	6580
3500	15390	8270	6750
3600	15780	8470	6920
3700	16160	8680	7080
3800	16550	8880	7250
3900	16930	9100	7420
4000	17310	9300	7590
5000	21150	11350	9270

HEATING (-)										
AREA	1 Story		1½ Story		2 Story		2½ Story		3 Story	
	No Heat	Non Cent.	No Heat	Non Cent.	No Heat	Non Cent.	Heat	Non Cent.	No Heat	Non Cent.
300	1080	570	1400	740	1610	850	1920	1020	2130	1130
400	1210	650	1570	840	1800	960	2160	1150	2390	1270
500	1350	720	1740	930	2000	1060	2400	1270	2650	1410
600	1480	790	1920	1020	2200	1170	2630	1400	2910	1550
700	1610	860	2090	1110	2400	1270	2870	1530	3180	1690
800	1750	930	2260	1200	2590	1380	3110	1650	3440	1830
900	1880	1000	2430	1290	2790	1480	3340	1780	3700	1970
1000	2010	1070	2610	1390	2990	1590	3580	1900	3960	2110
1100	2150	1140	2780	1480	3190	1690	3820	2030	4220	2250
1200	2280	1210	2950	1570	3380	1800	4050	2150	4490	2390
1300	2410	1280	3120	1660	3580	1900	4290	2280	4750	2520
1400	2550	1350	3290	1750	3780	2010	4530	2410	5010	2660
1500	2680	1420	3470	1840	3980	2110	4760	2530	5270	2800
1600	2810	1500	3640	1930	4170	2220	5000	2660	5540	2940
1700	2950	1570	3810	2030	4370	2320	5240	2780	5800	3080
1800	3080	1640	3980	2120	4570	2430	5470	2910	6060	3220
1900	3210	1710	4160	2210	4770	2530	5710	3040	6320	3360
2000	3350	1780	4330	2300	4960	2640	5950	3160	6580	3500
2100	3480	1850	4500	2390	5160	2740	6180	3290	6850	3640
2200	3610	1920	4670	2480	5360	2850	6420	3410	7110	3780
2300	3740	1990	4850	2580	5560	2950	6660	3540	7370	3920
2400	3880	2060	5020	2670	5750	3060	6890	3670	7630	4060
2500	4010	2130	5190	2760	5950	3160	7130	3790	7890	4200
2600	4140	2200	5360	2850	6150	3270	7370	3920	8160	4340
2700	4280	2270	5530	2940	6350	3370	7600	4040	8420	4470
2800	4410	2340	5710	3030	6550	3480	7840	4170	8680	4610
2900	4540	2420	5880	3130	6740	3580	8080	4290	8940	4750
3000	4680	2490	6050	3220	6940	3690	8320	4420	9200	4890
3100	4810	2560	6220	3310	7140	3790	8550	4550	9470	5030
3200	4940	2630	6400	3400	7340	3900	8790	4670	9730	5170
3300	5080	2700	6570	3490	7530	4000	9030	4800	9990	5310
3400	5210	2770	6740	3580	7730	4110	9260	4920	10250	5450
3500	5340	2840	6910	3670	7930	4210	9500	5050	10510	5590
3600	5480	2910	7090	3770	8130	4320	9740	5180	10780	5730
3700	5610	2980	7260	3860	8320	4420	9970	5300	11040	5870
3800	5740	3050	7430	3950	8520	4530	10210	5430	11300	6010
3900	5880	3120	7600	4040	8720	4630	10450	5550	11560	6150
4000	6010	3190	7770	4130	8920	4740	10680	5680	11820	6290
5000	7340	3900	9500	5050	10890	5790	13050	6940	14440	7680

FINISHED ATTICS (+)				
AREA	Un-Fin	Half	Full	Full/Wh
300	1850	2850	3840	4550
400	2080	3200	4320	5110
500	2310	3550	4790	5680
600	2530	3900	5260	6240
700	2760	4250	5730	6800
800	2990	4600	6210	7360
900	3220	4950	6680	7920
1000	3440	5300	7150	8480
1100	3670	5650	7630	9040
1200	3900	6000	8100	9600
1300	4130	6350	8570	10160
1400	4360	6700	9050	10720
1500	4580	7050	9520	11280
1600	4810	7400	9990	11840
1700	5040	7750	10470	12400
1800	5270	8100	10940	12960
1900	5490	8450	11410	13520
2000	5720	8800	11880	14090
2100	5950	9150	12360	14650
2200	6180	9500	12830	15210
2300	6410	9850	13300	15770
2400	6630	10200	13780	16330
2500	6860	10560	14250	16890
2600	7090	10910	14720	17450
2700	7320	11260	15200	18010
2800	7540	11610	15670	18570
2900	7770	11960	16140	19130
3000	8000	12310	16610	19690
3100	8230	12660	17090	20250
3200	8460	13010	17560	20810
3300	8680	13360	18030	21370
3400	8910	13710	18510	21930
3500	9140	14060	18980	22490
3600	9370	14410	19450	23060
3700	9590	14760	19930	23620
3800	9820	15110	20400	24180
3900	10050	15460	20870	24740
4000	10280	15810	21350	25300
5000	12550	19320	26080	30900

AIR CONDITIONING (+)					
AREA	1 Story	1½ Story	2 Story	2½ Story	3 Story
300	850	1100	1270	1520	1680
400	960	1240	1420	1710	1890
500	1060	1380	1580	1890	2090
600	1170	1510	1740	2080	2300
700	1270	1650	1890	2270	2510
800	1380	1790	2050	2450	2710
900	1480	1920	2200	2640	2920
1000	1590	2060	2360	2830	3130
1100	1690	2190	2520	3010	3340
1200	1800	2330	2670	3200	3540
1300	1910	2470	2830	3390	3750
1400	2010	2600	2980	3570	3960
1500	2120	2740	3140	3760	4160
1600	2220	2870	3300	3950	4370
1700	2330	3010	3450	4130	4580
1800	2430	3150	3610	4320	4780
1900	2540	3280	3760	4510	4990
2000	2640	3420	3920	4700	5200
2100	2750	3550	4080	4880	5400
2200	2850	3690	4230	5070	5610
2300	2960	3830	4390	5260	5820
2400	3060	3960	4540	5440	6020
2500	3170	4100	4700	5630	6230
2600	3270	4230	4860	5820	6440
2700	3380	4370	5010	6000	6650
2800	3480	4510	5170	6190	6850
2900	3590	4640	5320	6380	7060
3000	3690	4780	5480	6560	7270
3100	3800	4910	5640	6750	7470
3200	3900	5050	5790	6940	7680
3300	4010	5190	5950	7130	7890
3400	4110	5320	6100	7310	8090
3500	4220	5460	6260	7500	8300
3600	4320	5590	6420	7690	8510
3700	4430	5730	6570	7870	8710
3800	4530	5870	6730	8060	8920
3900	4640	6000	6880	8250	9130
4000	4740	6140	7040	8430	9330
5000	5790	7500	8600	10300	11400

PLUMBING
Point Value = \$100
BASE PRICE INCLUDES:
5 fixtures ...
equal to 20 points
ADD:
4 points per each
additional fixture
DEDUCT:
4 points per each
fixture less than 5

PRICING NOTE
INTERPOLATE:
All Base Prices
and Adjustment
Prices to the
nearest 10 S.F.

LIVING AREA ADDITIONS												
AREA	Frame or CB			Brick or Stone			AREA	Bsmt Add	Unfin Attic Add	Part Fin Attic Add	Full Fin Attic Add	Air Con Add
	First Floor	Upper Floor		First Floor	Upper Floor							
		Full Story	Half Story		Full Story	Half Story						
10	3	2	1	3	2	1	10	—	—	—	—	—
20	5	4	2	6	4	3	20	1	—	1	1	—
30	8	6	3	9	7	4	30	1	—	1	1	—
40	10	8	5	12	9	5	40	2	—	1	2	—
50	13	9	6	15	11	6	50	2	1	2	2	—
60	16	11	7	18	13	8	60	2	1	2	3	1
70	18	13	8	20	15	9	70	3	1	2	3	1
80	21	15	9	23	18	10	80	3	1	3	4	1
90	23	17	10	26	20	12	90	4	1	3	4	1
100	26	19	12	29	22	13	100	4	1	3	5	1
110	28	21	13	32	24	14	110	4	1	4	5	1
120	31	23	14	35	26	16	120	5	1	4	6	1
130	34	25	15	38	29	17	130	5	2	4	6	1
140	36	27	16	41	31	18	140	6	2	5	7	1
150	39	28	17	44	33	19	150	6	2	5	7	1
160	41	30	19	47	35	21	160	6	2	5	8	1
170	44	32	20	50	37	22	170	7	2	6	8	2
180	47	34	21	53	40	23	180	7	2	6	9	2
190	49	36	22	55	42	25	190	8	2	6	9	2
200	52	38	23	58	44	26	200	8	2	7	10	2
210	54	40	24	61	46	27	210	8	3	7	10	2
220	57	42	26	64	48	28	220	9	3	7	11	2
230	60	44	27	67	51	30	230	9	3	8	11	2
240	62	45	28	70	53	31	240	9	3	8	12	2
250	65	47	29	73	55	32	250	10	3	8	12	2
260	67	49	30	76	57	34	260	10	3	9	12	2
270	70	51	31	79	59	35	270	11	3	9	13	2
280	73	53	32	82	62	36	280	11	3	9	13	3
290	75	55	34	85	64	38	290	11	3	10	14	3
300	78	57	35	88	66	39	300	12	4	10	14	3
325	84	62	38	95	72	42	325	13	4	11	16	3
350	91	66	41	102	77	45	350	14	4	12	17	3
375	97	71	43	109	83	49	375	15	4	12	18	3
Over	25.90	18.95	11.60	29.20	22.00	12.95	Over	3.95	1.20	3.30	4.80	.90

AREA	ATTACHED GARAGES		CAR-PORT
	Frame or CB	Brick or Stone	Open
160	22	29	8
180	24	31	9
200	26	34	10
220	28	36	11
240	29	38	12
260	31	40	12
280	33	43	13
300	35	45	14
320	37	47	15
340	38	49	16
360	40	52	17
380	42	54	18
400	44	56	19
425	46	59	20
450	48	62	22
475	50	65	23
500	52	67	24
525	55	70	25
550	57	73	26
575	59	76	28
600	61	79	29
650	66	84	31
Over	12.15	15.60	4.80
GARAGE – EXTENSIONS			
FR or CB	8.90	BR/STN	11.30

PRICING NOTES	
BAYS -	Use First Floor Addition Prices.
OVERHANGS -	Use First Floor Addition Prices.
POINT VALUE = \$100	

ATTACHED GREENHOUSE	9.50 SF

AREA	PORCHES								AREA	MS or TERR	PATIOS		CNPY	SUN- DECKS	AREA	UTILITY BUILDINGS		
	Frame or CB				Brick or Stone													
	Open		Enclosed		Open		Enclosed				Conc or Brick	Conc or Brick	Flgstrn or Tile	Wood or Alum		Wood	Frame or CB	Brick or Stone
	First Floor	Upper Floor	First Floor	Upper Floor	First Floor	Upper Floor	First Floor	Upper Floor										
20 40 60	3 6 8	2 3 5	4 9 13	3 5 8	3 7 10	2 5 7	5 10 15	3 6 10	20 40 60	2 4 5	— 1 1	1 2 3	1 2 3	1 2 4	20 40 60	1 3 4	2 3 5	
80 100 120	11 14 17	7 9 10	17 22 26	10 13 16	13 17 20	9 12 14	20 25 30	13 16 19	80 100 120	7 9 11	2 2 2	4 5 6	4 5 6	5 6 7	80 100 120	5 7 8	7 9 10	
140 160 180	19 22 25	12 14 16	30 35 39	18 21 23	24 27 30	16 18 21	34 39 44	22 25 29	140 160 180	13 14 16	3 3 3	7 8 9	7 8 9	8 10 11	140 160 180	9 10 12	12 14 16	
200 220 240	28 30 33	17 19 21	43 48 52	26 28 31	34 37 40	23 25 28	49 54 59	32 35 38	200 220 240	18 20 22	4 4 5	10 11 12	10 11 12	12 13 14	200 220 240	13 14 16	17 19 21	
260 280 300	36 39 41	22 24 26	56 60 65	34 36 39	44 47 50	30 32 35	64 69 74	41 44 48	260 280 300	23 25 27	5 5 6	13 14 15	12 13 14	16 17 18	260 280 300	17 18 20	22 24 26	
325 350 375	45 48 52	28 30 32	70 76 81	42 45 49	55 59 63	37 40 43	80 86 92	52 55 59	325 350 375	29 32 34	6 7 7	17 18 19	16 17 18	20 21 23	325 350 375	21 23 24	28 30 32	
Over	13.80	8.65	21.60	12.95	16.80	11.50	24.60	15.85	Over	9.00	1.90	5.15	4.80	6.00	Over	6.50	8.65	

DWELLING PRICING SCHEDULE – OTHER FEATURES

MASONRY TRIM	Add Per S.F. Over Frame Base	6.25
WOODBURNING FIREPLACES	Add Per Item	
	Stack and One Opening	2200
	Each Additional Opening	1100
PREFABRICATED METAL FIREPLACES	Add Per Stack	1400
FINISHED BASEMENT RECREATION ROOMS	Refers to a relatively open undivided area not necessarily finished with a quality of materials and workmanship consistent with the main living area of the dwelling. Select the grade on the basis of the extent and quality of the construction components, ranging from a completely finished high cost interior exhibiting professional workmanship to semi-finished cheap interior exhibiting unskilled workmanship. Add Per S.F. of Finished Area Price Includes Interior Wall Finish, Flooring Ceiling, Lighting and Built-Ins.	6.25
	Add For Air Conditioning	.85
FINISHED BASEMENT LIVING AREA	Refers to a divided area finished with a quality of materials and workmanship consistent with the main living area of the dwelling . . . such as in the lower or grade level of split-level and bi-level dwellings. Add Per S.F. of Finished Area Price Includes Interior Wall Finish, Flooring, Ceiling, Lighting, Normal Built-Ins and Partitioning.	15.00
	Add For Air Conditioning	.85
UNFINISHED AREA	Refers to an area within the living area of the dwelling which lacks interior finish such as ceiling, wall and floor finish. Deduct per S.F. of Unfinished Area	5.40
BASEMENT GARAGES	Refers to any garage located within that area of a dwelling priced as a basement. Select the grade on the basis of the extent and quality of the components. A typical C Grade garage would be comparable to an attached garage, enclosed, semi-finished and compact, such as the type normally found in the lower or grade level of split-level and bi-level dwellings; B and A Grade garages would be similarly constructed, but more spacious and finished to a greater extent and quality; D and E Grade garages would be relatively unfinished with the E Grade open to the other portions of the basement. Add Per Item Price Includes Doors, Enclosure Walls, Interior Finish and Lighting. 1 Car Garage	800
	2 Car Garage	1100
	3 Car Garage	1400
	4 Car Garage	1600
	5 Car Garage	1800

Price all items to nearest \$100. List on the property record card, the size or quantity, grade and point value (1 Point = \$100) of each feature.
Use the space provided below to note additional data and instructions particular to your project.

RESIDENTIAL SWIMMING POOLS

Base Prices include — Basic Pool structure, filter and pump equipment,
all plumbing, drains, and a minimum 3' perimeter concrete walkway.

Structure Type Code	Pool Size	Depth	Area	Cost per S/F	Contractor Price
PLASTIC LINER TYPE — Sand hopper or sloping bottom, concrete block walls or equal.					
RP1	12 x 27	40" to 7'	324	15.60	5100.00
RP1	16 x 32	40" to 7'	512	12.60	6500.00
RP1	18 x 36	40" to 7'	648	11.60	7500.00
RP1	20 x 40	40" to 7'	800	10.70	8600.00
PRE-FABRICATED POOLS — Vinyl liner, sand hopper bottom, galvanized steel walls or equal.					
RP2	12 x 27	44" to 7'	324	18.40	6000.00
RP2	16 x 32	44" to 7'	512	14.45	7400.00
RP2	18 x 36	44" to 7'	648	13.00	8400.00
RP2	20 x 40	44" to 7'	800	11.65	9300.00
REINFORCED CONCRETE POOLS — Good quality poured concrete walls and bottom.					
RP3	12 x 27	3' to 7'	324	23.45	7600.00
RP3	16 x 32	3' to 7'	512	18.40	9400.00
RP3	18 x 36	3' to 7'	648	16.60	10800.00
RP3	20 x 40	3' to 8'	800	14.80	11800.00
FIBERGLASS POOLS — ½" rigid fiberglass self-supporting pools.					
RP4	12 x 27	44" to 7'	324	25.50	8300.00
RP4	16 x 32	44" to 7'	512	20.00	10200.00
RP4	18 x 36	44" to 7'	648	18.00	11700.00
RP4	20 x 40	44" to 7'	800	16.15	12900.00
GUNITE TYPE POOLS — Gunite sprayed steel walls and bottom.					
RP5	12 x 27	3' to 7'	324	27.50	8900.00
RP5	16 x 32	3' to 7'	512	24.00	12300.00
RP5	18 x 36	3' to 7'	648	22.80	14800.00
RP5	20 x 40	3' to 8'	800	21.60	17300.00

BASE PRICE ADJUSTMENTS			
CODE	MODIFICATION CODES	CODE	SPECIAL MODIFICATION CODES
1	No Filter (-) 1130	SP1	Diving Board — each (+) 380
2	Gas or Propane Heating Built into Circulating System (+) 910	SP2	Chrome or Steel Ladder — ea. (+) 160
3	Electric Heating (+) 1980	SP3	Underwater Lighting — per Fixture (+) 140

Percent (%) Good Guideline — Value reduction of 10% per year for the first 5 years and 5% per year for the next 5 years. A pool with utility value will have a remaining value of 25%.

RESIDENTIAL YARD ITEMS

TYPE AND QUALITY GRADE	DETACHED GARAGE C		ATTACHED GARAGE C	
	RG1	RG2	RA1	RA2
STRUCTURE CODE				
CONSTRUCTION	FRAME	MASONRY	FRAME	MASONRY
AREA				
160	22.25	36.55	13.90	18.20
180	20.75	33.85	13.35	17.40
200	19.55	31.65	12.90	16.80
220	18.55	29.85	12.55	16.30
240	17.75	28.40	12.25	15.90
260	17.05	27.15	11.95	15.55
280	16.45	26.05	11.75	15.20
300	15.95	25.10	11.55	14.95
320	15.50	24.30	11.40	14.75
340	15.10	23.60	11.25	14.55
360	14.75	22.95	11.10	14.35
380	14.40	22.35	11.00	14.20
400	14.15	21.85	10.90	14.05
425	13.80	21.30	10.75	13.90
450	13.55	20.75	10.65	13.75
475	13.25	20.30	10.55	13.60
500	13.05	19.90	10.50	13.50
525	12.85	19.50	10.40	13.40
550	12.65	19.20	10.35	13.30
575	12.50	18.85	10.30	13.20
600	12.30	18.60	10.20	13.10
650	12.05	18.10	10.10	13.00
700	11.80	17.65	10.05	12.85
750	11.60	17.30	9.95	12.75
800	11.40	16.95	9.90	12.65
850	11.25	16.65	9.90	12.65
900	11.10	16.40	9.90	12.65
950	11.00	16.20	9.90	12.65
1000	10.85	16.00	9.90	12.65
OVER 1000	10.85	16.00	9.90	12.65

DETACHED RESIDENTIAL GREENHOUSES			
DETACHED STRUCTURE CODE	GH1	GH2	GH3
CONSTRUCTION	WOOD FRAME	METAL PIPE	PLASTIC
AREA			
20	49.90	75.10	37.55
25	45.00	67.70	33.85
30	41.45	62.35	31.15
35	38.70	58.20	29.10
40	36.55	54.95	27.45
45	34.75	52.25	26.10
50	33.25	50.00	25.00
60	30.85	46.35	23.20
70	29.00	43.60	21.80
80	27.55	41.35	20.70
90	26.30	39.55	19.75
100	25.30	38.00	19.00
120	23.65	35.55	17.75
140	22.40	33.65	16.80
160	21.40	32.10	16.05
180	20.55	30.85	15.40
200	19.85	29.80	14.90
220	19.25	28.90	14.45
240	18.70	28.10	14.05
260	18.25	27.40	13.70
280	17.85	26.80	13.40
300	17.50	26.25	13.10
350	16.70	25.05	12.55
400	16.10	24.15	12.05
450	15.55	23.35	11.70
500	15.15	22.70	11.35
600	14.45	21.65	10.85
800	13.45	20.20	10.10
1000	12.80	19.20	9.60
OVER 1000	12.80	19.20	9.60

QUALITY GRADES FOR GARAGES ONLY	
AA	2.10
A	1.55
B	1.26
C	1.00
D	.78
E	.50

TYPE	CARPORT	CANOPY	UTILITY BUILDINGS	
STRUCTURE CODE	RC1	RC2	RS1	RS2
CONSTRUCTION	OPEN FR./MTL.	OPEN FR./MTL.	FRAME or CB	MASONRY
PRICE/S.F.	4.80	4.80	6.50	8.65

TENNIS COURTS		
STRUCTURE CODE	CONSTRUCTION	CONTRACT PRICE
TC1	ASPHALT	15050
TC2	CONCRETE	18080
TC3	CLAY	10560

TYPE	BOAT HOUSES		PAVING	
CONSTRUCTION	FRAME OR C.B.	MAS.	ASPHALT OR BLACKTOP	CONC.
STRUCTURE CODE	RB1	RB2	CI1	CI2
PRICE/S.F.	6.80	8.95	1.25	2.35

BOAT DOCKS			
STRUCTURE CODE	CONSTRUCTION	DESCRIPTION	PRICE/L.F.
RD1	LIGHT	2" Deck, Light Posts and Pilings	12.00
RD2	MEDIUM	3" Deck, Average Posts and Pilings	18.00
RD3	HEAVY	4" Deck, Heavy Posts and Pilings	30.00

MULTI-FAMILY APARTMENTS
WALK-UP OR GARDEN TYPE-6 OR MORE UNITS

BASE PRICES - PER SQUARE FOOT									
AVERAGE UNIT SIZE	FRAME OR CONCRETE BLOCK			AVERAGE UNIT SIZE	BRICK OR EQUAL			AVERAGE UNIT SIZE	AIR CONDITIONING ADD PER FLOOR
	FINISHED BASEMENT	FIRST FLOOR	UPPER FLOOR		FINISHED BASEMENT	FIRST FLOOR	UPPER FLOOR		
300	35.45	39.30	37.20	300	40.35	44.75	42.40	300	3.50
350	33.00	36.65	34.75	350	37.60	41.80	39.60	350	3.15
400	30.90	34.55	32.45	400	35.25	39.35	37.00	400	2.85
450	28.95	32.65	30.50	450	33.00	37.20	34.75	450	2.65
500	27.55	31.05	28.95	500	31.40	35.35	33.00	500	2.45
550	26.10	29.65	27.55	550	29.75	33.75	31.40	550	2.30
600	25.10	28.40	26.35	600	28.60	32.40	29.95	600	2.30
650	24.05	27.40	25.25	650	27.40	31.25	28.75	650	2.10
700	23.35	26.55	25.55	700	26.60	30.25	28.00	700	2.10
750	22.60	25.80	23.90	750	25.80	29.35	27.20	750	1.95
800	21.95	25.10	23.15	800	25.00	28.60	26.40	800	1.95
850	21.40	24.75	22.60	850	24.35	28.20	25.80	850	1.95
900	21.05	24.25	22.15	900	23.95	27.60	25.25	900	1.75
950	20.50	23.70	21.60	950	23.35	27.00	24.65	950	1.75
1000	20.00	23.15	21.05	1000	22.75	26.40	24.05	1000	1.75
1050	19.65	22.80	20.70	1050	22.40	26.00	23.65	1050	1.75
1100	19.30	22.50	20.40	1100	22.00	25.60	23.20	1100	1.75
1150	19.10	22.30	20.20	1150	21.75	25.40	22.95	1150	1.55
1200	18.95	22.15	20.00	1200	21.60	25.20	22.75	1200	1.55
1250	18.75	21.95	19.85	1250	21.40	25.00	22.60	1250	1.55
1300	18.65	21.75	19.65	1300	21.20	24.75	22.40	1300	1.55
1350	18.50	21.60	19.50	1350	21.05	24.55	22.20	1350	1.55
1400	18.35	21.40	19.30	1400	20.95	24.35	22.00	1400	1.55
1450	18.30	21.25	19.10	1450	20.80	24.15	21.75	1450	1.55
1500	18.10	21.05	18.90	1500	20.60	23.95	21.55	1500	1.55
1550	17.90	20.85	18.75	1550	20.40	23.75	21.40	1550	1.55
1600	17.75	20.70	18.65	1600	20.20	23.55	21.20	1600	1.40
1650	17.55	20.50	18.45	1650	20.00	23.35	21.00	1650	1.40
1700	17.35	20.40	18.25	1700	19.80	23.20	20.80	1700	1.40
1750	17.20	20.20	18.10	1750	19.60	23.00	20.60	1750	1.40
1800	17.00	20.00	17.95	1800	19.35	22.75	20.45	1800	1.40
1850	16.90	19.85	17.80	1850	19.25	22.60	20.30	1850	1.40
1900	16.75	19.70	17.70	1900	19.10	22.50	20.10	1900	1.40
1950	16.60	19.60	17.55	1950	18.90	22.30	20.00	1950	1.40
2000	16.45	19.45	17.40	2000	18.75	22.15	19.85	2000	1.40
OVER	16.35	19.30	17.20	OVER	18.65	22.00	19.65	OVER	1.20

BASE PRICES ARE FOR WOOD JOIST CONSTRUCTION; FIRE RESISTANT, ADD 20%; REINFORCED CONCRETE, ADD 25%.

BASE PRICE ADJUSTMENTS - ADDITIONAL FEATURES			
UNFINISHED BASEMENTS - PER S.F. GROUND AREA		PLUMBING Base Price includes 5 Fixtures per Unit. Add or Deduct per Fixture: \$540.00	
1000 S.F.	6.35	ADDITIONS/ OTHER FEATURES . Price from Appropriate Residential Schedule.	
1500 S.F.	5.65		
2000 S.F.	5.35	POOLS Price from Appropriate Commercial Schedule.	
4000 S.F.	4.65		
6000 S.F.	4.30	YARD ITEMS Price from Appropriate Residential/Commercial Schedule.	
8000 S.F.	4.20		
10000 S.F.	4.20		

QUALITY FACTORS	
AA	+ 2.50
	2.10
	- 1.85
A	+ 1.67
	1.55
	- 1.45
B	+ 1.35
	1.26
	- 1.17
C	+ 1.08
	1.00
	- .92
D	+ .85
	.78
	- .70
E	+ .60
	.50
	- .40

MOBILE HOMES

This pricing schedule is to be used as a guide to assist the appraiser in arriving at a reasonable and equitable estimate of cost new for a variety of mobile homes. Base costs are given for three grades of mobile homes, and have been developed to reflect complete on-site costs, including delivery, set-up charges and utility hook-ups. The costs do not include appliances, furniture, draperies, or other items normally considered household contents. Application of the schedule involves the selection of the Quality and Design Grade most representative of the subject mobile home as per the base specifications, and adjusting the corresponding base cost to account for certain specified variations and additions.

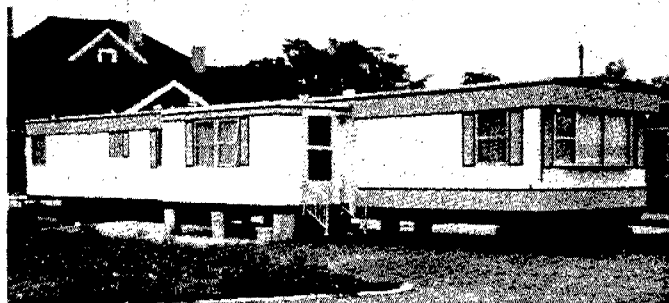
BASE SPECIFICATIONS

- B Grade** Custom-type mobile homes, built of high quality materials and workmanship throughout, having an abundance of special features, and exhibiting distinguished and attractive exterior wall and roof treatment, with conventional residential doors and windows, including bay windows in selected areas, and 8' ceilings in the living, dining, and kitchen areas. 2" x 4" wall studs and 2" x 6" or 2" x 8" floor joists 16" O.C. with 5/8" plywood subfloor. 1/4" high grade plywood interior paneling, high grade heavy duty vinyl flooring, and extensive use of good quality carpeting. Central heating, featuring large capacity ducts with cold air returns. Good code electrical and plumbing systems, with good quality fixtures.
- C Grade** Standard-type mobile homes, built of average quality materials and workmanship throughout, having a moderate amount of special features, and exhibiting a moderate exterior wall and roof treatment, with a conventional entrance door, louvered and picture windows, a raised roof, 8' ceiling in the living room. 2" x 4" wall studs and 2" x 6" or 2" x 8" floor joists 16" O.C. with 5/8" plywood subfloor. 1/4" plywood interior paneling, heavy duty vinyl flooring, and use of average quality carpeting. Central heating and good code electrical and plumbing systems, with average quality fixtures.

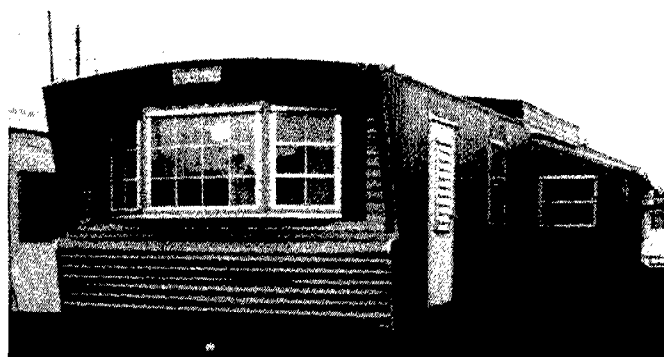
D Grade Economy-type mobile homes, built of low cost quality materials and workmanship throughout, having no special features, and exhibiting conventional, but scant mobile home exterior treatment in doors and windows. 2" x 3" wall studs and 2" x 6" floor joists 16" O.C. with 5/8" plywood subfloor. 3/16" plywood interior paneling, tile flooring, and scant carpeting. Central heating and minimal code electrical and plumbing systems, with economy quality fixtures.

PERCENT (%) GOOD GUIDELINES

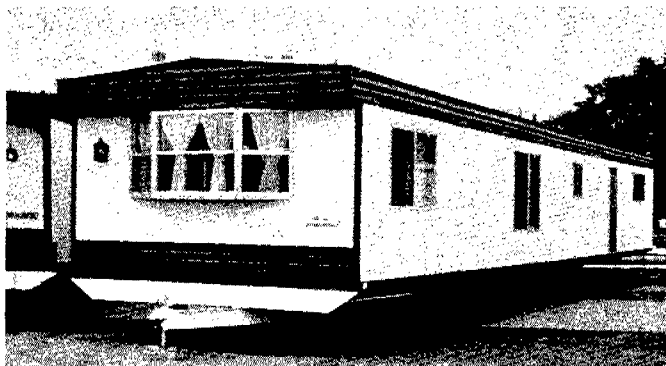
A mobile home has a relatively short life expectancy. Depending primarily upon its design and quality of construction, it will normally go out of style functionally and economically at a rate which is fairly consistent with its physical deterioration. Percent Good Tables designed to reflect this rate of normal depreciation are provided as a *guide* to assist the appraiser in arriving at a sound and equitable estimate of depreciated value. The percent good tables are based upon average condition, desirability and usefulness relative to actual age, and must therefore be adjusted accordingly to account for any factors which may contribute to a slower or faster rate of value loss.



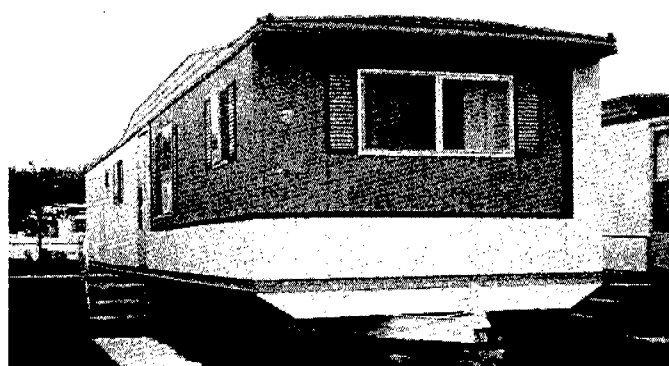
Grade B (With Expandable Room)



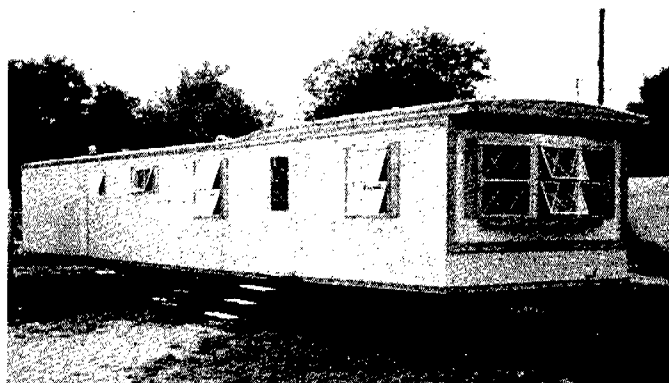
Grade B (With Tip-out Room)



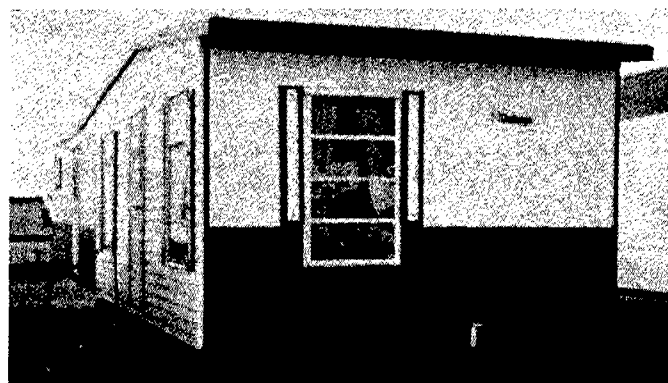
Grade C



Grade C



Grade C



Grade D

MOBILE HOMES
PRICING SCHEDULE APPLICATION

MANUAL APPLICATION

1. Determine the *Size* (length and width) of the mobile home. The length measurement should include the tow bar/hitch.
2. Determine the *Brand Name* and the *Year* the mobile home was manufactured.
3. Determine the proper *Quality Grade Factor*.
4. Select the *Base Price* from the appropriate schedule, based on size or area. Prices are provided for single-wide and double-wide units.
5. Multiply the square foot price by the *Area* to establish the total base value of the mobile home.
6. Add any *Other Features* or *Additions* costs to the subtotal value determined in Step 5.
7. Determine the *CDU* of the mobile home, and based on age and type, i.e., single-wide or double-wide, select the appropriate *% Good Factor* to be applied to the total replacement cost.

CAMA APPLICATION

1. Select the proper *Structure Type Code* and insert it on the card. There are two selections:

RM1 Standard width mobile homes, sizes 8 x 40 through 14 x 80
RM2 Double wide mobile homes, sizes 20 x 36 through 28 x 68
2. Insert the proper age (*Year made*) of the mobile home. Make every effort to obtain the correct age of the mobile home. This factor is essential to calculating a proper value of the mobile home.
3. Enter the proper *Size* of the mobile home. Sizes are to be determined by width and length, including the hitch. This is also essential in determining a proper value of the mobile home.
4. Insert the proper letter *Grade*.

5. Enter the proper *Condition* rating:
 - E to indicate excellent
 - G to indicate good
 - A to indicate average
 - F to indicate fair
 - P to indicate poor
 - U to indicate unsound
6. The *MA* or *Market Adjustment Factor* is an optional override percentage that may be used in rare instances to override the pre-calculated percent good figured in conjunction with the age and condition rating.
7. The *Mod Codes* or *Modification Codes* are inserted to describe extra features that may be included in mobile homes. (See schedule for code numbers and item descriptions.)
8. The *Special Modification Codes* are inserted to describe exterior features to mobile homes. (See schedule for codes and descriptions.) Entry for size must be either S.F. or L.F. and assumes the same grade and condition of the mobile home. Special modification codes must be entered directly beneath the mobile home structure code being described.
9. Enter the number of identical units.

MOBILE HOMES

SINGLE WIDE TYPE -STRUCTURE CODE RM1				
BASE COSTS				
SIZE*	AREA	QUALITY GRADE		
		B	C	D
8 x 40	320	34.70	27.55	21.50
8 x 44	352	33.20	26.35	20.50
10 x 36	360	32.80	26.05	20.30
10 x 40	400	31.20	24.80	19.30
10 x 44	440	30.00	23.80	18.60
10 x 48	480	28.90	23.00	17.95
10 x 52	520	27.70	22.00	17.15
10 x 56	560	27.00	21.40	16.70
10 x 60	600	26.30	20.90	16.30
10 x 64	640	25.70	20.40	15.90
10 x 68	680	25.20	20.00	15.60
12 x 36	432	30.10	23.90	18.60
12 x 40	480	28.90	23.00	17.95
12 x 44	528	27.70	22.00	17.15
12 x 48	576	26.75	21.25	16.55
12 x 52	624	25.90	20.60	16.10
12 x 56	672	25.20	20.00	15.60
12 x 60	720	24.65	19.55	15.25
12 x 64	768	24.05	19.10	14.90
12 x 70	840	23.30	18.50	14.40
14 x 48	672	25.20	20.00	15.60
14 x 52	728	24.50	19.45	15.20
14 x 56	784	23.80	18.90	14.75
14 x 60	840	23.30	18.50	14.40
14 x 64	896	22.75	18.05	14.10
14 x 70	980	22.15	17.60	13.70
14 x 80	1,120	21.50	17.05	13.25

*Includes Towbar, Normally 3 Feet in Length.

PERCENT (%) GOOD GUIDELINES - RM1						
AGE	EX	G	CDU			UN
			AV	F	P	
1	94	94	94	93	93	91
2	88	88	88	86	84	78
3	83	83	82	80	76	66
4	79	78	77	73	68	54
5	75	74	72	68	60	45
6	71	70	68	62	53	37
7	68	66	63	57	47	31
8	65	63	60	52	42	26
9	63	60	56	48	37	22
10	60	57	53	44	33	19
11	58	54	50	41	30	17
12	56	51	47	38	27	14
13	54	49	45	35	24	13
14	52	47	42	32	22	11
15	50	45	40	30	20	10

BASE COST MODIFICATIONS—C GRADE		
MODIFICATION CODE	DESCRIPTION	COST
1	Cent. Air Conditioning	1700.00
2	Metal Fireplace	1100.00
3	Slide Out/ Rollout Room	1600.00
4	Tip-Out Room	1100.00

DOUBLE WIDE TYPE - STRUCTURE CODE RM2				
BASE COSTS				
SIZE	AREA	QUALITY GRADE		
		B	C	D
20 x 36	720	31.70	25.15	19.60
20 x 40	800	30.25	24.00	18.70
20 x 44	880	29.10	23.10	18.00
20 x 48	960	28.20	22.40	17.45
20 x 52	1,040	27.40	21.80	17.00
20 x 56	1,120	26.90	21.40	16.70
20 x 60	1,200	26.10	20.70	16.15
20 x 64	1,280	25.60	20.30	15.85
20 x 68	1,360	25.30	20.10	15.65
24 x 40	960	28.20	22.40	17.45
24 x 44	1,056	27.65	21.95	17.10
24 x 48	1,152	26.80	21.30	16.60
24 x 52	1,248	25.90	20.60	16.10
24 x 56	1,344	25.30	20.10	15.65
24 x 60	1,440	19.70	19.70	15.35
24 x 64	1,536	19.40	19.40	15.10
24 x 68	1,632	19.00	19.00	14.80
28 x 56	1,568	24.25	19.25	15.00
28 x 60	1,680	23.65	18.80	14.65
28 x 64	1,792	23.30	18.50	14.40
28 x 68	1,904	23.00	18.25	14.20

PERCENT (%) GOOD GUIDELINES-RM2						
AGE	EX	G	CDU			UN
			A	F	P	
1	98	98	98	97	97	97
2	95	95	95	95	95	93
3	93	93	93	92	92	89
4	91	91	90	90	86	85
5	89	89	88	87	85	80
6	87	87	86	85	82	75
7	85	85	84	82	79	70
8	83	83	82	80	76	66
9	82	81	80	77	73	61
10	80	79	78	75	70	57
11	78	77	76	73	67	53
12	77	76	74	70	64	50
13	75	74	73	68	61	46
14	74	73	71	66	58	43
15	73	71	69	64	56	40
16	71	70	68	62	53	37
17	70	68	66	60	51	35
18	69	67	64	58	49	33
19	68	66	63	56	46	30
20	67	64	62	55	44	29
25	62	58	55	47	36	21
30	57	53	49	40	29	16
35	53	49	44	35	24	13
40	50	45	40	30	20	10

BASE COST MODIFICATIONS—C GRADE		
SPECIAL MODIF. CODES	DESCRIPTION	COST
SM1	Screened Porch	5.60 per S.F.
SM2	Wd/Mtl/Glass Addition	13.10 per S.F.
SM3	Covered Patio/Carport	4.80 per S.F.
SM4	Skirting	4.30 per L.F.
SM5	Wood Deck	6.00 per S.F.
SM6	Attached 1 st Fr	20.20 per S.F.
SM7	OFP(Dwelling Type)	10.75 per S.F.
SM8	Basement	7.60 per S.F.
SM9	Conc. Block Found.	8.40 per L.F.

AGRICULTURAL BUILDINGS

This section of the Manual has been developed to be used as a guide for estimating the replacement cost new of agricultural buildings. The Cost Schedules included contain base specifications and prices for normal "C" Grade average construction with additions and deductions to account for variations from the base specifications. These schedules are designed for either manual or computer application through the use of Structure Type Codes and Modifications. Specific instruction on the structure type code use and application can be found in the *Data Inventory* section of the Manual.

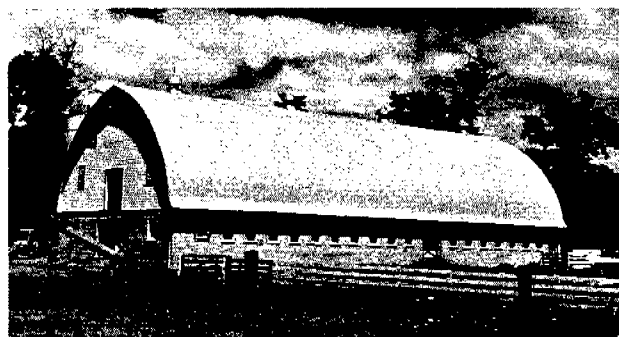
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Slurry Systems

SPECIAL PURPOSE DAIRY & HORSE BARN



Grade B

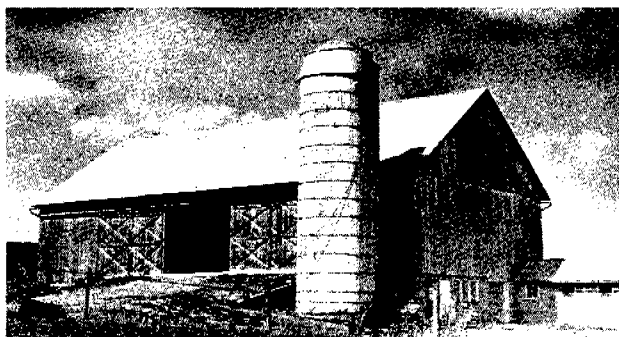


Grade B

GENERAL PURPOSE BANK BARN



Grade C



Grade D

GENERAL PURPOSE BARN & SHEDS



Grade B



Grade C



Grade C

GENERAL PURPOSE BARNs & SHEDs

BASE SPECIFICATIONS

FOUNDATION Concrete Walls and Footings.

WALLS Wood or Metal Siding on Wood Frame; Masonry for Stable, Normal Openings.

FLOORS First, Concrete; Upper, Wood on Wood Joist, Timber or Steel Beams and Columns.

ROOF Asphalt Shingles or Metal on Wood Decking, Rafters, and Timber Framing.

OTHER FEATURES Electric Lighting.

QUALITY GRADE SPECIFICATIONS

B GRADE Good Quality Construction with Numerous Electrical Fixtures and Outlets. Numerous Windows, Service Doors, and Equipment Access Doors.

C GRADE Average Quality Construction with Adequate Electrical System. Normal Windows, Service and Equipment Access Doors.

D GRADE Poor Quality Construction Utilizing Inferior Materials. Minimal Electric and Few Windows and Doors.

BASE PRICES - PER SQUARE FOOT

AREA	STRUCTURE TYPE		
	AD1	AB1	AB2
	DAIRY/HORSE	BANK	FLAT
800	28.05	20.55	9.80
1000	26.40	18.95	9.30
1200	25.20	17.90	8.90
1400	24.25	17.15	8.65
1600	23.45	16.60	8.40
1800	22.85	16.15	8.20
2000	22.30	15.80	8.05
2200	21.85	15.50	7.90
2400	21.40	15.25	7.80
2600	21.05	15.05	7.70
2800	20.75	14.90	7.60
3000	20.45	14.70	7.50
3200	20.20	14.60	7.40
3400	19.95	14.45	7.35
3600	19.75	14.35	7.30
3800	19.55	14.30	7.20
4000	19.40	14.20	7.15
4500	19.00	14.00	7.05
5000	18.65	13.85	6.95
5500	18.35	13.75	6.85
6000	18.10	13.65	6.80
6500	17.85	13.60	6.70
7000	17.65	13.50	6.65
7500	17.50	13.45	6.60
8000	17.30	13.40	6.55
8500	17.20	13.35	6.50
9000	17.05	13.30	6.45
9500	16.90	13.25	6.40
10000	16.80	13.25	6.40
OVER	16.80	13.25	6.40

BASE PRICE ADJUSTMENTS

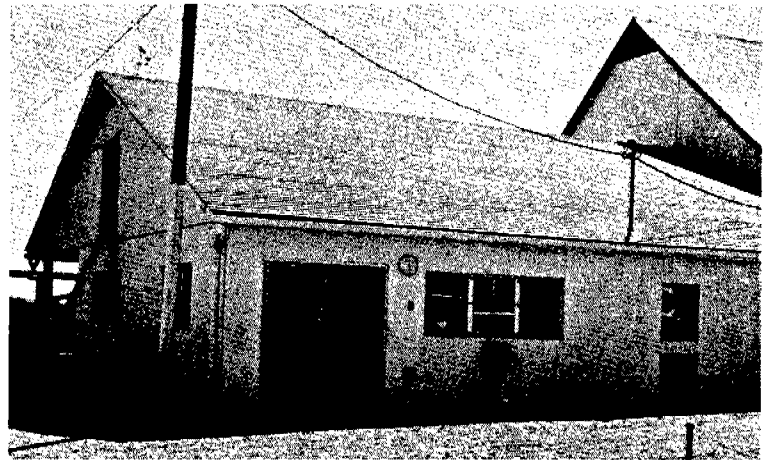
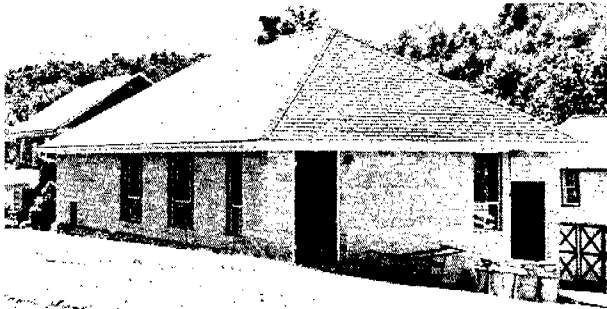
MODIFICATION CODE	BANK/FLAT BARNs
	<u>Add/Deduct Per S.F.</u>
1	Wood Loft Floor (+) \$ 1.70
2	Gambrel/Arch Roof..... (+) 1.20
3	Stalls/Partitions..... (+) .35
4	Earth Floor..... (-) 1.30
5	No Lighting..... (-) .35
FB1	Water Connection (+) 180.00
FB2	Roof Ventilators (each) (+) 222.00
	<u>DAIRY/HORSE BARNs</u>
	<u>Add Per Lineal Foot</u>
FD1	Barn Gutter Cleaner..... (+) \$ 29.65
FD2	Concrete Feed Bunk (+) 36.30
FD3	Wood Feed Bunk (+) 18.95
FD4	Mechanic Feeder - Auto..... (+) 82.50
FD5	- Manual (+) 65.35
	<u>Add/Deduct Per S.F.</u>
FD6	Stable Ceiling (+) .55
1	Earth Floor..... (-) 1.30
2	No Lighting..... (-) .35

STRUCTURE TYPE	CODE	COST PER S.F.
ATTACHED LEAN-TO	AL1	\$4.45

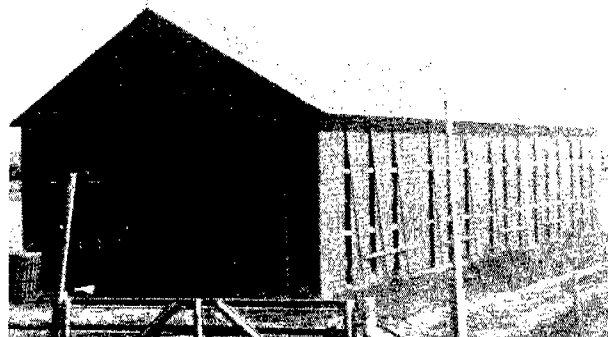
QUALITY GRADE FACTOR

B - 1.26
C - 1.00
D - .78

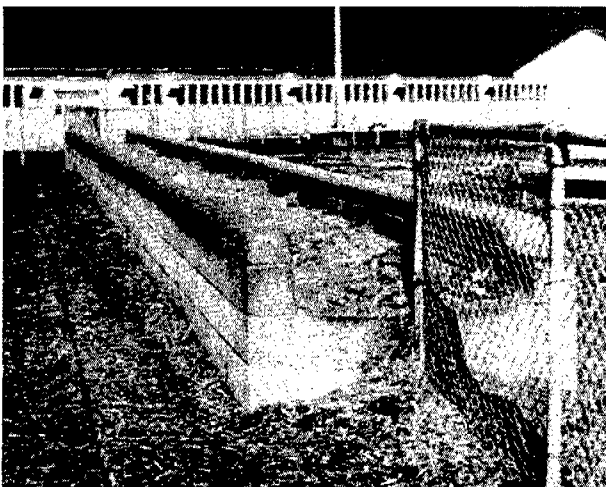
MILK HOUSES & MILKING PARLORS



TOBACCO BARN



CATTLE FEED BUNKS



CATTLE FENCE BUNKS



MILKING PARLORS & MILK HOUSES

BASE PRICES - PER SQUARE FOOT						
AREA	MILK HOUSES				MILKING PARLORS	
	ATTACHED		DETACHED			
	AM1	AM2	AM3	AM4	AM5	AM6
	C.B.	TILE	C.B.	TILE	C.B.	TILE
200	22.95	28.05	26.40	31.55	33.65	34.95
300	18.50	24.95	21.10	27.65	27.95	29.85
400	16.20	23.35	18.30	25.55	24.95	26.95
500	14.75	22.35	16.55	24.25	23.05	25.05
600	13.75	21.65	15.35	23.30	21.75	23.65
800	12.40	20.75	13.80	22.10	20.05	21.80
1000	11.60	20.20	12.80	21.35	18.95	20.55
1200	11.00	19.80	12.15	20.80	18.20	19.65

BASE SPECIFICATIONS	
FOUNDATION	Concrete Walls and Footings
WALLS.....	Concrete Block/Glazed Tile with Wood/Steel Sash Windows.
FLOOR	Concrete
ROOF.....	Double Pitch with Asphalt Shingles on Wood Decking and Framing.
OTHER FEATURES	Electric Lighting, Unit Heaters, Piping, Hose Bibs and Floor Drains.
MODIFICATION CODES	
1	Metal Roof(+) \$.65
2	Wood Shingle Roof.....(+) .55
3	Composition Roof(-) .55
4	No Heating.....(-) 1.85
	<u>Add: Each Item</u>
FM1	Water Heater.....(+) \$564.00
FM2	Exhaust Fan.....(+) 266.00

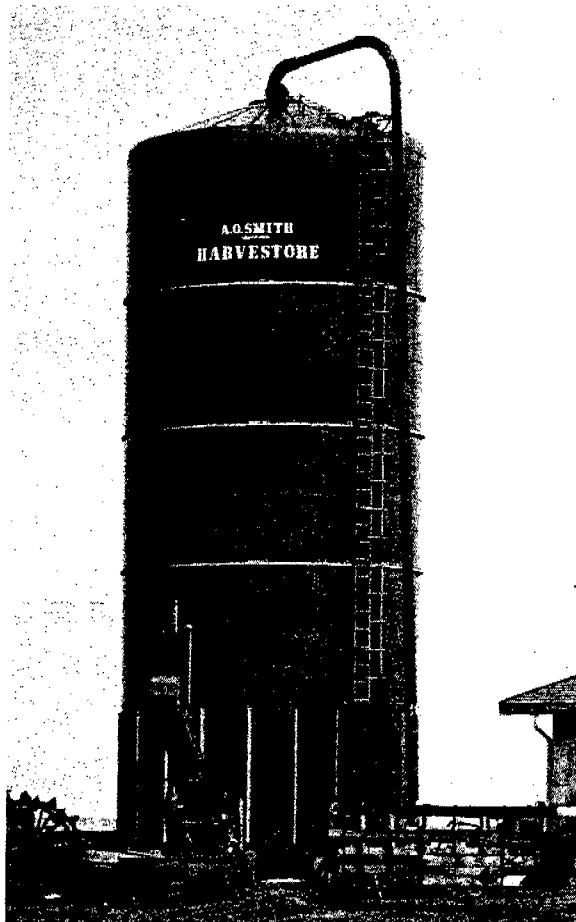
TOBACCO BARNs

BASE SPECIFICATIONS	
FOUNDATION	Concrete Pier
WALLS	Vented Wood Siding
FLOOR	Ground
ROOF	Shingle/Metal on Decking with Wood Framing. Post and Girder or Pole Construction.
OTHER FEATURES	Minimal Lighting
BASE PRICES - PER SQUARE FOOT	
AREA	A03
500	13.95
1000	11.00
2000	8.95
3000	8.05
4000	7.50
6000	6.85
8000	6.50
10000	6.20
MODIFICATION CODE	ADD/DEDUCT PER S.F.
1	No Lighting.....(-) \$.55
2	Concrete Floor.....(+) 1.30
	<u>Add Per Unit</u>
FO1	Ventilation Fan - 24"..... \$294.00
FO2	36"..... 444.00

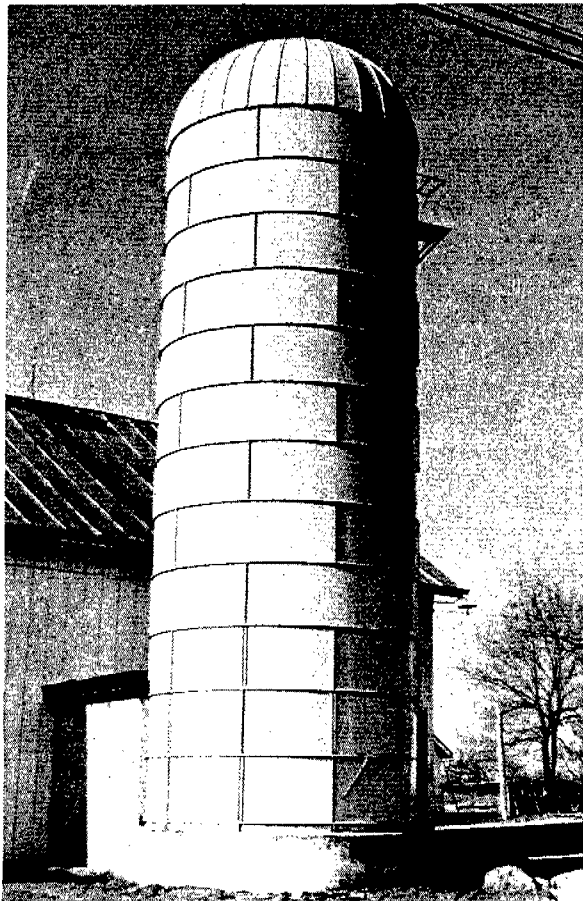
FEED/FENCE BUNKS

BASE SPECIFICATIONS				
FEED BUNKS Two Sided Feeder Constructed with Concrete Base, with Plank Sides or Post and Plank Construction.				
FENCE BUNKS One Sided Feeder, Concrete or Post and Plank Construction.				
BASE PRICES - PER LINEAL FOOT				
CONSTRUCTION TYPE	FEED BUNK		FENCE BUNK	
	AF1	AF2	AF3	AF4
CONCRETE	36.30	—	25.45	—
POST & PLANK	—	18.95	—	15.85
MODIFICATION CODE		ADD PER LINEAL FOOT		
FF1	Roof, 10' Wide.....			\$ 33.00
FF2	Mechanical Feeder - Auto.....			82.50
FF3	- Manual....			65.35
FF4	Concrete Apron, 10' Wide			11.95
<u>Add Per Unit - Stock Waterer</u>				
FF5	Cattle			\$378.00
FF6	Hog or Sheep.....			240.00
FF7	Combination - Cattle/Hog.....			468.00

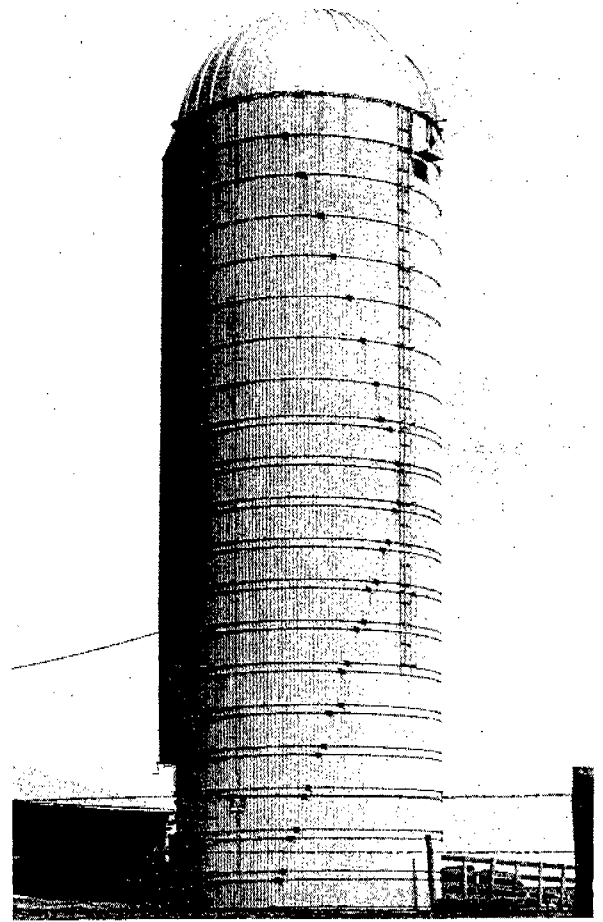
PORCELAIN SILOS



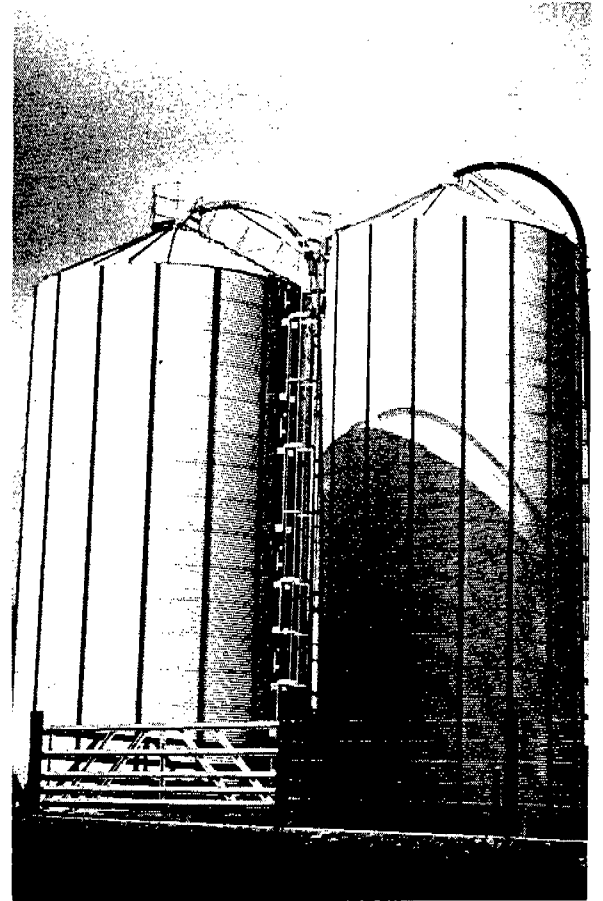
PREFABRICATED STEEL SILOS



CONCRETE STAVE SILOS



BUTLER LMS* SILOS



PORCELAIN SILOS

BASE PRICES			
STRUCTURE TYPE			AS4
MODEL	DIAM.	HEIGHT	COST
—	14'	40'	21,600
SA03	17'	40'	26,680
SA03	17'	50'	32,710
SA03	20'	40'	31,920
SA03	20'	50'	39,010
SA06	20'	60'	46,100
SA06	20'	70'	53,200
SA14	20'	20'	17,740
SA14	20'	25'	21,280
SA14	20'	30'	24,830
SA15	20'	22'	19,160
SA15	20'	27'	22,700
SA09	25'	65'	63,170
SA09	25'	80'	76,470
COST INCLUDES FOUNDATION AND ERECTION			

CONCRETE STAVE SILOS

BASE PRICES			
STRUCTURE TYPE		AS1	AS2
		WITH ROOF	WITHOUT ROOF
DIAM.	HGT.	COST	COST
10'	30'	4,380	3,900
	35'	4,950	4,470
	40'	5,520	5,040
12'	30'	5,280	4,580
	40'	6,640	5,950
	50'	8,010	7,320
14'	40'	7,800	6,860
	50'	9,400	8,460
16'	30'	7,180	5,950
	40'	9,000	7,780
	50'	10,830	9,600
	60'	12,650	11,420
18'	50'	12,300	10,740
	60'	14,350	12,790
	70'	16,400	14,840
20'	40'	11,520	9,600
	50'	13,800	11,880
	60'	16,080	14,160
	70'	18,360	16,440
24'	40'	14,190	11,420
	50'	16,920	14,160
	60'	19,660	16,900
	70'	22,400	19,630
COST INCLUDES FOUNDATION AND ERECTION			

PREFABRICATED STEEL SILOS

BASE PRICES			
STRUCTURE TYPE		AS5	AS6*
DIAM.	HEIGHT	COST	COST
11' - 6"	20'	4,310	5,390
	30'	5,970	7,460
	40'	7,630	9,540
13' - 5"	20'	5,000	6,260
	30'	6,940	8,680
	40'	8,880	11,100
15' - 4"	20'	5,720	7,150
	30'	7,940	9,920
	40'	10,150	12,690
17' - 3"	20'	6,460	8,080
	30'	8,950	11,190
	40'	11,450	14,310
20' - 0"	30'	10,440	13,060
	40'	13,340	16,670
	50'	16,230	20,290
24' - 0"	30'	12,700	15,880
	40'	16,170	20,220
	50'	19,640	24,550
COST INCLUDES FOUNDATION AND ERECTION			
*HIGH MOISTURE STORAGE SILOS			

BUTLER LMS* SILOS

BASE PRICES		
STRUCTURE TYPE		AS3
DIAM.	HEIGHT	COST
24'	59'	55,620
24'	69'	62,740
27'	59'	64,490
30'	59'	73,790
36'	59'	93,670
36'	69'	104,340
COST INCLUDES FOUNDATION AND ERECTION		
*LOW MOISTURE SILAGE		

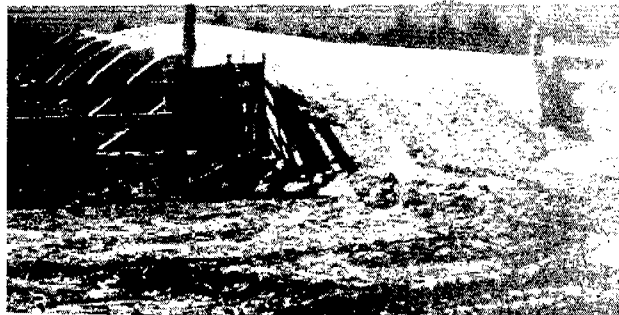
MODIFICATION CODES

1	17' Automatic Unloader (+) \$10,120
2	20' Automatic Unloader (+) 10,220
3	25' Automatic Unloader (+) 14,340
4	17' Raised Arm Auger (+) 3,590
5	20' Raised Arm Auger (+) 3,860
6	25' Raised Arm Auger (+) 4,150

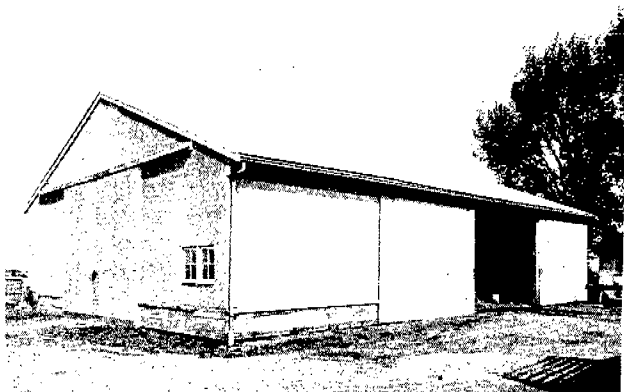
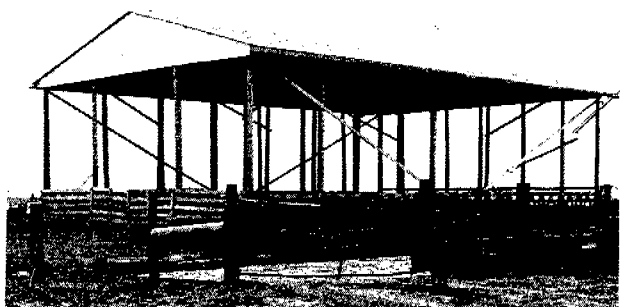
TRENCH SILOS



BUNKER SILOS



POLE FRAME BUILDINGS AND IMPLEMENT SHEDS



TRENCH SILOS

BASE SPECIFICATIONS		
Treated Plank or Concrete Floor and Side Walls. Normally Below Ground Level.		
BASE PRICES PER LINEAL FOOT - 30' WIDE		
TRENCH DEPTH	AT1	AT2
	CONC. OR PLANK	DIRT
10'	135.35	66.60
12'	150.20	71.05
16'	179.85	79.90
20'	209.50	88.80
25'	246.60	99.90
30'	283.70	111.00

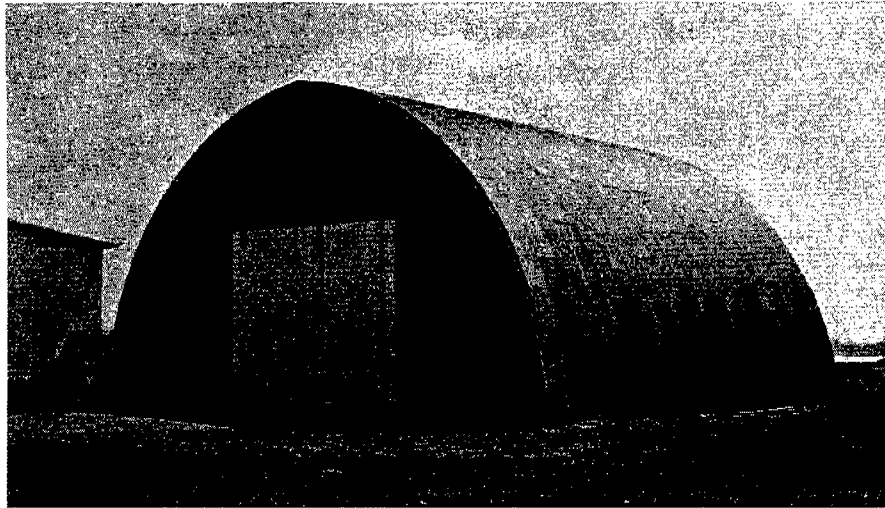
BUNKER SILOS

BASE SPECIFICATIONS	
Treated Plank Side Walls with Open Ends. Usually Above Ground Level with a Concrete Floor on Grade.	
BASE PRICES - PER LINEAL FOOT	
WALL HEIGHT	AK1
8	112.80
10	126.00
12	139.20
16	165.60
20	192.00
25	225.00

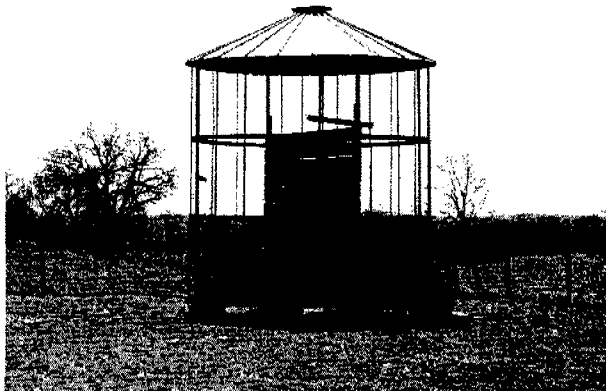
POLE FRAME BUILDINGS AND IMPLEMENT SHEDS

BASE SPECIFICATIONS:		FOUNDATION Concrete Pier				
		WALLS Wood or Metal on Wood Framing				
		ROOF Wood or Metal on Wood Trusses - 36' Clear Span				
		FLOOR Earth or Gravel				
		OTHER FEATURES None				
BASE PRICES - PER SQUARE FOOT - 36' SPAN						
AREA	FOUR SIDES CLOSED		ONE SIDE OPEN		FOUR SIDES OPEN	
	AP1	AP2	AP3	AP4	AP5	AP6
	METAL	WOOD	METAL	WOOD	METAL	WOOD
600	7.20	7.85	6.40	6.80	4.60	5.25
1000	5.80	6.30	5.15	5.50	3.90	4.40
1400	5.15	5.55	4.60	4.90	3.55	3.90
2000	4.60	4.95	4.15	4.45	3.25	3.50
3000	4.15	4.45	3.80	4.00	2.95	3.10
4000	3.90	4.15	3.65	3.80	2.80	2.85
MODIFICATION CODE			MODIFICATION CODE			
ADD/DEDUCT PER S.F.			COST PER UNIT			
1	Truss Span to 50'..... (+) \$.30		FP1	14 x 12 Sliding Door..... \$378.00		
2	Concrete Floor..... (+) 1.30		FP2	14 x 10 Sliding Door..... 348.00		
3	Insulation..... (+) .30		FP3	14 x 8 Sliding Door..... 276.00		
4	Wood Lining..... (+) .85		FP4	16 x 7 Overhead Door..... 414.00		
			FP5	9 x 7 Overhead Door..... 264.00		

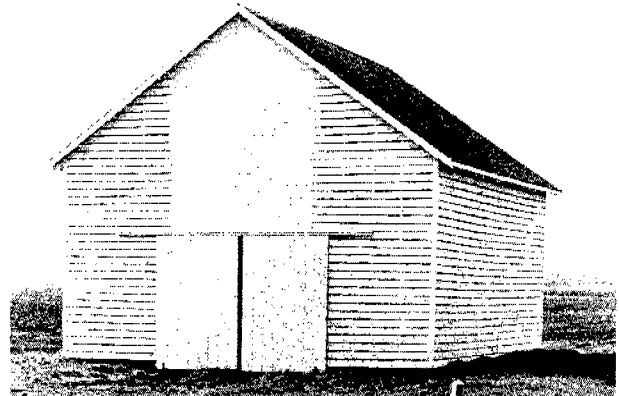
QUONSET BUILDINGS



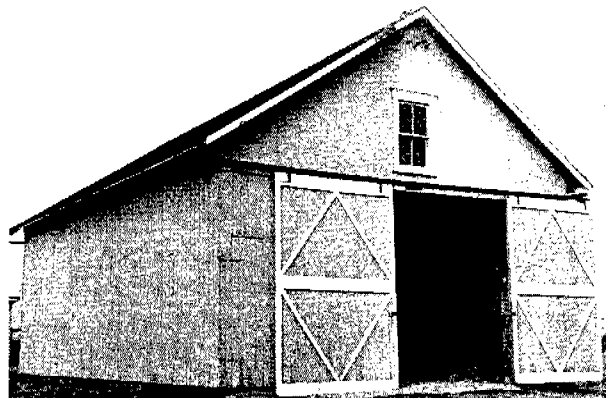
WIRE CORN CRIBS



FRAME CORN CRIBS



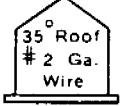
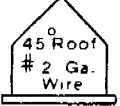
GRANARIES



QUONSET BUILDINGS

BASE PRICES - PER SQUARE FOOT			
STRUCTURE TYPE			
AQ1			
AREA	COST	AREA	COST
800	11.55	4500	6.80
900	11.05	5000	6.65
1000	10.60	5500	6.55
1200	9.95	6000	6.40
1400	9.40	6500	6.30
1600	9.00	7000	6.20
1800	8.70	7500	6.15
2000	8.40	8000	6.05
2400	8.00	8500	6.00
2800	7.65	9000	5.95
3200	7.40	9500	5.90
3600	7.20	10000	5.85
4000	7.00	OVER	5.85
Base Price Costs include Doors in End Walls, No Floor, Lighting or Heating.			
MODIFICATION CODES		ADD PER S.F.	
1	Lighting.....	(+)	\$.60
2	Asphalt Floor.....	(+)	.60
3	Concrete Floor.....	(+)	1.30

WIRE CORN CRIBS

BASE SPECIFICATIONS					
Concrete Foundation and Floor, Wire Mesh Walls on Steel Frame, Metal Roof, Central Air Ducts.					
					
DIAM.	HGT.	COST	DIAM.	HGT.	COST
15	14	1,280	15	14	1,410
15	20	1,530	15	20	1,670
					
DIAM.	HGT.	COST	DIAM.	HGT.	COST
15	14	1,480	15	14	1,650
15	20	1,730	15	20	1,980
MODIFICATION CODES		DEDUCT PER CRIB			
1	No Concrete Slab.....	(-)	\$350.00		
2	No Roof 35°.....	(-)	350.00		
3	No Roof 45°.....	(-)	470.00		

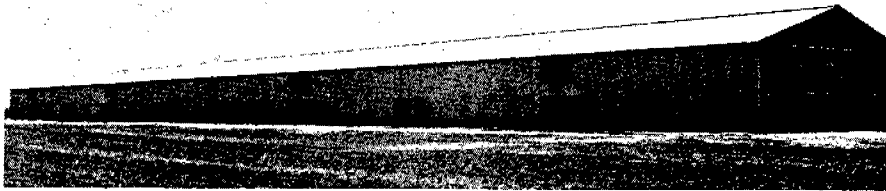
FRAME CORN CRIBS

BASE SPECIFICATIONS		
FOUNDATION	Concrete Piers	
WALLS	Wood Slats on Studs	
FLOOR	Earth in Driveway, Pine Under Crib	
ROOF	Double Pitch with Metal or Shingles	
OTHER FEATURES	Wood Slat Partitions	
BASE PRICES - PER SQUARE FOOT		
AREA	AC1	AC2
	WOOD BOARD	WELDED WIRE
200	12.15	8.75
300	10.95	7.85
400	10.20	7.35
500	9.70	7.00
600	9.35	6.75
700	9.10	6.55
800	8.85	6.40
900	8.65	6.25
1000	8.50	6.15
1200	8.25	5.95
1400	8.05	5.80
1600	7.90	5.70
1800	7.75	5.60
OVER	7.75	5.60
MODIFICATION CODE		ADD PER S.F.
1	Storage Bin Over (Wood) ... (+)	\$2.40
2	Storage Bin Over (Wire) (+)	1.55
3	Lighting (+)	.55

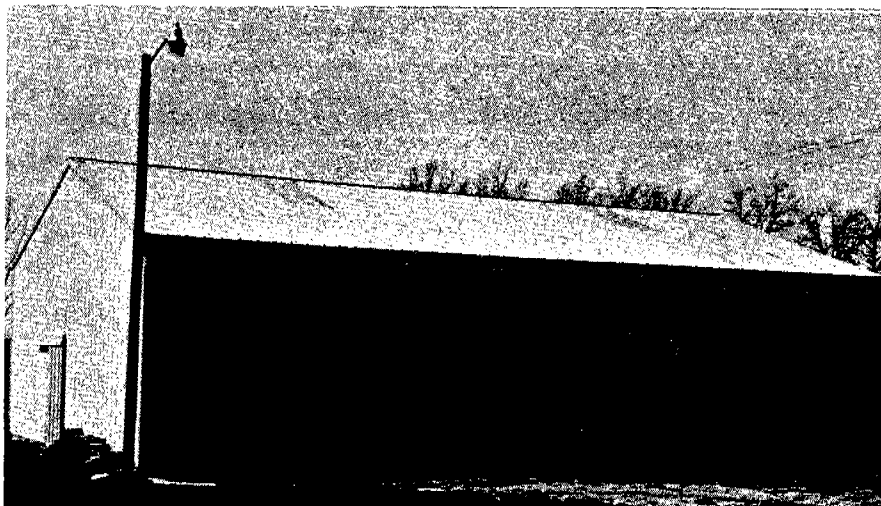
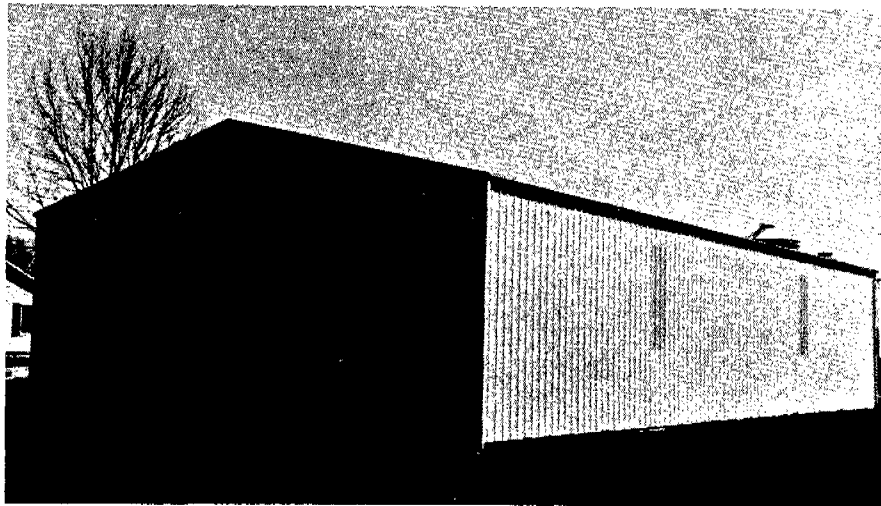
GRANARIES

BASE SPECIFICATIONS	
FOUNDATION	Concrete Walls and Footings
WALLS	Drop Siding, Interior 1" x 4" Wood Crib Siding.
FLOOR	Concrete, Loft Pine on Wood Joist
ROOF	Double Pitch, Shingle on Wood Decking.
OTHER FEATURES	Electric Lighting
BASE PRICES - PER SQUARE FOOT	
AREA	STRUCTURE TYPE
	AR1
400	14.95
500	13.65
600	12.75
700	12.10
800	11.55
1000	10.80
1200	10.25
1400	9.85
1600	9.50
1800	9.25
OVER	9.25
MODIFICATION CODE	
1	Wood Storage Bins.....(+) \$2.40
2	Metal Walls.....(+) .55
3	Metal Roof(+) .20
4	Wood Ventilation Ducts....(+) 1.20
5	No Lighting.....(-) .55
6	Pier Foundation(-) .90

POULTRY HOUSES/BARNs



PREFABRICATED STEEL BUILDINGS



POULTRY HOUSES/BARNs

BASE PRICES PER SQUARE FOOT - GROUND AREA						
AREA	FRAME OR METAL			CONCRETE BLOCK		
	AH1	AH2	AH3	AH4	AH5	AH6
	ONE STORY	TWO STORY	THREE STORY	ONE STORY	TWO STORY	THREE STORY
200	12.20	19.15	26.10	15.85	24.90	33.95
400	9.75	15.20	20.65	12.30	18.85	25.40
600	8.65	13.50	18.35	10.70	16.35	22.05
800	7.95	12.50	17.05	9.80	14.95	20.15
1000	7.55	11.80	16.15	9.15	14.05	18.95
1200	7.20	11.35	15.50	8.65	13.35	18.05
1400	6.95	10.95	15.00	8.30	12.85	17.40
1600	6.75	10.65	14.55	8.00	12.45	16.90
1800	6.55	10.40	14.25	7.75	12.10	16.45
2000	6.40	10.20	13.95	7.55	11.80	16.10
2400	6.20	9.85	13.50	7.20	11.35	15.55
2800	6.00	9.60	13.15	6.95	11.05	15.10
3200	5.85	9.35	12.90	6.75	10.75	14.75
3600	5.75	9.20	12.65	6.55	10.50	14.50
4000	5.65	9.05	12.45	6.40	10.35	14.25
5000	5.45	8.75	12.10	6.10	9.95	13.80
7500	5.15	8.30	11.50	5.65	9.40	13.15
10000	4.95	8.05	11.15	5.40	9.05	12.75
OVER	4.95	8.05	11.15	5.40	9.05	12.75

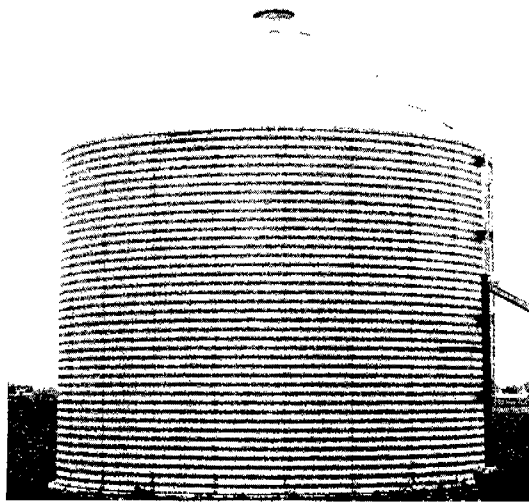
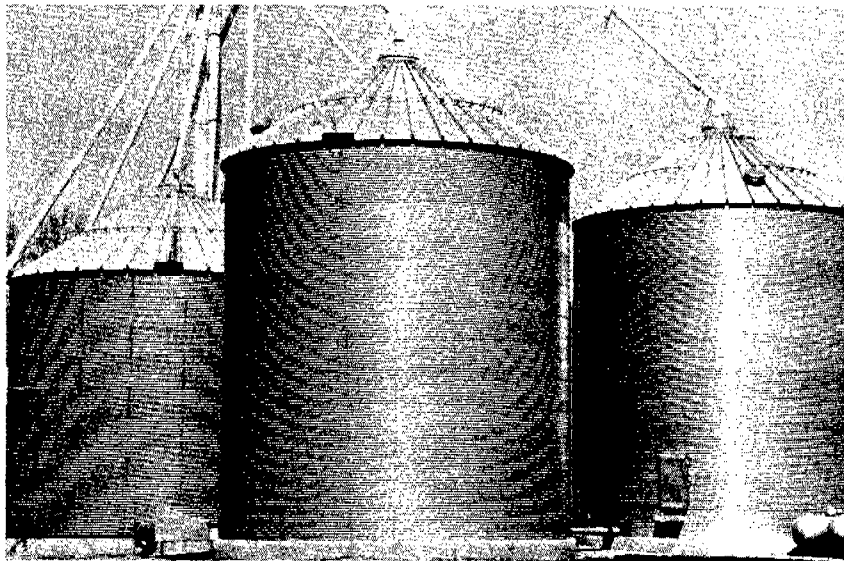
BASE SPECIFICATIONS	
FOUNDATION	Masonry Walls and Footings
WALLS	Wood or Metal Siding on Wood Framing; or Concrete Block; Wood or Steel Sash Windows.
GROUND FLOOR	Concrete
UPPER FLOOR	Wood on Wood Joists and Framing.
ROOF	Double Pitch, Metal on Asphalt Shingle. Roofing on Wood Sheathing and Framing.
OTHER FEATURES	Electric Lighting
MODIFICATION CODE	ADD/DEDUCT PER S.F.
1	Insulation - First Floor.....(+) \$ 1.80
2	- Second Floor(+) .60
3	- Third Floor.....(+) .60
4	Earth Floor.....'(-) 1.30
5	Single Pitch Roof'(-) .35
<u>ADD PER UNIT</u>	
FB1	Water Connection(+) \$180.00
FB2	Roof Ventilators(+) 222.00

PREFABRICATED STEEL BUILDINGS

BASE PRICES - PER SQUARE FOOT			
AREA	AX1	AREA	AX1
	14' WALL HEIGHT		14' WALL HEIGHT
1000	9.30	3800	5.70
1200	8.65	4000	5.65
1400	8.15	4500	5.40
1600	7.75	5000	5.25
1800	7.40	5500	5.10
2000	7.15	6000	5.00
2200	6.90	6500	4.85
2400	6.70	7000	4.75
2600	6.50	7500	4.65
2800	6.35	8000	4.60
3000	6.20	8500	4.50
3200	6.05	9000	4.45
3400	5.95	10000	4.35
3600	5.80	OVER	4.35

BASE SPECIFICATIONS	
Costs are per square foot of Floor Area of Standard Prefabricated Steel Buildings, with minimal Doors and Windows. These costs are considered as erected on Concrete Footings, with No Heating, Lights, or Floors.	
MODIFICATION CODE	ADD PER S.F.
1	Lighting(+) \$.60
2	Asphalt Floor.....(+) .60
3	Concrete Floor.....(+) 1.30

STEEL GRAIN BINS

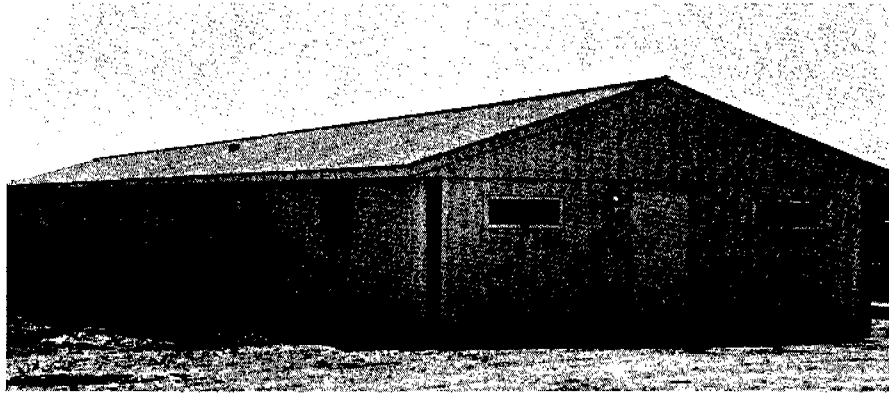


STEEL GRAIN BINS

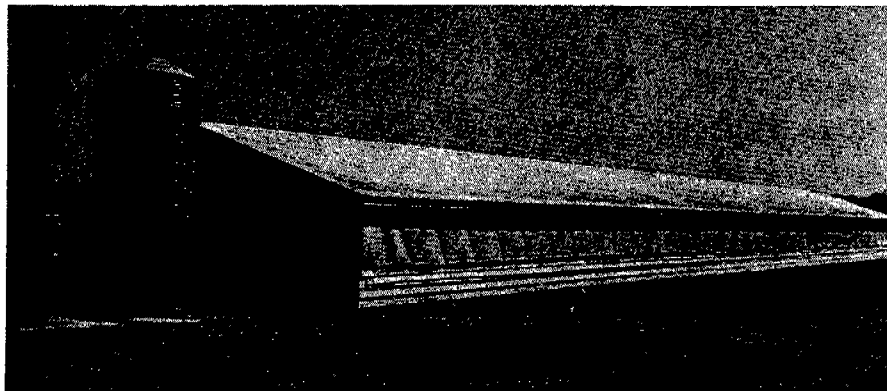
BASE PRICES				
STRUCTURE TYPE			AG1	AG2
DIAM.	HGT.	BUSHEL CAPACITY	WITHOUT DRYING BIN	WITH DRYING BIN
15'	7' - 4"	1,257	3,720	4,620
	11' - 0"	1,792	4,130	5,030
	14' - 8"	2,329	4,550	5,440
	18' - 4"	2,864	4,960	5,860
18'	11' - 0"	2,647	4,680	5,970
	14' - 8"	3,422	5,270	6,570
	18' - 4"	4,198	5,860	7,160
	22' - 0"	4,973	6,460	7,750
	25' - 8"	5,748	7,050	8,340
	33' - 0"	7,299	8,240	9,530
	40' - 4"	8,849	9,420	10,720
21'	47' - 8"	10,400	10,610	11,900
	11' - 0"	3,693	5,320	7,080
	14' - 8"	4,753	6,130	7,890
	18' - 4"	5,813	6,930	8,700
	22' - 0"	6,874	7,740	9,500
	25' - 8"	7,934	8,550	10,310
	33' - 0"	10,055	10,160	11,930
24'	40' - 4"	12,175	11,780	13,540
	47' - 8"	14,296	13,390	15,150
	11' - 0"	4,949	6,060	8,360
	14' - 8"	6,344	7,120	9,420
	18' - 4"	7,739	8,170	10,470
	22' - 0"	9,134	9,220	11,530
	25' - 8"	10,528	10,280	12,580
27'	33' - 0"	13,318	12,390	14,690
	40' - 4"	16,107	14,500	16,800
	47' - 8"	18,897	16,600	18,910
	11' - 0"	6,409	6,900	9,820
	14' - 8"	8,182	8,240	11,150
	18' - 4"	9,955	9,570	12,480
	22' - 0"	11,728	10,900	13,820
30'	25' - 8"	13,500	12,240	15,150
	33' - 0"	17,046	14,910	17,820
	40' - 4"	20,591	17,580	20,490
	47' - 8"	24,137	20,240	23,160

BASE PRICES				
STRUCTURE TYPE			AG1	AG2
DIAM.	HGT.	BUSHEL CAPACITY	WITHOUT DRYING BIN	WITH DRYING BIN
30'	14' - 8"	10,278	9,490	13,090
	18' - 4"	12,473	11,130	14,730
	22' - 0"	14,668	12,780	16,380
	25' - 8"	16,863	14,430	18,030
	33' - 0"	21,252	17,720	21,320
	40' - 4"	25,624	21,020	24,620
	47' - 8"	30,031	24,310	27,910
36'	14' - 8"	15,297	12,390	17,570
	18' - 4"	18,473	14,760	19,940
	22' - 0"	21,648	17,130	22,310
	25' - 8"	24,823	19,500	24,690
	33' - 0"	31,174	24,250	29,430
	40' - 4"	37,524	28,990	34,170
	47' - 8"	43,875	33,740	38,920
42'	58' - 8"	53,400	40,850	46,040
	14' - 8"	21,416	15,810	22,870
	18' - 4"	25,738	19,040	26,100
	22' - 0"	30,060	22,270	29,320
	25' - 8"	34,382	25,500	32,550
	33' - 0"	43,026	31,960	39,010
	40' - 4"	51,670	38,420	45,470
48'	47' - 8"	60,314	44,870	51,930
	58' - 8"	73,279	54,560	61,610
	14' - 8"	26,749	19,770	28,980
	18' - 4"	34,394	23,980	33,200
	22' - 0"	40,039	28,200	37,410
	25' - 8"	45,684	32,420	41,630
	33' - 0"	56,974	40,850	50,070
60'	40' - 4"	68,264	49,290	58,500
	47' - 8"	79,554	57,720	66,930
	58' - 8"	96,488	70,370	79,590
	18' - 4"	56,170	35,850	50,240
	25' - 8"	73,810	49,020	63,420
	40' - 4"	109,092	75,380	89,780
	47' - 8"	126,732	88,560	102,950

SWINE FARROWING BARN



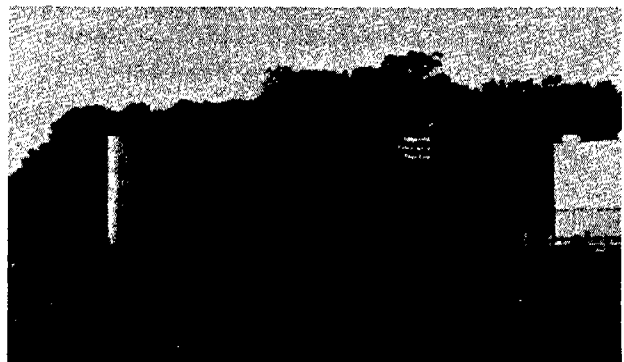
SWINE/CONFINEMENT BARN



POTATO STORAGE BUILDINGS



SLURRY SYSTEMS



SWINE FARROWING BARN

BASE PRICES - PER SQUARE FOOT		
AREA	AV1	
	COST PER SQ. FT.	TOTAL COST
200	20.95	4,190
300	17.00	5,100
400	15.00	6,000
500	13.80	6,900
700	12.40	8,680
1000	11.40	11,400
2000	10.20	20,400
3000	9.80	29,400
4000	9.60	38,400
5000	9.50	47,500
6000	9.40	56,400
7000	9.35	65,450
8000	9.30	74,400
9000	9.25	83,250
10000	9.25	92,500
OVER	9.25	
MODIFICATION CODES ADD PER S.F.		
1	25% Conc. Pit Area	(+) \$1.70
2	100% Conc. Pit Area	(+) 3.55

SWINE/CONFINEMENT BARN

BASE PRICES - PER SQUARE FOOT				
AREA	AW1 - FINISHING		AW2 - CONFINEMENT	
	COST/SF	TOTAL	COST/SF	TOTAL
200	21.95	4,390	22.90	4,580
300	16.40	4,920	17.35	5,205
400	13.65	5,460	14.60	5,840
500	11.95	5,975	12.95	6,475
700	10.05	7,035	11.05	7,735
1000	8.65	8,650	9.60	9,600
2000	6.95	13,900	7.90	15,800
3000	6.40	19,200	7.35	22,050
4000	6.15	24,600	7.10	28,400
5000	5.95	29,750	6.90	34,500
6000	5.85	35,100	6.80	40,800
7000	5.75	40,250	6.70	46,900
8000	5.70	45,600	6.65	53,200
9000	5.65	50,850	6.60	59,400
10000	5.60	56,000	6.60	66,000
OVER	5.60		6.60	
MODIFICATION CODES ADD PER S.F.				
1	25% Conc. Pit Area	(+) \$1.70		
2	100% Conc. Pit Area	(+) 3.55		

POTATO STORAGE BUILDINGS

BASE SPECIFICATIONS		
BELOW GROUND . . .	No Foundation. Ground Floor and Walls, Double Pitch Roof with Roll Asphalt, Covered with Straw and Earth. Lighting, Air Ducts.	
ABOVE GROUND . . .	Concrete Foundation and Footing. 8" Insulated Concrete Block Walls, Insulated Ceiling, Ground Floor, Double Pitch Roof with Asphalt Shingles, Electric Lighting.	
BASE PRICES - PER SQUARE FOOT		
AREA	AO1	AO2
	UNDER GROUND	ABOVE GROUND
1000	5.55	17.60
2000	5.25	14.20
3000	5.15	12.70
4000	5.05	11.75
6000	5.00	10.70
8000	4.95	10.05
10000	4.90	9.60
15000	4.85	8.95
MODIFICATION CODES		
1	No Lighting	(-) \$.55
2	Concrete Floor	(+) 1.30

SLURRY SYSTEMS

LIQUID MANURE TANKS, CONCRETE CLOSED PIT			
AY1 - CIRCULAR			
DIAM.	HEIGHT	GAL. CAPACITY	COST
25'	13'	50000	12,260
25'	18'	67000	15,850
32'	10'	60000	14,690
42'	9'	92000	21,150
42'	13' - 6"	140000	30,260
42'	18'	187000	39,370
48'	10'	135000	29,370
61' - 6"	9'	198000	41,990
AY2 - RECTANGULAR - 10' DEEP			
WIDTH	LENGTH	GAL. CAPACITY	COST
20'	20'	30000	7,460
20'	40'	60000	12,320
20'	60'	90000	17,220
20'	80'	120000	22,080
20'	100'	150000	26,900

EXEMPT AND INSTITUTIONAL BUILDINGS SCHEDULE APPLICATION

The Exempt and Institutional Buildings Schedule is to be used for computing the replacement cost new of all structure types contained within the schedule. The schedule has been designed to be utilized in the Other Building and Yard Improvements section of the property record card. The schedule has also been designed to accomodate both manual and computer pricing and depreciation. For individual applications, consult the Other Building and Yard Improvements section of your data collection manual's Property Record Card Specifications.

Note: For multi story buildings without a basement, it is only necessary to enter one line item with the total square footage of all floors included. For multi story buildings with a finished or unfinished basement, it will be necessary to break out the first floor separately from the upper floors. The computer will price the basement area utilizing the square footage of the first floor.

Note: Quality Grade selection is based on exterior wall material.

The following are examples of both manual and computer priced and depreciated entries for the Exempt and Institutional Buildings Schedule.

Example: A 2 story, stone, university classroom building over finished classrooms in the basement, built in 1975.

Basement contains 21,000 SF

1st Story contains 21,000 SF

2nd Story contains 19,500 SF

Manual Priced and Depreciated entry

799 DELETE 801 811															OTHER BUILDING & YARD IMPROVEMENTS																			
	TYPE CODE	YEAR BUILT	REMOD	CONSTRUCTION	SIZE	AREA	GRADE	RATE	BASE VALUE	MOD CODES	COND	MA%	IDENT UNITS	TRUE VALUE																				
801	E S A	75		UNIV CLASSROOM	21,000	21000	B	143.70	3,017,700	1	A	85	01	2,565,050																				
802	E S A	75		UNIV CLASSROOM	19,500	19500	B	83.90	1,636,050		A	85	01	1,390,640																				
803																																		
804																																		
805																																		
806																																		
807																																		
808																																		
809																																		
810																																		
811																																		
															TOTAL VALUE OTHER BUILDINGS										3,955,690									
															TOTAL GROSS VALUE																			
															TOTAL VALUE ALL IMPROVEMENTS																			
870																																		
DATA COLLECTED BY					DATE					REVIEWED BY					DATE																			

EXEMPT/INSTITUTIONAL BUILDINGS

BASE SPECIFICATIONS

Prices include provision for normal construction features, such as plumbing, heating, air conditioning, elevators and mechanical features according to designed building type.

QUALITY GRADE FACTOR

B = 1.26
C = 1.00
D = .78

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Churches		EC1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Limestone Concrete, Metal & Glass	\$65.30	\$46.70	\$13.00
C	Brick or Block, Stone Trim	51.80	37.10	10.30
D	Stucco or Frame, No Trim	40.40	28.90	8.00

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Elementary and Secondary Schools		ES1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Concrete or Metal Panels	\$65.90	\$44.80	\$14.20
C	Brick, Block or Concrete, Some Trim	50.40	35.50	10.30
D	Stucco or Frame, Little or no trim	39.40	27.70	8.00

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Elementary and Secondary School Gymnasium		EG1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Best Ornamental Block	\$54.10	\$38.00	\$10.10
C	Brick, Block or Tilt Up	43.00	30.20	8.00
D	Stucco or Frame	33.50	23.60	6.20

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
College and University Classrooms		ES2	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Stone, Concrete or Metal Panels — Solar Glass	\$83.90	\$59.80	\$16.80
C	Face Brick or Ornamental Block	66.60	47.40	13.30
D	Brick Veneer, Glass, Stucco	52.00	37.00	10.40

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
College and University Gymnasiums		EG2	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Best Ornamental Block	\$72.70	\$51.10	\$13.60
C	Brick, Block or Tilt Up	57.70	40.60	10.80
D	Stucco or Frame	45.00	31.70	8.40

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
College or University Dormitories		ED1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Steel or Concrete panels — Ornamentation	\$59.80	\$41.20	\$11.20
C	Brick, Steel or Concrete Panels	47.40	32.60	8.90
D	Brick Veneer or Stucco	37.00	25.40	7.00

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Auditoriums		EA1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Concrete panels with trim	\$70.90	\$49.90	\$13.30
C	Brick, Block Concrete panels	56.30	39.60	10.60
D	Stucco or Frame	43.90	30.80	8.30

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Courthouses		EC2	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Good metal & glass, Concrete, Stone ornamentation	\$85.90	\$59.80	\$16.80
C	Brick, Block, Concrete, metal and glass	68.20	47.40	13.30
D	Brick veneer, ornamental stucco	43.20	37.00	10.40

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Jails		EJ1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Concrete, limestone, granite ornamentation	\$119.40	\$85.00	\$23.90
C	Brick on Block, Concrete	94.80	67.40	19.00
D	Brick Veneer or Stucco	73.90	52.60	14.80

Note - These prices reflect the cell block area and jail hardware normally found in this type building.

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Fire Station		EF1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Stone, Metal & Glass	\$66.50	\$46.00	\$13.30
C	Brick, Block, Concrete	51.80	36.50	10.60
D	Stucco or Frame	40.40	28.40	8.30

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Library		EL1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Metal & Glass, Limestone, Concrete	\$69.10	\$48.60	\$13.00
C	Brick, Metal & Glass, Ornamental block	54.80	38.50	10.30
D	Stucco, Block, Frame	42.80	30.00	8.00

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Post Office		EP1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Limestone, Concrete, Ornamentation	\$65.30	\$46.70	\$13.00
C	Brick on Block, Concrete	41.80	37.10	10.30
D	Stucco or Frame	40.40	28.90	8.00

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Armory, Federal or National Guard		EA2	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Face Brick, Concrete, Some Trim	\$50.40	\$35.40	\$9.40
C	Brick on Block or Tilt Up	40.00	28.10	7.40
D	Stucco or Frame	31.20	22.00	5.80

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
General Hospital		EH1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Good Brick Metal & Glass, Concrete	\$100.70	\$70.90	\$20.50
C	Brick on Block, some metal & glass	79.90	56.30	16.30
D	Stucco, Frame or Block	62.40	43.90	12.70

STRUCTURE TYPE		STRUCTURE TYPE CODE	MODIFICATION CODES	
Nursing Homes		EN1	1. Finished Basement 2. Unfinished Basement	
QUALITY GRADE	EXTERIOR WALL CONSTRUCTION	PRICE PER SQ. FT. OF FLOOR AREA	ADD FIN. BSMT.	ADD UNFIN. BSMT.
B	Good Brick Metal & Glass, Concrete	\$74.60	\$52.30	\$15.00
C	Brick on Block, Some Metal & Glass	59.30	41.50	11.90
D	Stucco or Frame	46.20	32.40	9.20

GENERAL COMMERCIAL/INDUSTRIAL PRICING SCHEDULES

General Discussion of the Commercial/Industrial System

- Computer-Assisted Mass Appraisal Commercial/Industrial Valuation System Overview
- Commercial/Industrial Cost Schedules - General Specifications
- Commercial/Industrial CAMA System Manual Pricing Procedures
- Commercial/Industrial Pricing Schedules
 - Building Construction Type
 - Interior
 - Exterior Wall Material
 - Heating and Air Conditioning
 - Plumbing and Sprinkler
 - Building Other Features - Attached Improvements
 - Yard Improvements/Secondary Buildings

Graded Photographs

- Garden Apartments, Hi-Rise Apartment
- Hotels/Motels
- Restaurants
- Food Franchises
- Bars/Lounges
- Auto Dealers
- Auto Service Garages
- Service Stations
- Car Washes
- Parking Garages/Decks
- Shopping Mall
- Shopping Centers
- Discount Department Stores, Department Store
- Supermarkets, Convenience Food Market
- Medical Office
- Banks, Savings Institutions
- Office Buildings
- Motion Picture, Cinemas/Theaters
- Downtown Row Types
- Retail
- Bowling Alley, Tennis Club, Racquet Club
- Cold Storage Facility
- Mini Warehouses, Warehouses
- Manufacturing

COMPUTER-ASSISTED MASS APPRAISAL COMMERCIAL/INDUSTRIAL VALUATION SYSTEM OVERVIEW

The Commercial/Industrial system provides for both the cost and income approaches to value. The cost approach is a model approach with adjustments at the component level. The income approach utilizes income models which do not require income and expense data on each individual property, but may necessitate income adjustment or override parameters on the exceptional properties.

Cost Valuation

Pricing schedules and related cost tables are included in this section to assist the appraiser in arriving at accurate estimating of Replacement Cost New. They have been developed by applying segregated cost for all components. The application of the schedules involves the computer pricing of all components from the data collection form.

Costs have been developed for all basic structure types, interior and mechanical costs, exterior wall costs, to be computed to develop an overall Replacement Cost New.

Since various construction types are necessary for different uses, several costs were developed for basic structures. High rise office buildings require different cost ranges than properties such as one-story warehouses, commercial buildings, and service stations. Interior finish, heating, plumbing, air conditioning and lighting requirements are varied for different uses, requiring cost ranges. Certain use types, such as Fast or Franchised Food Restaurants and Service Stations, began with a specified cost then modifier by grade. Other features, attached improvements, yard items and lesser buildings are set up on a more simplified cost system requiring in most cases minor modifications only.

Selecting the Proper Quality Grade

The quality grade of materials and workmanship is one of the most significant adjustments to be made in the cost approach. Many buildings with similar square feet areas and uses can vary significantly in cost. This is due to quality of materials and workmanship. A better quality building is expected to have a longer economic life, requiring less maintenance. The appraiser must analyze these characteristics in order to arrive at an estimate of quality grade.

Most properties will be computer priced at an average or typical building grade and will require no quality grade percent modification. The generated value for replacement less normal condition/utility factor will be accurate. It becomes the appraiser's responsibility to analyze the generated values.

QUALITY GRADES & QUALITY FACTORS

	+ 2.50
<u>AA (x)</u>	<u>2.10</u>
	- 1.85

	+ 1.67
<u>A</u>	<u>1.55</u>
	- 1.45

	+ 1.35
<u>B</u>	<u>1.26</u>
	- 1.17

	+ 1.08
<u>C</u>	<u>1.00</u>
	- .92

	+ .85
<u>D</u>	<u>.78</u>
	- .70

	+ .60
<u>E</u>	<u>.50</u>
	- .40

Income Valuation

The income model approach differs from traditional computer-assisted income valuation techniques in that it does not require income data on each property. Income models may be developed through manual analysis of income and expense data or by utilizing computerized modeling software, such as the MRA module in MAS, to analyze the data. Models are developed on the basic physical characteristics collected on the standard data collection form. Valuation results may be adjusted for exceptional properties by inputting income quality rating, expense adjustment factor, occupancy adjustment factor, and capitalization of adjustment level. Provisions are included for excess acreage valuation.

COMMERCIAL/INDUSTRIAL COST SCHEDULES GENERAL SPECIFICATIONS

The Commercial/Industrial Costs were derived in the following manner. Numerous Structure Type Codes were created and combined into eight Basic Structure Types. Base prices were developed for the eight basic structure types, which include the following:

1. **FRAMING COST** — The Frame Cost Rate (dollars per square foot of floor area excluding basement area) as a function of construction type code and basic structure type.
2. **ROOFING COSTS** — The cost rates for the roof framing and roofing materials (dollars per square foot of floor area covered) as a function of basic structure type. Insulation costs have been included in the roofing materials.
3. **FLOOR STRUCTURE COST** — The Structural Floor Cost (dollars per square foot of the floor area) as a function of the basic structure type.
4. **EXTERIOR WALL MATERIAL COST** — The Exterior Wall Material Cost (dollars per square foot of wall area) as a function of material type code and the basic structure type. All wall material costs include insulation, normal openings, and appropriate back-up materials when required.
5. **CEILING AND FLOOR FINISH COST** — The Ceiling and Floor Finish Cost (dollars per square foot of floor area) as a function of the basic structure type or multi-use use type code.
6. **BASEMENT COST** — The Basement Wall Cost Rate (dollars per square foot of wall area) as a function of the construction type code and basic structure type. The cost of waterproofing has been added.

Numerous Use Type Codes were developed which equate to the type of interior utilization of the structure being described. Costs were developed for the specific use types, which include the following:

1. **INTERIOR PARTITION COST** — The Interior Partition Cost (dollars per square foot of floor area) as a function of use type code and quality or extent of occurrence code.
2. **HEATING COST** — The Heating Cost (dollars per square foot of floor area) as a function of the heating system type and the use type code.
3. **AIR CONDITIONING COST** — The Air Conditioning Cost (dollars per square foot of floor area) as a function of the air conditioning system type and the use type code.
4. **PLUMBING COST** — The Plumbing Cost (dollars per square foot of floor area) as a function of use type code and quality or extent of occurrence code.
5. **SPRINKLER COST** — The Sprinkler Cost (dollars per square foot of floor area) as a function of use type code, sprinkler type code and extent of occurrence code.
6. **LIGHTING COST** — The Lighting Cost (dollars per square foot of floor area) as a function of use type code. Lighting costs are assumed to be 100% in all use type codes.

COMMERCIAL/INDUSTRIAL CAMA SYSTEM MANUAL PRICING PROCEDURE

Although the Commercial/Industrial CAMA System has total computer pricing capability, it is sometimes desirable to manually price improvements. The following is the correct procedure for manually pricing commercial/industrial improvements utilizing the computer generated cost tables. Pricing is accomplished on an interior/exterior line for line basis.

1. Determine the *Basic Structure Code* by utilizing the Building Construction Type Cost Schedule and the structure type code located in the General Building Data section of the data collection form.
For example: Structure Type Code 321 = Restaurant = Basic Structure Code 03 = Retail
2. Determine the *Construction Type (Framing) Code* from the data collection form.
3. Determine the *Main Building Base Rate* by using the Building Construction Type Cost Schedule — based on the structure type code, basic structure code, construction type, and floor level.
4. Determine the *Interior Base Rate* by utilizing the Interior Cost Schedule — based on the use code located on the data collection form.
5. Add the main building base rate and the interior base rate to determine the *Total Base Rate*, and enter it in the appropriate horizontal pricing area of the data collection form.
6. Determine the *Exterior Wall Rate* by utilizing the Exterior Wall Material Cost Schedule — based on the exterior wall type code and the basic structure code, and enter it in the appropriate horizontal pricing area of the data collection form.
7. Determine the *Perimeter Area Ratio* (expressed to the nearest thousandth) by dividing the perimeter of the building by the area, and enter the PAR in the appropriate horizontal pricing area of the data collection form.
8. Enter the *Wall Height* of the interior/exterior line as shown on the data collection form in the appropriate horizontal pricing area of the data collection form.
9. Multiply the exterior wall rate times the perimeter area ratio times the wall height to determine the *Total Square Foot Rate* of the exterior walls.
10. Add the total base rate (Step 5) and the total square foot rate of the exterior walls (Step 9) to determine the *Unadjusted Square Foot Rate*, and enter it in the appropriate horizontal pricing area of the data collection form.
11. Determine any necessary *Adjustment* to the unadjusted square foot rate because of a lack of interior finish (less than 100%) by utilizing the Interior Cost Schedule.

For example: Use Code 034 = Retail Store = Interior Finish Rate = \$3.85

Interior Finish noted as 080 percent

$\$3.85 \times 20\% \text{ unfinished} = -\$0.77$

Enter any necessary adjustment in the appropriate horizontal pricing area of the data collection form.

12. Determine any necessary *Adjustments* to the unadjusted square foot rate for Partitions, Heating and Air Conditioning due to deviations from the base rates — based on use code and line item codes in the Interior/Exterior Rates from both the Interior Cost Schedule and the Heating and Air Conditioning Cost Schedule. Enter any necessary adjustments in the appropriate horizontal pricing area of the data collection form.

Note: Central air conditioning may or may not be included in the base rate based on use code.

13. Determine any necessary *Adjustments* to the unadjusted square foot rate for deviations from the base rate of Plumbing and Sprinklers — based on use code and line item codes in the Interior/Exterior Rates from the Plumbing and Sprinkler Cost Schedule. Enter any necessary adjustments in the appropriate horizontal pricing area of the data collection form.
14. Determine the *Total Square Foot Rate* of the building by adding the unadjusted square foot rate and any adjustments for Interior Finish, Partitions, Heating, Air Conditioning, Plumbing and Sprinkler Systems. Enter the total square foot rate in the appropriate horizontal pricing area of the data collection form.
15. Determine the *Cost of Building Other Features/Attached Improvements* by utilizing the Building Other Features/Attached Improvements Cost Schedule — based on structure type code, unit of measure, and rate per unit. Select the rate per unit based on structure code, and multiply the rate times the appropriate measurement to determine the value of the other feature/attached improvement (rounded to the nearest \$10).
16. Multiply the total square foot rate by the size of the line item being described to determine the unadjusted value of the line item. Add any other feature/attached improvement value (rounded to the nearest \$1,000) which belongs with the line item to the unadjusted value of the line to determine the *Unadjusted Replacement Cost New (RCN)*. Enter the unadjusted RCN (rounded to the nearest \$1) in the appropriate horizontal pricing area.
17. Determine the correct numeric entry from the Commercial/Light Industrial Depreciation Selection Guide Matrix (found in the Percent Good Schedules and Tables section of this manual) — based on the physical condition and functional utility of the building.
18. Determine the *Economic Life* of the line item being described by utilizing the Economic Life Table (found in the Percent Good Schedules and Tables section of this manual) — based on structure type code and construction type.
19. Determine the correct *Percent Good* from the appropriate Expected Life Table (found in the Percent Good Schedules and Tables section of this manual) — based on the matrix selection and age of the building. Enter the correct percent good in the appropriate area of the data collection form's horizontal pricing area.

20. Multiply the unadjusted RCN of the line item times the percent good to determine the *Unadjusted Replacement Cost New Less Depreciation (RCNLD)* for the line item. Enter the unadjusted RCNLD (rounded to the nearest \$10) in the appropriate horizontal pricing area.
21. Add all unadjusted RCNLD line item values to determine the *Total Unadjusted RCNLD*. Enter the total unadjusted RCNLD in the sub total vertical pricing area of the data collection form.
22. Multiply the sub total times any appropriate county modifier percent factor and enter the resultant value in the pricing area provided.
23. Multiply the value after application of the county modifier times any appropriate grade factor percent to determine *Replacement Cost New Less Depreciation (RCNLD)*. Enter the RCNLD (rounded to the nearest \$10) in the pricing area provided.
24. Determine any *Yard Improvement and/or Secondary Building Value* by utilizing the Yard Improvements/Secondary Building Cost Schedule — based on structure type code, unit of measure, rate per unit, number of identical units, and expected life table. Multiply the dimensions/size (unit of measure) times the rate per unit (rounded to the nearest \$10). Multiply times the number of identical units to determine the *Replacement Cost New (RCN)*. Enter the RCN in the appropriate horizontal pricing area. Determine the correct numeric entry from the Commercial/Light Industrial Depreciation Selection Guide Matrix (found in the Percent Good Schedules and Tables section of this manual) — based on the physical condition and functional utility of the improvement. Determine the appropriate Expected Life of the item by utilizing the Yard Improvements/Secondary Building Cost Schedule. Determine the correct Percent Good from the appropriate Expected Life Table (found in the Percent Good Schedules and Tables section of this manual) — based on the matrix selection and age of the improvement. Enter the correct percent good in the appropriate horizontal pricing area of the data collection form. Multiply the replacement cost new (RCN) times the percent good to determine Replacement Cost New Less Depreciation (RCNLD). Enter the RCNLD (rounded to the nearest \$10) in the appropriate horizontal pricing area of the data collection form. Add all RCNLD line item values to determine the *Total Yard Improvement and/or Secondary Building Value*. Enter the total value in the vertical pricing area of the data collection form.
25. *Total Other Improvement Value* — This section of the data collection form may be utilized in numerous ways. Since it is not expected that every parcel should be appraised by computer-assisted techniques, it is necessary to allow for the value of manually appraised properties to be integrated into the system. This is done by use of the Total Other Improvements category. This category may also be utilized to add or deduct a flat dollar amount from the overall improvement value of the parcel.

Description — Space is provided to enter characters to describe the manually appraised property or to explain the reason for an addition or deduction of a flat dollar amount.

+/- — Space is provided to enter a plus (+) or minus (-) sign to denote the addition or deduction of value.

Value — Space is provided to enter a dollar value amount.

BUILDING CONSTRUCTION TYPE COST SCHEDULE

STR. TYPE CODE	BASIC STRUCTURE DESCRIPTION	BASIC STR. CODE	BASEMENT				FIRST FLOOR				UPPER FLOOR			
			CONSTRUCTION TYPE				CONSTRUCTION TYPE				CONSTRUCTION TYPE			
			Wood	Steel	Reinf. Conc.	Lt. Steel	Wood	Steel	Reinf. Conc.	Lt. Steel	Wood	Steel	Reinf. Conc.	Lt. Steel
101	RESIDENTIAL, 1 FAMILY	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
102	RESIDENTIAL, 2 FAMILY	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
103	RESIDENTIAL, 3 FAMILY	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
104	RESIDENTIAL, 4 FAMILY	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
105	RES./CI BUILT AS RES.	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
106	CONDO (COMMON ELEM.)	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
107	CONDO (FEE SIMPLE)	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
211	APARTMENTS, GARDEN	02	9.70	11.20	11.20	—	8.00	12.60	15.95	—	5.80	6.60	10.70	—
212	APARTMENTS, HI RISE	01	11.75	13.55	13.55	—	9.20	13.55	17.05	—	6.35	8.55	11.60	—
314	HOTEL/MOTEL, HI RISE	01	11.75	13.55	13.55	—	9.20	13.55	17.05	—	6.35	8.55	11.60	—
315	HOTEL/MOTEL, LO RISE	02	9.70	11.20	11.20	—	8.00	12.60	15.95	—	5.80	6.60	10.70	—
316	NURSING HOME	02	9.70	11.20	11.20	—	8.00	12.60	15.95	—	5.80	6.60	10.70	—
318	BRDING/ROOMING HSE.	10	3.60	5.70	—	—	7.95	12.55	—	—	5.80	6.65	—	—
319	MIXED RES./COMM.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
321	RESTAURANT	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
323	FOOD STAND	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
325	FAST FOOD	09	—	—	—	—	—	—	—	—	—	—	—	—
326	ICE HOUSE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
327	BAR/LOUNGE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
328	NIGHT CLUB/DNR. THTR.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
331	AUTO DEALER, FL. SERV.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
332	AUTO SERVICE, GAR.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
333	SERV. STATION, FULL	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
334	SERV. STATION, SELF	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
335	TRUCK STOP	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
336	CAR WASH, MANUAL	07	9.00	11.05	11.05	9.00	8.15	10.30	12.70	8.35	5.90	6.50	8.55	5.95
337	CAR WASH, AUTOMATIC	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
338	PARKING GAR./DECK	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
341	REG. SHOP. MALL/CTR.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
342	COMM. SHOPPING CTR.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
343	NBHD. SHOPPING CTR.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
344	STRIP SHOPPING CTR.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
345	DISCOUNT DEPT. STORE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
346	DEPARTMENT STORE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
347	SUPERMARKET	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
348	CONVEN. FOOD MKT.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
349	MEDICAL OFFICE BLDG.	08	12.30	14.65	14.65	—	11.30	19.30	23.10	—	8.50	12.55	16.10	—
351	BANK	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
352	SAVINGS INSTITUTION	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
353	OFFICE BLDG., L/R 1-4S	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
354	OFFICE BLDG., H/R 5ST	08	12.30	14.65	14.65	—	11.30	19.30	23.10	—	8.50	12.55	16.10	—
355	OFFICE CONDOMINIUM	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
356	RETAIL CONDOMINIUM	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
361	FUNERAL HOME	02	9.70	11.20	11.20	—	8.00	12.60	15.95	—	5.80	6.60	10.70	—

BUILDING CONSTRUCTION TYPE COST SCHEDULE (continued)

STR. TYPE CODE	BASIC STRUCTURE DESCRIPTION	BASIC STR. CODE	BASEMENT				FIRST FLOOR				UPPER FLOOR			
			CONSTRUCTION TYPE				CONSTRUCTION TYPE				CONSTRUCTION TYPE			
			Wood	Steel	Reinf. Conc.	Lt. Steel	Wood	Steel	Reinf. Conc.	Lt. Steel	Wood	Steel	Reinf. Conc.	Lt. Steel
362	VETERINARY CLINIC	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
363	LEGITIMATE THEATER	06	11.70	14.95	14.95	11.70	11.50	18.90	23.20	11.85	7.90	11.90	15.60	7.75
364	MOT. PICTURE THEATER	06	11.70	14.95	14.95	11.70	11.50	18.90	23.20	11.85	7.90	11.90	15.60	7.75
365	CINEMA/THEATER	06	11.70	14.95	14.95	11.70	11.50	18.90	23.20	11.85	7.90	11.90	15.60	7.75
366	RADIO/TV/MOVIE STU.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
367	SOCIAL/FRAT. HALL	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
368	HANGAR	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
369	DAY CARE CENTER	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
370	GREENHOUSE	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
371	DOWNTOWN ROW TYPE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
373	RETAIL, SINGLE OCCUP.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
374	RETAIL, MULTI OCCUP.	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
381	BOWLING ALLEY	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
382	SKATING RINK	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
383	HEALTH SPA	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
384	SWIM., INDOOR POOL	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
385	TENNIS CLUB, INDOOR	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
386	RACQ. CLUB, INDOOR	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
387	COUNTRY CLUB	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
388	CLUB HOUSE	03	11.80	14.35	14.35	11.05	9.50	15.00	18.00	—	6.55	9.40	11.95	6.95
389	CTRY. CLUB W/COURSE	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
391	COLD STORAGE FACIL.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
392	LUMBER STORAGE	07	9.00	11.05	11.05	9.00	8.15	10.30	12.70	8.35	5.90	6.50	8.55	5.95
395	TRUCK TERMINAL	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
396	MINI WAREHOUSE	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
397	OFFICE/WAREHOUSE	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
398	WAREHOUSE	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
399	PREFAB. WAREHOUSE	07	9.00	11.05	11.05	9.00	8.15	10.30	12.70	8.35	5.90	6.50	8.55	5.95
401	MANUF./PROCESSING	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
405	RESEARCH & DEV.	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
610	REC./HEALTH	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
611	LIBRARY	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
612	SCHOOL	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
613	COLLEGE & UNIV.	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
620	RELIGIOUS	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
630	AUDITORIUM	06	11.70	14.95	14.95	11.70	11.50	18.90	23.20	11.85	7.90	11.90	15.60	7.75
640	HOSPITAL	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
660	POLICE/FIRE STATION	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
670	CORRECTIONAL	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
680	CULTURAL FACILITY	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
690	RAIL/BUS/AIR TERM.	05	9.05	14.25	14.25	10.70	10.85	17.15	20.25	11.25	7.55	10.60	13.50	7.30
710	TELEPH. EQUIP. BLDG.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
715	TELE. SERV. GAR. FAC.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90
720	RADIO/TV TRMTR. BLD.	04	11.60	14.35	14.35	11.70	10.70	15.40	18.15	9.45	7.75	9.65	12.10	6.90

INTERIOR COST AND ADJUSTMENT SCHEDULE

USE CODE BASE COST - INTERIOR FINISH COST - PARTITIONS COST

USE TYPE CODE	USE CODE DESCRIPTION	INTERIOR BASE RATE	NO INTERIOR FINISH	PARTITIONS			
				0 NONE	1 BELOW NORM	2 NORM	3 ABOVE NORM
011	APARTMENT	17.35	-3.40	- 6.55	- .70	—	+ .75
012	HOTEL	24.30	-3.10	- 9.85	-1.15	—	+1.35
021	MOTEL	21.95	-2.90	- 9.15	-1.15	—	+1.35
023	DORMITORY	25.20	-3.10	-10.00	-1.15	—	+1.30
025	DWELLING CONV. - OFFICE	16.90	-2.90	- 6.35	-1.10	—	+1.35
026	DWELLING CONV. - SALES	16.90	-2.90	- 6.35	-1.10	—	+1.35
027	DWELLING	16.90	-2.90	- 6.35	-1.10	—	+1.35
031	RESTAURANT	37.05	-6.20	- 8.45	-2.95	—	+5.95
032	DEPARTMENT STORE	14.05	-3.15	- 1.60	- .35	—	+ .45
033	DISCOUNT STORE/MARKET	10.15	-2.15	- .75	- .15	—	+ .20
034	RETAIL STORE	13.60	-3.85	- 1.70	- .55	—	+ .70
035	TAVERN/BAR	22.45	-3.85	- 5.50	-1.90	—	+3.00
036	BAR/LOUNGE	22.45	-3.85	- 5.50	-1.90	—	+3.00
037	CAFETERIA	24.50	-3.15	- 2.90	-1.05	—	+1.60
038	CONVENIENCE STORE	13.60	-3.85	- 1.70	- .55	—	+ .70
041	MINI WAREHOUSE	4.65	- .65	- .60	- .45	—	+ .60
042	HANGAR	4.90	- .65	- .45	- .15	—	+ .20
043	MANUFACTURING	5.70	- .65	- .80	- .30	—	+ .60
044	LIGHT MANUFACTURING	5.70	- .65	- .80	- .30	—	+ .60
045	WAREHOUSE	4.65	- .65	- .60	- .45	—	+ .60
046	AUTO SHOWROOM/OFFICE	15.30	-3.50	- 2.65	- .70	—	+1.00
047	AUTO PARTS/SERVICE	8.05	- .65	- .80	- .30	—	+ .45
048	TENNIS CLUB	12.35	- .65	- 2.65	- .30	—	+ .45
049	RACQUETBALL COURT	23.65	-1.40	-12.95	-1.25	—	+3.75
050	SKATING RINK (ICE/ROLLER)	11.20	-1.80	- 1.65	- .55	—	+ .70
051	BANK/SAVINGS INSTITUTION	36.70	-6.65	-14.25	-2.20	—	+2.55
052	MEDICAL CENTER	36.85	-6.65	-15.25	-2.25	—	+2.65
053	OFFICE BUILDING	28.80	-6.65	-11.10	-2.40	—	+3.15
054	NURSING HOME	32.75	-6.65	-11.55	-1.90	—	+2.25
055	SCHOOL	29.65	-6.65	-11.10	- .45	—	+1.90
056	HOSPITAL	50.75	-6.65	-21.10	-1.95	—	+2.10
057	LIBRARY	31.95	-6.65	-11.10	-1.40	—	+1.70
058	FUNERAL HOME	23.55	-3.50	- 9.20	-2.25	—	+2.90
061	AUDITORIUM/THEATER	24.80	-3.30	- 9.05	-1.70	—	+2.50
062	CINEMA	23.90	-3.30	- 9.10	-2.10	—	+2.70
063	RELIGIOUS INSTITUTION	24.40	-3.30	- 9.50	-2.20	—	+2.90
064	SOCIAL/FRATERNAL	22.75	-3.30	- 8.25	-1.60	—	+1.85
070	SERVICE STATION W/BAYS	13.75	- .65	- 5.65	- .70	—	+ .80
071	SERV. STAT., CONV. RETAIL	14.55	- .65	- 5.65	- .70	—	+ .80
072	SERV. STAT., CONV. STORAGE	13.75	- .65	- 5.65	- .70	—	+ .80
073	SERVICE STATION W/O BAYS	20.80	- .65	- 5.65	- .70	—	+ .80
074	CAR WASH, MANUAL	5.65	-1.40	- .70	- .20	—	+ .30
075	CAR WASH, AUTOMATIC	5.65	-1.40	- .70	- .20	—	+ .30
081	MULTI-USE, APARTMENT	17.05	-2.70	- 6.75	- .70	—	+ .80
082	MULTI-USE, OFFICE	23.55	-3.50	- 9.20	-2.25	—	+2.90
083	MULTI-USE, SALES	11.20	-1.80	- 1.65	- .55	—	+ .70
084	MULTI-USE, STORAGE	5.65	-1.40	- .70	- .20	—	+ .30
085	ENCLOSURE	17.55	-3.45	- 6.35	-1.10	—	+1.35
086	SUPPORT AREA	5.65	-1.40	- .20	—	—	+ .30
088	RESTRM./LOCKER RM. FACIL.	5.65	-1.40	- .70	- .20	—	+ .30
090	PARKING GARAGE	1.75	—	- .60	- .45	—	+ .60
091	UNFIN. RESID. BASEMENT	4.15	-1.40	- .65	- .20	—	+ .35
095	COVERED MALL	12.60	-3.85	- .70	- .30	—	+ .20
100	FAST FOOD	56.20	—	—	—	—	—
990	PARKING UPPER DECK	.10	—	—	—	—	—

EXTERIOR WALL MATERIAL COST SCHEDULE

EXTERIOR WALL TYPE CODE	EXTERIOR WALL DESCRIPTION	COST BY BASIC STRUCTURE CODE									
		Hotel Apt. Hi-Rise	Apart- ment	Retail	Ware- house	Office Lo-Rise	Instit.	Lt. Metal	Office Hi-Rise	Food Fran- chise	Resid.
		01	02	03	04	05	06	07	08	09	10
00	None	—	—	—	—	—	—	—	—	—	—
01	Brick	9.75	8.30	10.00	9.50	11.10	10.90	8.05	11.10	—	8.30
02	Frame	6.55	6.10	7.10	6.55	7.30	7.20	5.50	7.30	—	6.10
03	Concrete Block	8.50	7.55	8.35	7.75	9.35	9.00	6.10	9.35	—	7.55
04	Brick and Block	9.10	8.00	9.20	8.65	10.20	9.90	7.05	10.20	—	8.00
05	Tile	12.20	—	12.25	11.55	11.95	12.10	—	11.95	—	—
06	Frame or Brick on Wood	8.15	7.20	8.55	8.05	9.20	9.05	6.75	9.20	—	7.20
07	Metal, Light	—	—	2.10	2.10	2.10	2.10	1.80	—	—	—
08	Metal, Sandwich	—	—	7.00	6.60	6.60	6.60	6.60	—	—	—
09	Concrete, Load Bearing	9.20	8.55	9.80	9.45	10.55	10.30	7.45	10.55	—	8.55
10	Concrete, Non Load Bearing	8.75	—	9.00	8.70	9.70	8.45	6.95	9.70	—	—
11	Glass and Steel	14.25	13.40	14.40	13.15	15.05	14.75	11.50	15.05	—	13.40
12	Glass and Masonry	13.05	12.20	12.95	11.90	14.60	15.45	—	14.60	—	12.20
13	Enclosure	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	—	1.95
14	Concrete, Tilt-Up	—	—	7.70	7.00	8.05	8.00	5.40	8.05	—	—
15	Solar Glass/Steel	21.60	21.35	22.85	21.10	25.10	24.70	—	25.10	—	21.35
16	Corrugated Asbestos	5.90	5.50	6.50	6.15	6.75	6.65	4.45	6.75	—	5.50

HEATING AND AIR CONDITIONING COST ADJUSTMENT SCHEDULE

BY USE TYPE

BASIC USE TYPE CODE	USE CODE DESCRIPTION	HEATING							AIR COND.		
		0 None	1 Hot Air	2 Hot Water	3 Unit	4 Elec.	5 Ht. Pump	6 Solar	0 None	1 Central	2 Unit
011	APARTMENT	-1.35	—	—	-.95	—	—	—	-2.10	—	-.85
012	HOTEL	-1.60	—	—	-1.10	—	—	—	-2.30	—	-.95
021	MOTEL	-1.45	—	—	-1.10	—	—	—	-2.20	—	-.95
023	DORMITORY	-1.60	—	—	-1.10	—	—	—	-2.30	—	-.95
025	DWELLING CONV. - OFFICE	-1.45	—	—	-1.10	—	—	—	-2.20	—	-.95
026	DWELLING CONV. - SALES	-1.45	—	—	-1.10	—	—	—	-2.20	—	-.95
027	DWELLING	-1.45	—	—	-1.10	—	—	—	-2.20	—	-.95
031	RESTAURANT	-1.65	—	—	-.95	—	—	—	-5.65	—	-1.35
032	DEPARTMENT STORE	-1.10	—	—	-1.10	—	—	—	-2.65	—	-1.35
033	DISCOUNT STORE/MARKET	-.80	—	—	-.80	—	—	—	-2.65	—	-1.35
034	RETAIL STORE	-1.65	—	—	-.95	—	—	—	-2.65	—	-1.35
035	TAVERN/BAR	-1.65	—	—	-.95	—	—	—	-2.65	—	-1.35
036	BAR/LOUNGE	-1.65	—	—	-.95	—	—	—	-2.65	—	-1.35
037	CAFETERIA	-1.15	—	—	-.80	—	—	—	-2.65	—	-1.35
038	CONVENIENCE STORE	-1.65	—	—	-.95	—	—	—	-2.65	—	-1.35
041	MINI WAREHOUSE	-1.60	—	—	-.85	—	—	—	—	+2.35	+1.10
042	HANGAR	-1.60	—	—	-.85	—	—	—	—	+2.35	+1.10
043	MANUFACTURING	-1.60	—	—	-.85	—	—	—	—	+2.35	+1.10
044	LIGHT MANUFACTURING	-1.60	—	—	-.85	—	—	—	—	+2.35	+1.10
045	WAREHOUSE	-1.60	—	—	-.85	—	—	—	—	+2.35	+1.10
046	AUTO SHOWROOM/OFFICE	-1.60	—	—	-.85	—	—	—	-2.35	—	-1.10
047	AUTO PARTS/SERVICE	-1.60	—	—	-.85	—	—	—	-2.35	—	-1.10
048	TENNIS CLUB	-1.60	—	—	-.85	—	—	—	-2.35	—	-1.10
049	RACQUETBALL COURT	-1.25	—	—	-.55	—	—	—	-1.95	—	-1.00
050	SKATING RINK (ICE/ROLLER)	-1.45	—	—	-.85	—	—	—	-2.55	—	-1.30
051	BANK/SAVINGS INSTITUTION	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
052	MEDICAL CENTER	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
053	OFFICE BUILDING	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
054	NURSING HOME	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
055	SCHOOL	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
056	HOSPITAL	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
057	LIBRARY	-2.25	—	—	-1.65	—	—	—	-2.90	—	-1.30
058	FUNERAL HOME	-2.20	—	—	-1.60	—	—	—	-2.85	—	-1.30
061	AUDITORIUM/THEATER	-2.55	—	—	-1.90	—	—	—	-2.85	—	-1.15
062	CINEMA	-2.55	—	—	-1.90	—	—	—	-2.85	—	-1.15
063	RELIGIOUS INSTITUTION	-2.55	—	—	-1.90	—	—	—	-2.85	—	-1.15
064	SOCIAL/FRATERNAL	-2.55	—	—	-1.90	—	—	—	-2.85	—	-1.15
070	SERVICE STATION W/BAYS	-1.40	—	—	-.20	—	—	—	—	+2.35	+1.10
071	SERV. STAT., CONV. RETAIL	-1.40	—	—	-.20	—	—	—	—	+2.35	+1.10
072	SERV. STAT., CONV. STORAGE	-1.40	—	—	-.20	—	—	—	—	+2.35	+1.10
073	SERVICE STATION W/O BAYS	-1.40	—	—	-.20	—	—	—	—	+2.35	+1.10
074	CAR WASH, MANUAL	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
075	CAR WASH, AUTOMATIC	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
081	MULTI-USE, APARTMENT	-1.35	—	—	-1.00	—	—	—	-2.05	—	-.85
082	MULTI-USE, OFFICE	-2.20	—	—	-1.60	—	—	—	-2.85	—	-1.30
083	MULTI-USE, SALES	-1.45	—	—	-.85	—	—	—	-2.55	—	-1.30
084	MULTI-USE, STORAGE	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
085	ENCLOSURE	-1.45	—	—	-.85	—	—	—	-2.30	—	-.85
086	SUPPORT AREA	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
088	RESTRM./LOCKER RM. FACIL.	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
090	PARKING GARAGE	—	—	—	—	—	—	—	—	—	—
091	UNFIN. RESID. BASEMENT	-1.45	—	—	-.85	—	—	—	—	+2.30	+1.05
095	COVERED MALL	-1.65	—	—	-.95	—	—	—	-2.65	—	-1.35
100	FAST FOOD	—	—	—	—	—	—	—	—	—	—
990	PARKING UPPER DECK	—	—	—	—	—	—	—	—	—	—

PLUMBING AND SPRINKLER COST ADJUSTMENT SCHEDULE

BY USE TYPE

BASIC USE TYPE CODE	USE CODE DESCRIPTION	PLUMBING				SPRINKLER			
		0 None	1 Below Norm	2 Norm	3 Above Norm	0 None	1 Wet	2 Dry	3 Other
011	APARTMENT	- 2.40	- .55	—	.65	—	1.60	1.70	1.85
012	HOTEL	- 4.15	-1.05	—	1.30	—	1.60	1.70	1.85
021	MOTEL	- 3.90	-1.00	—	1.30	—	1.65	1.80	1.90
023	DORMITORY	- 4.05	-1.05	—	1.40	—	1.60	1.70	1.85
025	DWELLING CONV. - OFFICE	- 2.40	- .75	—	1.05	—	1.65	1.80	1.90
026	DWELLING CONV. - SALES	- 2.40	- .75	—	1.05	—	1.65	1.80	1.90
027	DWELLING	- 2.40	- .75	—	1.05	—	1.65	1.80	1.90
031	RESTAURANT	- 4.90	-1.65	—	2.35	—	1.15	1.30	1.40
032	DEPARTMENT STORE	- 1.05	- .90	—	.30	—	1.15	1.30	1.40
033	DISCOUNT STORE/MARKET	- .75	- .35	—	.20	—	1.15	1.30	1.40
034	RETAIL STORE	- 1.10	- .45	—	.70	—	1.15	1.30	1.40
035	TAVERN/BAR	- 4.90	-1.65	—	2.35	—	1.15	1.30	1.40
036	BAR/LOUNGE	- 4.90	-1.65	—	2.35	—	1.15	1.30	1.40
037	CAFETERIA	- 3.15	-1.10	—	1.60	—	1.15	1.30	1.40
038	CONVENIENCE STORE	- 1.10	- .45	—	.70	—	1.15	1.30	1.40
041	MINI WAREHOUSE	- .75	- .60	—	.65	—	1.05	1.10	1.25
042	HANGAR	- .75	- .60	—	.75	—	1.05	1.10	1.25
043	MANUFACTURING	- .85	- .30	—	.45	—	1.05	1.10	1.25
044	LIGHT MANUFACTURING	- .85	- .30	—	.45	—	1.05	1.10	1.25
045	WAREHOUSE	- .75	- .60	—	.65	—	1.05	1.10	1.25
046	AUTO SHOWROOM/OFFICE	- 1.80	- .55	—	.70	—	1.05	1.10	1.25
047	AUTO PARTS/SERVICE	- 1.00	- .45	—	.65	—	1.05	1.10	1.25
048	TENNIS CLUB	- 1.80	- .55	—	.70	—	1.05	1.10	1.25
049	RACQUETBALL COURT	- 1.25	- .35	—	1.25	—	1.15	1.30	1.40
050	SKATING RINK (ICE/ROLLER)	- 1.10	- .45	—	.65	—	1.15	1.30	1.40
051	BANK/SAVINGS INSTITUTION	- 3.00	-1.10	—	1.65	—	1.15	1.30	1.40
052	MEDICAL CENTER	- 4.50	-1.70	—	2.30	—	1.15	1.30	1.40
053	OFFICE BUILDING	- 1.45	- .20	—	1.90	—	1.15	1.30	1.40
054	NURSING HOME	- 4.80	-1.35	—	1.90	—	1.15	1.30	1.40
055	SCHOOL	- 3.10	-1.05	—	1.45	—	1.15	1.30	1.40
056	HOSPITAL	- 7.55	-1.85	—	2.45	—	1.15	1.30	1.40
057	LIBRARY	- 2.50	- .95	—	1.35	—	1.15	1.30	1.40
058	FUNERAL HOME	- 2.10	- .85	—	1.25	—	1.15	1.30	1.40
061	AUDITORIUM/THEATER	- 3.10	- .75	—	1.00	—	1.30	1.45	1.60
062	CINEMA	- 2.25	- .55	—	.70	—	1.30	1.45	1.60
063	RELIGIOUS INSTITUTION	- 2.35	- .85	—	1.25	—	1.30	1.45	1.60
064	SOCIAL/FRATERNAL	- 2.50	- .95	—	1.35	—	1.30	1.45	1.60
070	SERVICE STATION W/BAYS	- 4.10	-1.35	—	.80	—	1.35	1.45	1.65
071	SERV. STAT., CONV. RETAIL	- 4.10	-1.35	—	.80	—	1.35	1.45	1.65
072	SERV. STAT., CONV. STORAGE	- 4.10	-1.35	—	.80	—	1.35	1.45	1.65
073	SERVICE STATION W/O BAYS	-11.10	-5.65	—	2.10	—	1.35	1.45	1.65
074	CAR WASH, MANUAL	- .70	- .20	—	.30	—	1.15	1.30	1.40
075	CAR WASH, AUTOMATIC	- .70	- .20	—	.30	—	1.15	1.30	1.40
081	MULTI-USE, APARTMENT	- 2.10	- .60	—	.70	—	1.15	1.30	1.40
082	MULTI-USE, OFFICE	- 2.10	- .85	—	1.25	—	1.15	1.30	1.40
083	MULTI-USE, SALES	- 1.10	- .45	—	.65	—	1.15	1.30	1.40
084	MULTI-USE, STORAGE	- .70	- .20	—	.30	—	1.15	1.30	1.40
085	ENCLOSURE	- 2.40	- .75	—	1.05	—	1.15	1.30	1.40
086	SUPPORT AREA	- .70	- .20	—	.30	—	1.15	1.30	1.40
088	RESTRM./LOCKER RM. FACIL.	- .70	- .20	—	.30	—	1.15	1.30	1.40
090	PARKING GARAGE	—	—	—	—	—	—	—	—
091	UNFIN. RESID. BASEMENT	- .65	- .20	—	.35	—	1.20	1.30	1.40
095	COVERED MALL	—	—	—	—	—	—	—	—
100	FAST FOOD	—	—	—	—	—	—	—	—
990	PARKING UPPER DECK	—	—	—	—	—	—	—	—

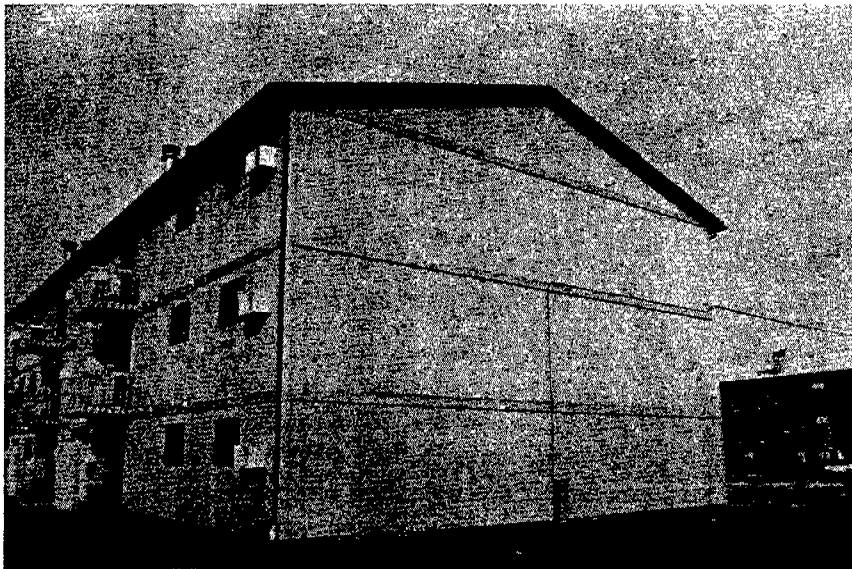
BUILDING OTHER FEATURES - ATTACHED IMPROVEMENTS COST SCHEDULE

STRUCTURE DESCRIPTION	Str. Code	Unit of Meas.	Rate	STRUCTURE DESCRIPTION	Str. Code	Unit of Meas.	Rate
Aerial Walkway	AW1	Sq. Ft.	154.50	OPEN AREAS			
Atrium (Cover Only)	AT1	Sq. Ft.	24.75	High Rise Apartments and Hotels	OA1	Sq. Ft.	4.55
Atrium (Walls)	AT2	Sq. Ft.	9.00	Garden Apts., Motels & Dwellings	OA2	Sq. Ft.	4.20
Bank Canopy, Drive In	BC1	Sq. Ft.	22.25	Stores and Restaurants	OA3	Sq. Ft.	4.95
Bank Vault (Money)	BE1	Sq. Ft.	79.70	Industrial and Warehouses	OA4	Sq. Ft.	4.95
Bank Vault (Record Storage)	BE2	Sq. Ft.	24.10	Banks and Offices (Low rise)	OA5	Sq. Ft.	6.00
Bank Vault Door (Circ., Money)	BE3	Each	92100.00	Theaters and Auditoriums	OA6	Sq. Ft.	6.50
Bank Vault Door (Rect., Money)	BE4	Each	24700.00	Lt. Metal Buildings	OA7	Sq. Ft.	3.55
Bank Vault Door (Rcd. Stor.)	BE5	Each	2000.00	High Rise Office Buildings	OA8	Sq. Ft.	6.15
Bank Night Deposit Chute	BE6	Each	5100.00	Overhead Doors, Wood or Metal	OD1	Sq. Ft.	8.55
Bank Drive In Window	BE7	Each	6600.00	Overhead Doors, Rolling Steel	OD2	Sq. Ft.	13.55
Bank Service Window	BE8	Each	5500.00	Overhead Doors, Mtr. Op., Wd./Mtl.	OD3	Sq. Ft.	11.45
Bank Drive In Teller Booths	BE9	Sq. Ft.	57.20	Overhead Doors, Mtr. Op., Roll. Stl.	OD4	Sq. Ft.	16.45
Bank Pneumatic Tube	BE0	Lin. Ft.	510.00	Patio, Concrete	LP3	Sq. Ft.	1.15
Basement Top	BT1	Sq. Ft.	5.70	Patio, Asphalt	LP4	Sq. Ft.	.60
Canopy Only	CP5	Sq. Ft.	4.80	Patio, Flagstone, Sand Base	LP5	Sq. Ft.	3.05
Canopy, Roof/Slab	CP6	Sq. Ft.	5.95	Patio, Flagstone, Conc. Base	LP6	Sq. Ft.	4.30
Canopy, Serv. Station Economy	CP7	Sq. Ft.	4.80	Patio, Brick	LP7	Sq. Ft.	2.85
Canopy, Serv. Station Average	CP8	Sq. Ft.	8.05	Indoor Pool	SC2	Sq. Ft.	30.90
Canopy, Serv. Station Good	CP9	Sq. Ft.	11.30	Porch, Open	RP1	Sq. Ft.	9.30
Carport	RC1	Sq. Ft.	5.95	Porch, Enclosed	RP2	Sq. Ft.	16.05
Covered Mall	CM1	Sq. Ft.	18.55	Porch, Open Upper Deck	RP3	Sq. Ft.	5.45
Craneways, Light	CW1	Lin. Ft.	27.20	Porch, Enclosed Upper	RP4	Sq. Ft.	9.30
Craneways, Medium	CW2	Lin. Ft.	50.00	Porch, Covered	RP5	Sq. Ft.	9.45
Craneways, Heavy	CW3	Lin. Ft.	100.00	Porch, Screened	RP6	Sq. Ft.	10.40
Dock Level Floors	DL1	Sq. Ft.	.85	Porch, Covered Upper	RP7	Sq. Ft.	5.65
Elevator, Electric Freight	EL1	—	1.00	Porch, Screened Upper	RP8	Sq. Ft.	6.25
Elevator, Electric Passenger	EL2	—	1.00	Roof, Monitor	MR1	Sq. Ft.	2.35
Elevator, Hydraulic Freight	EL3	—	1.00	Roof, High Bay	MR2	Sq. Ft.	2.35
Elevator, Hydraulic Passenger	EL4	—	1.00	Store Front, Wood Frame	SF1	Lin. Ft.	61.80
Escalator (Stair width 32")	EL5	Ft. Rise	4943.40	Store Front, Aver. Metal Frame	SF2	Lin. Ft.	123.60
Escalator (Stair width 48")	EL6	Ft. Rise	5932.10	Store Front, Elaborate	SF3	Lin. Ft.	185.40
Enclosed Entry	EE1	Sq. Ft.	16.70	Tunnel	TU1	Sq. Ft.	259.50
2 Fireplace, 1 opening	FI1	Each	2230.00	Tunnel, Utility	TU2	Sq. Ft.	92.65
2 Fireplace, 2 openings	FI2	Each	3340.00	Utility Building, Frame	RS1	Sq. Ft.	5.45
2 Fireplace, 3 openings	FI3	Each	4450.00	Utility Building, Metal	RS2	Sq. Ft.	7.25
Garage, 1 story, Att. Frame	RG1	Sq. Ft.	10.50	Utility Building, Brick or Stone	RS3	Sq. Ft.	8.45
Garage, 1 story, Att. Masonry	RG2	Sq. Ft.	13.45	MODIFICATION CODES			
Greenhouse, Economy	GH1	Sq. Ft.	6.10	Sprinkler System (Wet Pipe)	SS1	Sq. Ft.	1.10
Greenhouse, Average	GH2	Sq. Ft.	7.80	Sprinkler System (Dry Pipe)	SS2	Sq. Ft.	1.25
Greenhouse, Good	GH3	Sq. Ft.	9.15	Air Conditioning (Central)	AC1	Sq. Ft.	2.55
Loading Dock, Steel or Conc.	LD1	Sq. Ft.	7.40	Air Conditioning (Unit)	AC2	Sq. Ft.	1.30
Loading Dock, Wood	LD2	Sq. Ft.	5.05				
Loading Dock, Interior	LD3	Sq. Ft.	16.05				
Truck and Train Wells	LD4	Sq. Ft.	8.80				
Dock Levelers	LD5	Each	3700.00				

YARD IMPROVEMENTS/SECONDARY BUILDINGS COST SCHEDULE

STRUCTURE DESCRIPTION	Str. Code	Unit of Meas.	Rate	STRUCTURE DESCRIPTION	Str. Code	Unit of Meas.	Rate
Bank Canopy, Drive In	BC1	Sq. Ft.	22.25	Paving, Concrete Parking, Average	PC1	Sq. Ft.	2.05
Canopy only	CP5	Sq. Ft.	4.80	Paving, Concrete, Heavy Duty	PC2	Sq. Ft.	2.25
Canopy, Roof/Slab	CP6	Sq. Ft.	5.95	Paving, Concrete Mat./Slab	PC3	Sq. Ft.	3.10
Canopy, Roof/Serv. Station Econ.	CP7	Sq. Ft.	4.80	Plumbing Fixture	PB1	Each	490.00
Canopy, Service Station Average	CP8	Sq. Ft.	8.05	Restroom Structure (Frame or CB)	TR1	Sq. Ft.	19.80
Canopy, Service Station Good	CP9	Sq. Ft.	11.75	Restroom Structure (Brick or Stone)	TR2	Sq. Ft.	23.45
Carport	RC1	Sq. Ft.	4.80	Service Station Attendant's Booth	GS3	Sq. Ft.	74.15
Drive-In, Theater Screen	DT1	Sq. Ft.	11.60	Steel/Glass on Masonry			
Drive-In, Speakers	DT2	Each	145.00	Service Station Attendant's Booth	GS4	Sq. Ft.	59.35
Drive-In, Heaters	DT3	Each	65.00	Stucco/Glass on Frame			
Fence, Chain Link	AP1	Sq. Ft.	1.50	Shed, Machinery	SH1	Sq. Ft.	6.10
Fence, Picket	AP2	Sq. Ft.	1.60	Shed, Aluminum	SH2	Sq. Ft.	7.50
Fence, Stockade	AP3	Sq. Ft.	1.10	Shed, Finished Metal	SH3	Sq. Ft.	10.70
Fence, Post and Rail	AP4	Sq. Ft.	.90	Shed, Quonset	SH4	Sq. Ft.	8.70
Fence, Basketweave	AP5	Sq. Ft.	1.45	Lumber Shed, Frame, 2 sides open	SH5	Sq. Ft.	3.75
Fence, Brick/Stone Wall	AP6	Sq. Ft.	5.55	Lumber Shed, Frame, 4 sides open	SH6	Sq. Ft.	3.40
Garage, Detached Frame	RG4	Sq. Ft.	10.90	Swimming Pool, Commercial	SC1	Sq. Ft.	35.05
Garage, Res. Detached Masonry	RG5	Sq. Ft.	16.80	Tennis Court, Asphalt	TC1	Each	14909.00
Greenhouse, Economy	GH1	Sq. Ft.	6.10	Tennis Court, Concrete	TC2	Each	16930.00
Greenhouse, Average	GH2	Sq. Ft.	7.80	Tennis Court, Clay	TC3	Each	9890.00
Greenhouse, Good	GH3	Sq. Ft.	9.15	Utility Building, Frame	RS1	Sq. Ft.	5.45
Lights, Merc. Va., Wall Mtd. Fld.	LT1	Each	200.00	Utility Building, Metal	RS2	Sq. Ft.	7.25
Lights, Incand., Wall Mtd. Fld.	LT2	Each	65.00	Utility Building, Brick or Stone	RS3	Sq. Ft.	8.45
Lights, Fluor., Pole & Brk. Inc.	LT3	Each	545.00	MODIFICATION CODES			
Lights, Incand., Pole & Brk. Inc.	LT4	Each	475.00	Air Conditioning (Central)	AC1	Sq. Ft.	2.55
Lights, Merc. Va., Pole & Brk. Inc.	LT5	Each	610.00	Air Conditioning (Unit)	AC2	Sq. Ft.	1.30
Paving, Asphalt Parking	PA1	Sq. Ft.	1.10	Sprinkler System (Wet Pipe)	SS1	Sq. Ft.	1.10
Paving, Service Station	PA2	Sq. Ft.	1.25	Sprinkler System (Dry Pipe)	SS2	Sq. Ft.	1.25

Garden Apartment (211)
C
Use Code 011
Construction Type 1



Garden Apartment (211)
C-
Use Code 011
Construction Type

Garden Apartment (211)
C+
Use Code 011
Construction Type 1

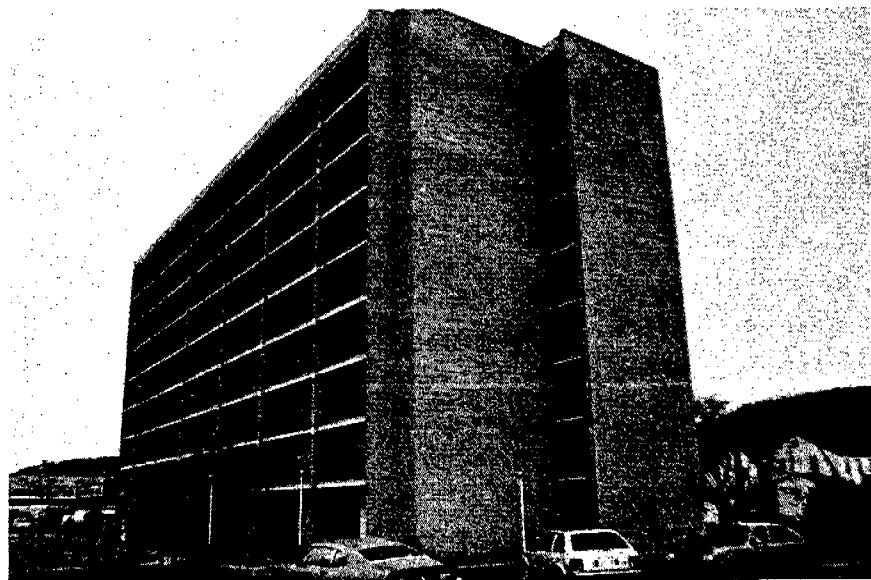


Garden Apartment (211)
C-
Use Code 011
Construction Type 1

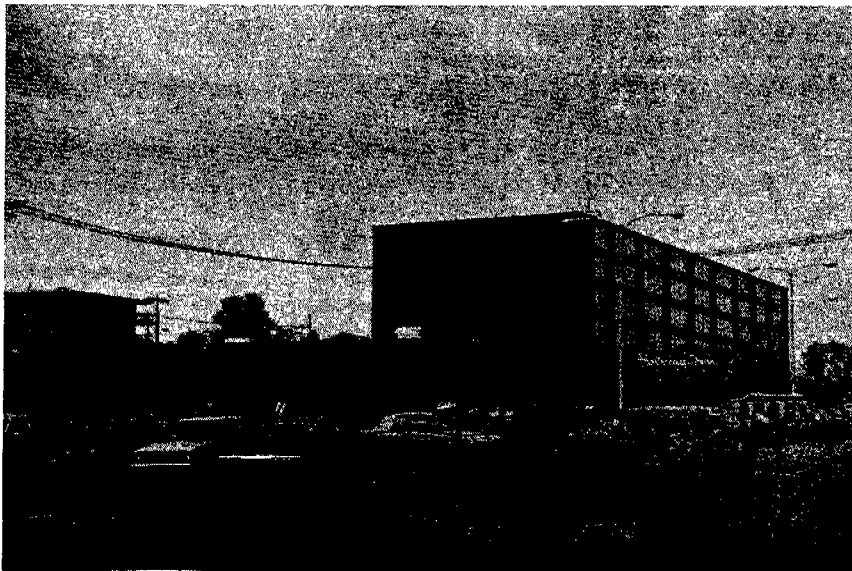


Garden Apartment (211)
D+
Use Code 011
Construction Type 1

High Rise Apartment (212)
B
Use Type 011
Construction Type 2

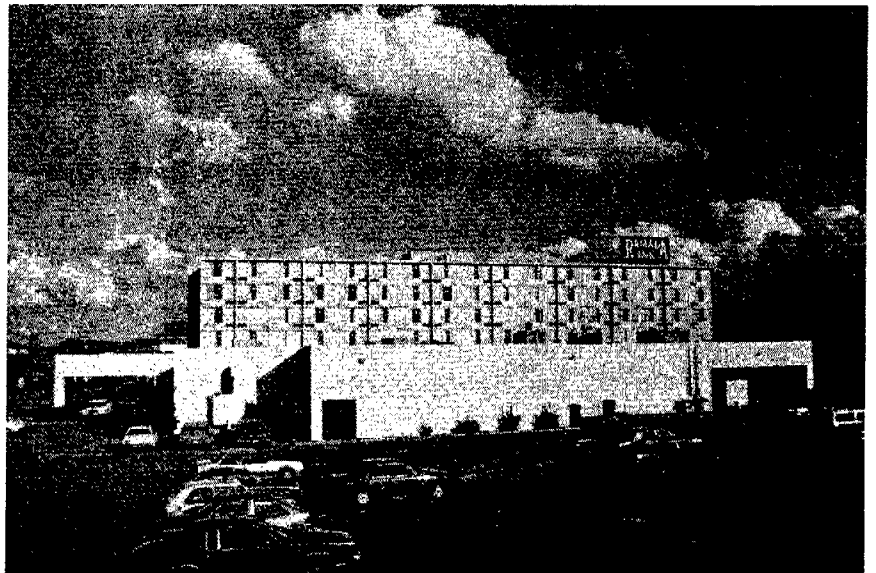


Hotel/Motel High Rise (314)
B
Use Code 012
Construction Type 2



Hotel/Motel High Rise (314)
B-
Use Code 012
Construction Type 2

Hotel/Motel High Rise (314)
C+
Use Code 012
Construction Type 2

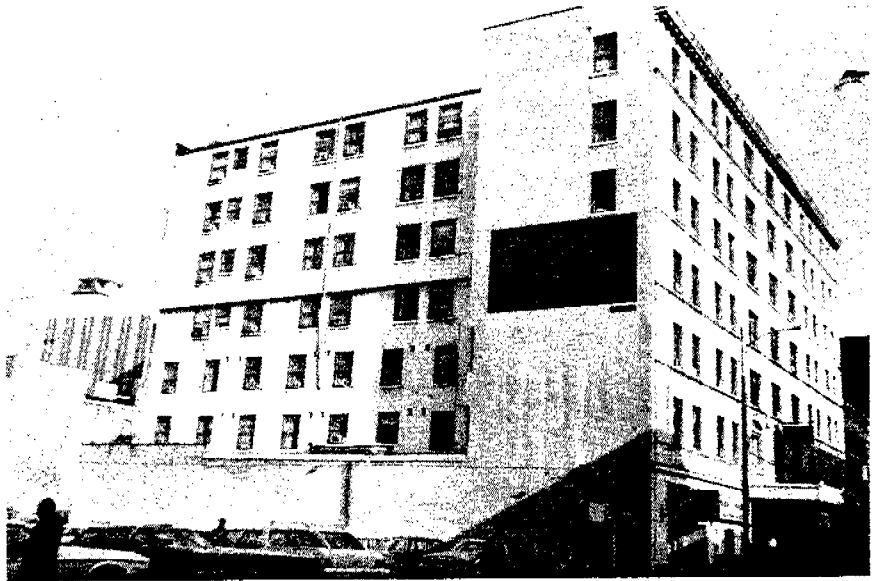


Hotel/Motel High Rise (314)

C

Use Code 012

Construction Type 1



Hotel/Motel Low Rise (315)

C

Use Code 021

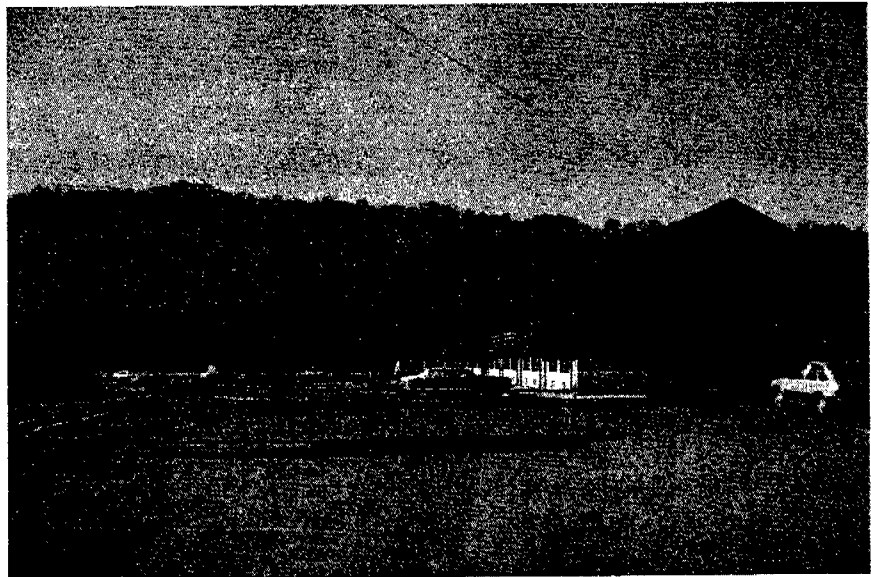
Construction Type 1

Hotel/Motel Low Rise (315)

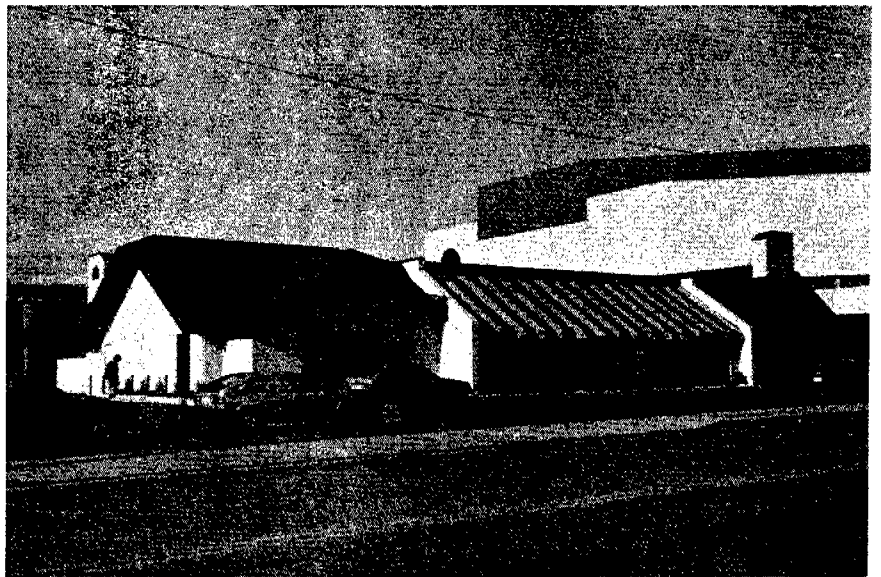
C-

Use Code 021

Construction Type 1



Restaurant (321)
 B+
 Use Code 031
 Construction Type 1

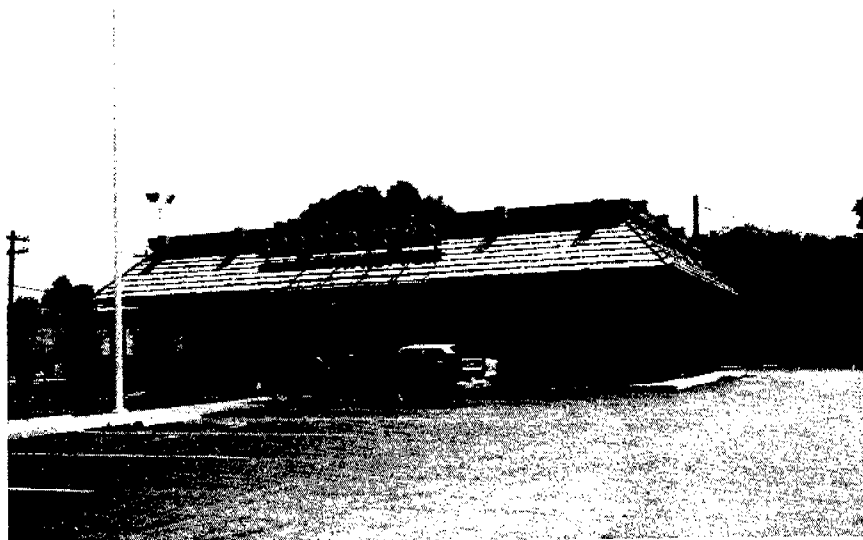
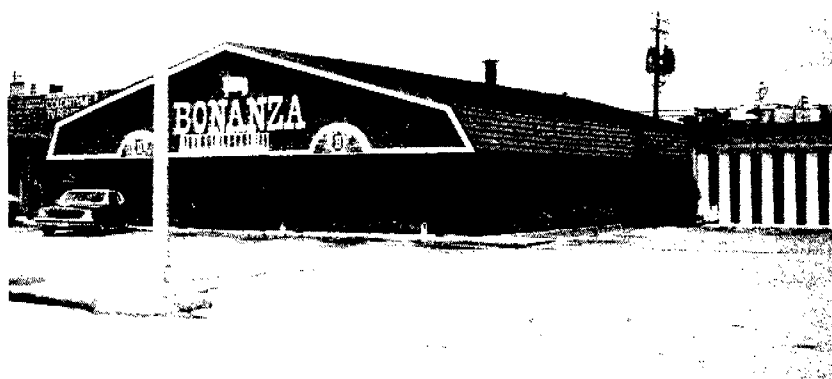


Restaurant (321)
 C
 Use Code 031
 Use Code 036
 Construction Type 1

Restaurant (321)
 C
 Use Code 031
 Construction Type 1



Bonanza Steak House
Structure Type (325)
C
Use Code 103
Construction Type 1

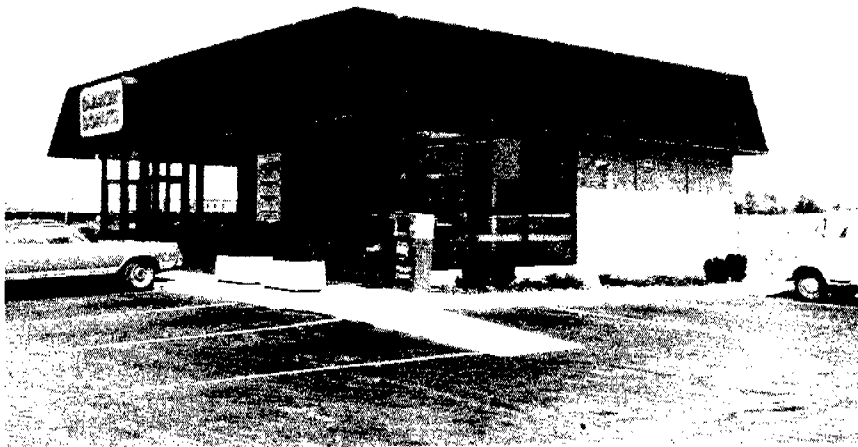


Burger King
Structure Type (325)
B
Use Code 105
Construction Type 1

Church's Fried Chicken
Structure Type (325)
A
Use Code 109
Construction Type 1

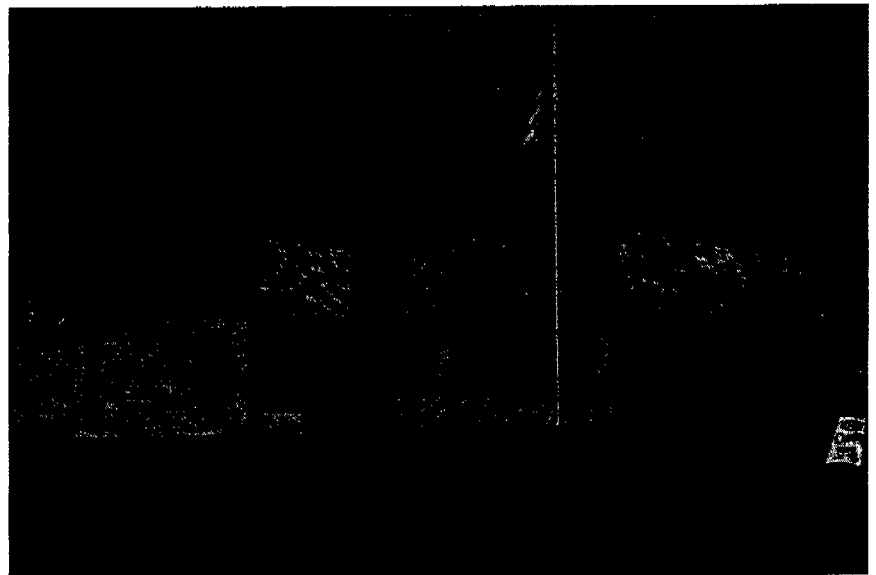


Dairy Queen
Structure Type (325)
B-
Use Code 111
Construction Type 1

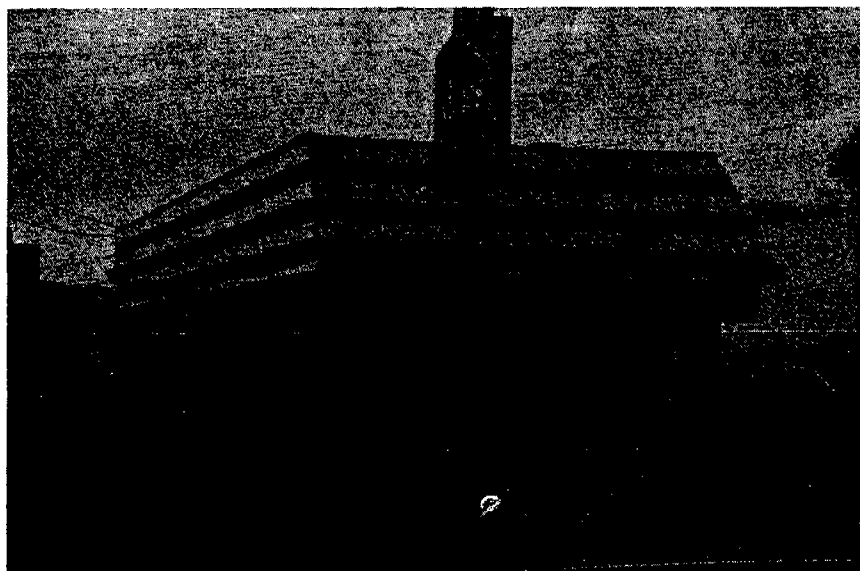


Dunkin Donuts
Structure Type (325)
B
Use Code 115
Construction Type 1

Hardees
Structure Type (325)
A-
Use Code 116
Construction Type 1

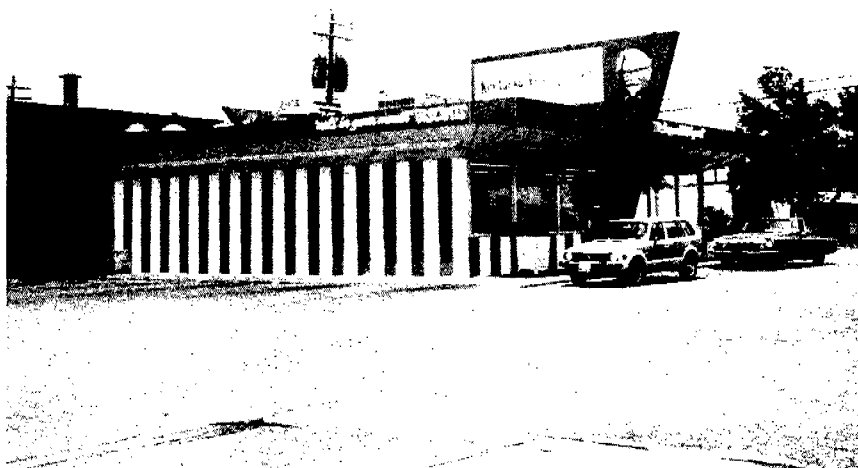


International House of Pancakes
Structure Type 325
A
Use Code 118
Construction Type 1

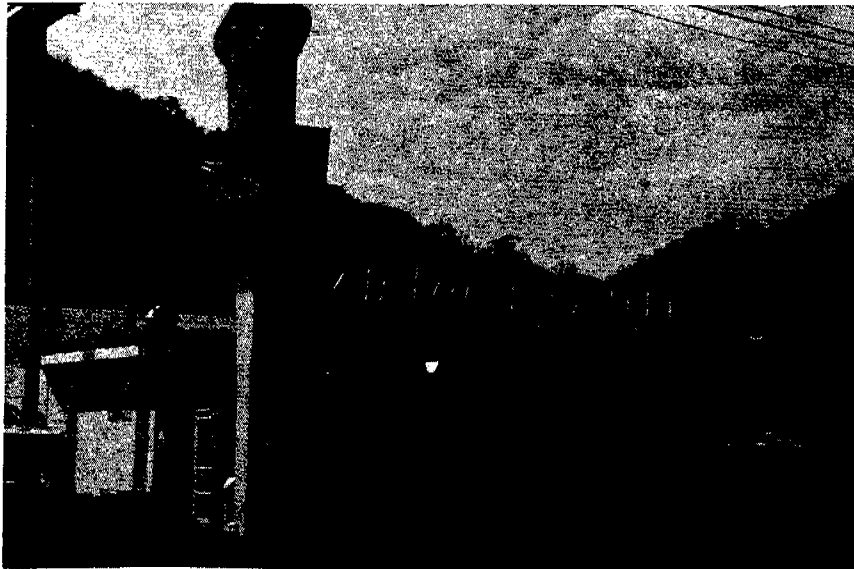
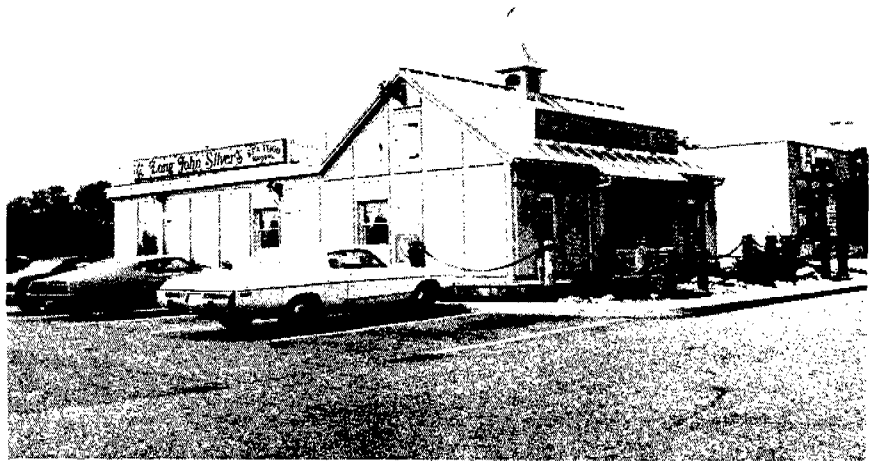


Gino's
Structure Type (325)
B
Use Code 122
Construction Type 1

Kentucky Fried Chicken
Structure Type (325)
B
Use Code 128
Construction Type 1



Long John Silver's
Structure Type (325)
B-
Use Code 135
Construction Type 1

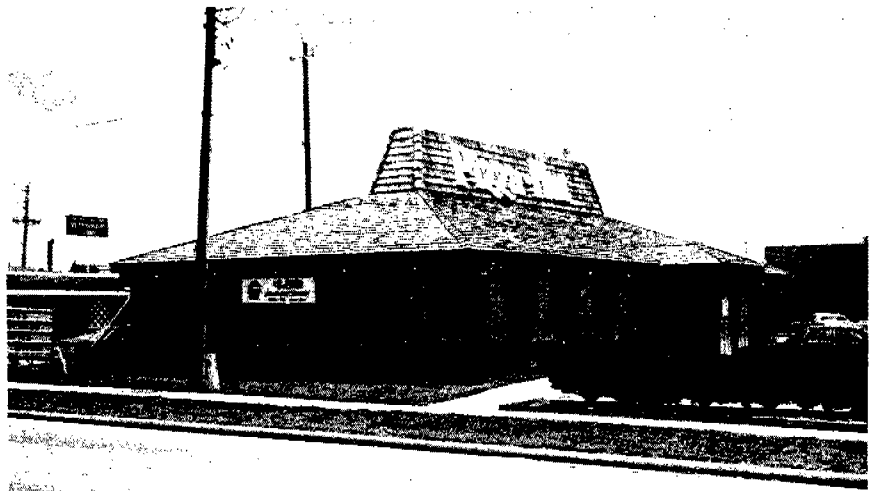


Mister Donut
Structure Type (325)
C+
Use Code 137
Construction Type 1

McDonald's
Structure Type (325)
A+
Use Code 138
Construction Type 1

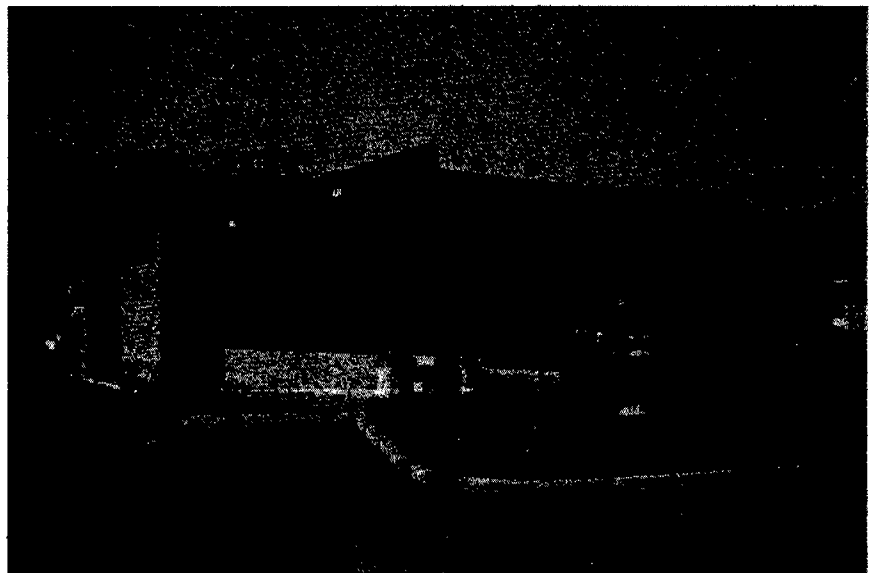


Pizza Hut
Structure Type (325)
B+
Use Code 143
Construction Type 1

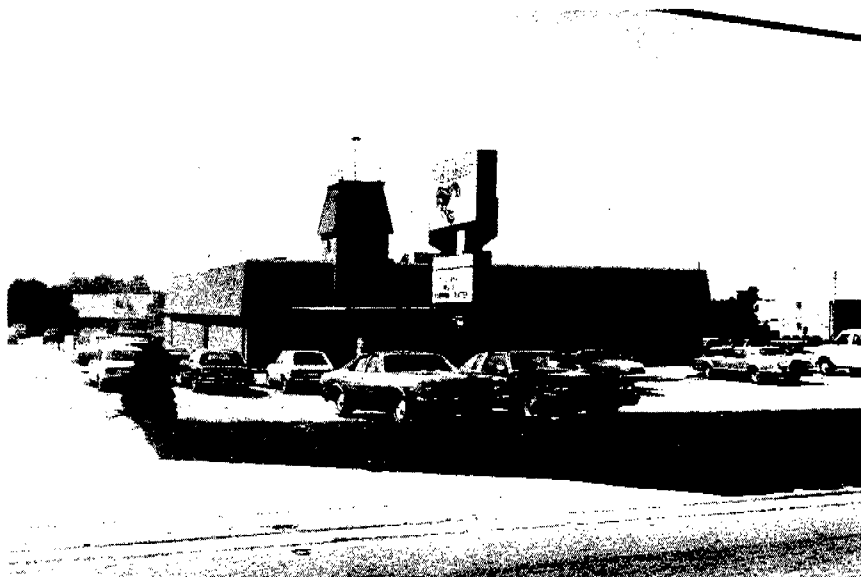


Ponderosa Steak House
Structure Type (325)
B-
Use Code 146
Construction Type 1

Rax
Structure Type (325)
A+
Use Code 151
Construction Type 1



Red Lobster
Structure Type (325)
B
Use Code 152
Construction Type 1

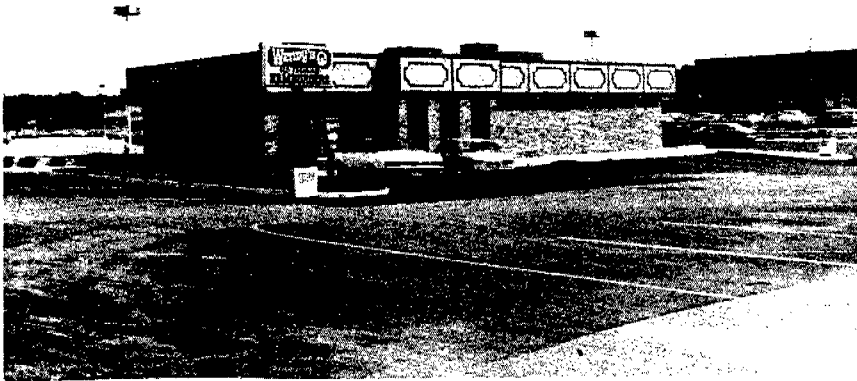
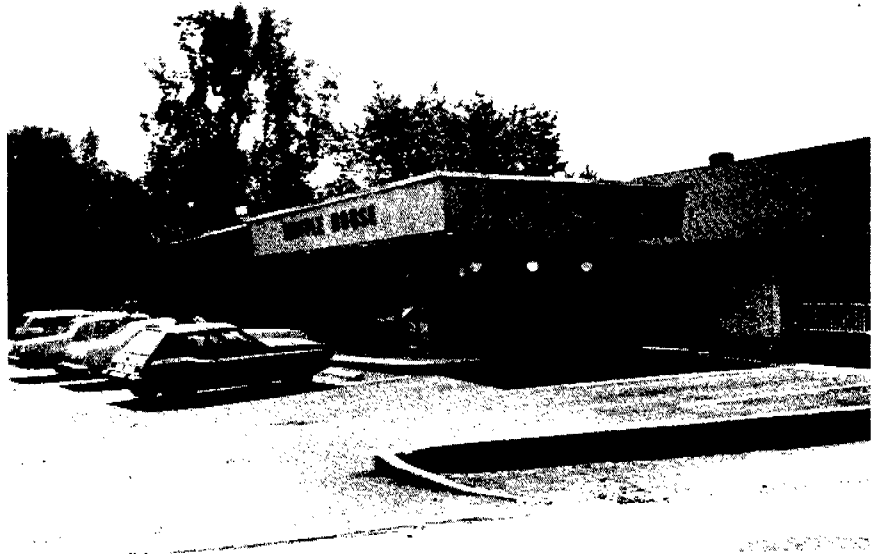


Shoney's
Structure Type (325)
B+
Use Code 166
Construction Type 1

Taco Bell
Structure Type (325)
A
Use Code 180
Construction Type 1



Waffle House
Structure Type (325)
B
Use Code 185
Construction Type 1



Wendy's Hamburgers
Structure Type (325)
A-
Use Code 187
Construction Type 1

Western Sizzlin Steak House
Structure Type (325)
B-
Use Code 190
Construction Type 1

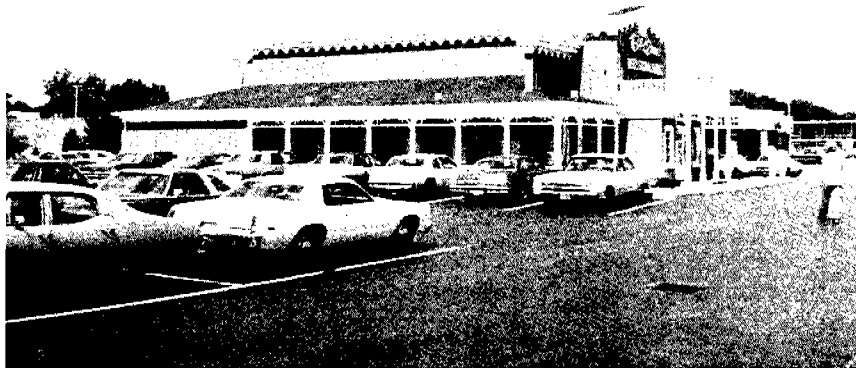


Arthur Treacher's Fish & Chips
Structure Type (325)

B-

Use Code 193

Construction Type 1



Bob Evan's
Structure Type (325)

B-

Use Code 195

Construction Type 1

Arby's Roast Beef
Structure Type (325)

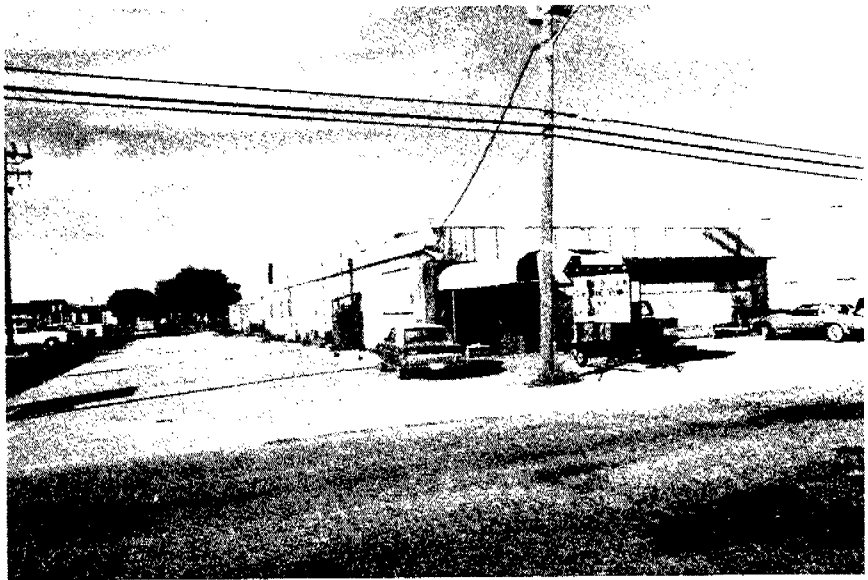
A+

Use Code 196

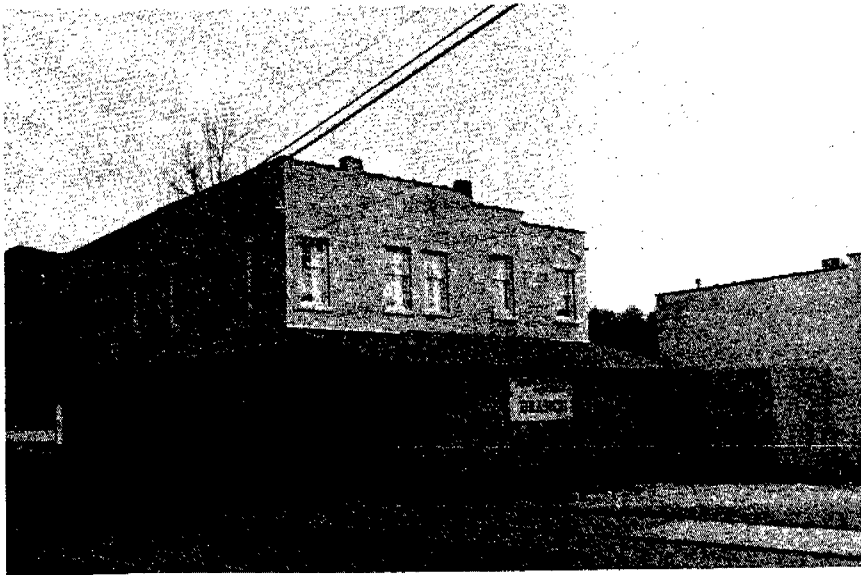
Construction Type 1



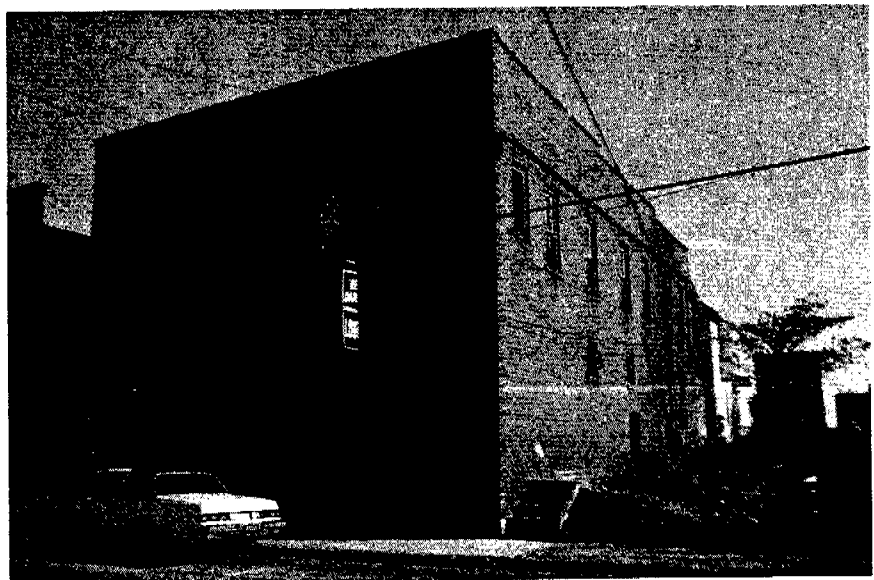
Bar/Lounge (327)
C-
Use Code 036
Construction Type 1



Bar/Lounge (327)
C-
Use Code 036
Use Code 081
Construction Type 1



Bar/Lounge
C-
Use Code 036
Use Code 081
Construction Type 1



Auto Dealer/Full Service (331)

B

Use Code 046

Use Code 047

Construction Type 2



Auto Dealer/Full Service (331)

C

Use Code 046

Use Code 047

Construction Type 1

Auto Dealer/Full Service (331)

C

Use Code 046

Construction Type 1

Use Code 047

Construction Type 4



Auto Service Garage (332)

C

Use Code 047

Construction Type 4

Use Code 083

Construction Type 1



Auto Service Garage (332)

C

Use Code 047

Use Code 083

Construction Type 1

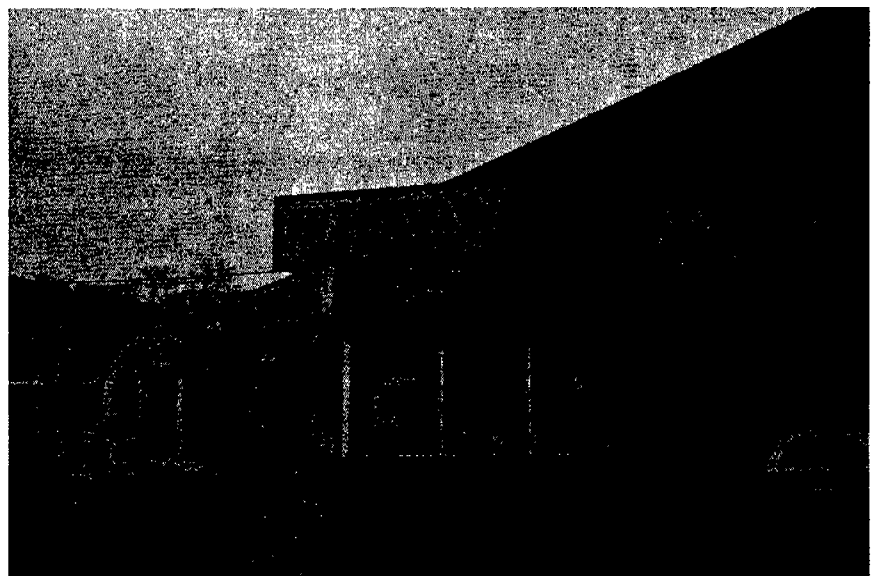
Auto Service Garage (332)

C

Use Code 047

Use Code 083

Construction Type 1



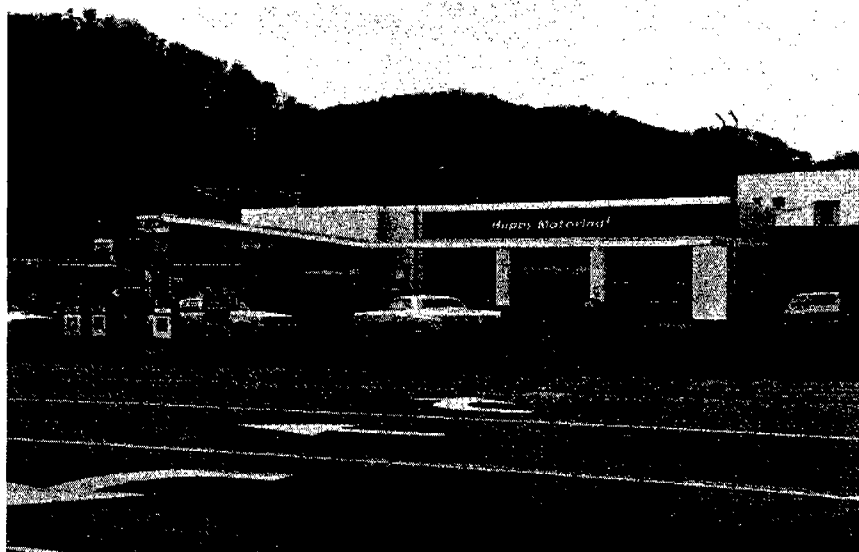
Service Station with Bays (333)

B

Use Code 070

Construction Type 1

Canopy (Good) CP9



Service Station with Bays (333)

B

Use Code 070

Construction Type 1

Canopy (Average) CP8

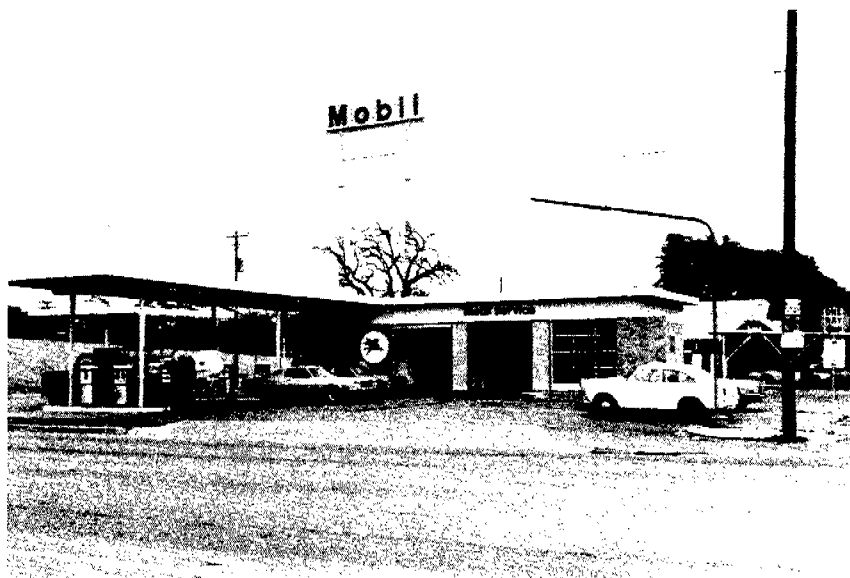
Service Station with Bays (333)

B

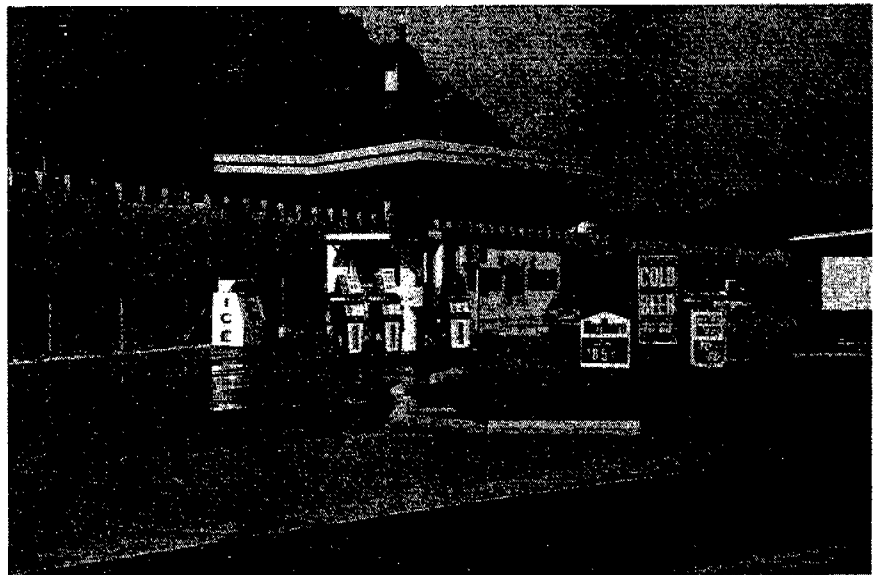
Use Code 070

Construction Type 1

Canopy (Average) CP8



Service Station
without Bays (334)
C
Use Code 073
Construction Type 1
Canopy (Average) CP8

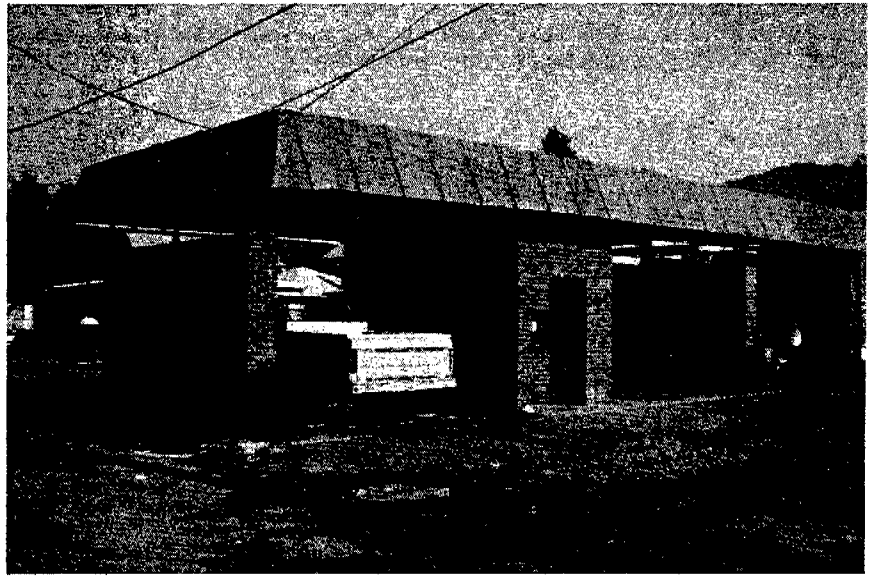


Service Station without Bays
Secondary Building
Structure Type GS3
Canopy (Good) CP9

Service Station without Bays
Secondary Building
Structure Type GS3
Canopy (Good) CP9



Car Wash/Manual (336)
C
Use Code 074
Construction Type 1



Car Wash/Automatic (337)
C
Use Code 075
Construction Type 1

Car Wash/Automatic (337)
B
Use Code 075
Construction Type 1



Parking Garage/Deck (338)

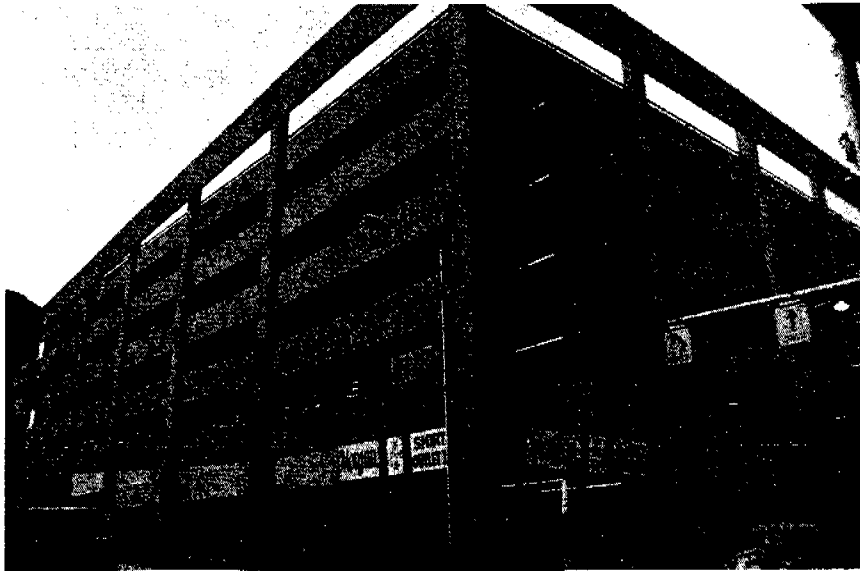
C

Use Code 083

Use Code 090

Use Code 990

Construction Type 2



Parking Garage/Deck (338)

C

Use Code 083

Use Code 090

Use Code 990

Construction Type 2

Parking Garage/Deck (338)

C

Use Code 090

Use Code 990

Construction Type 2



Regional Shopping Mall (341)

B

sectionalized as to use

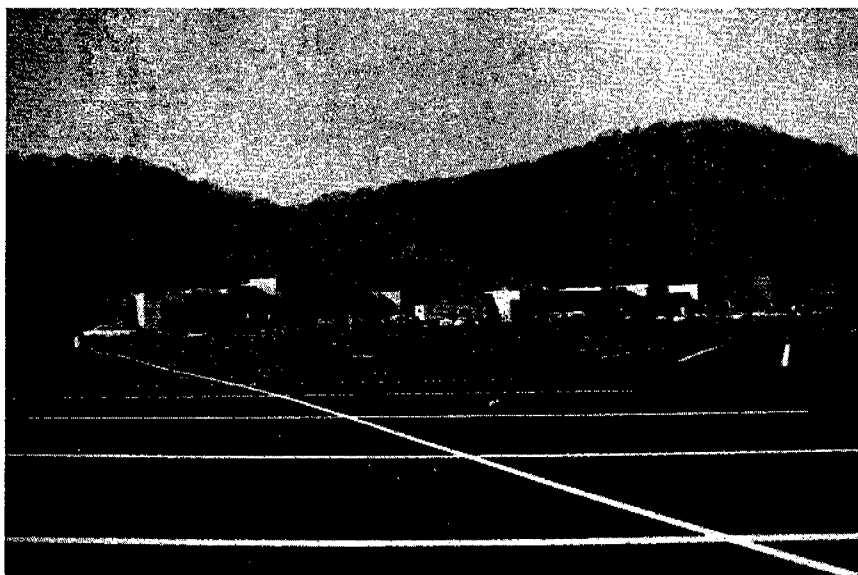
Use Code 032

Use Code 033

Use Code 034

Use Code 095

Construction Type 2



Community Shopping Center (342)

B

sectionalized as to use

Use Code 034

(Above Normal Partitions)

Construction Type 2

Neighborhood Shopping Center (343)

B-

sectionalized as to use

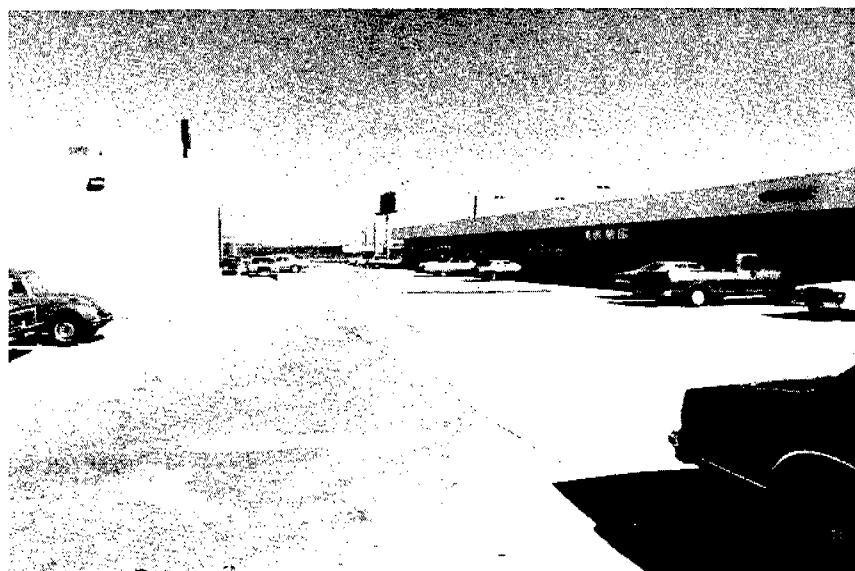
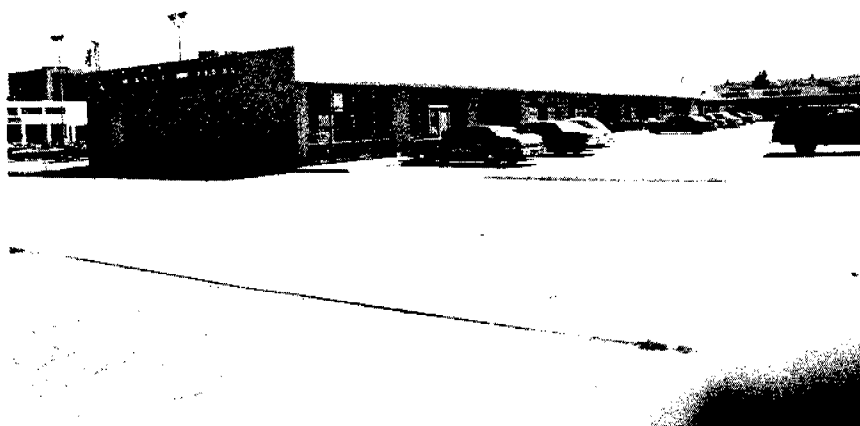
Use Code 034

(Above Normal Partitions)

Construction Type 2

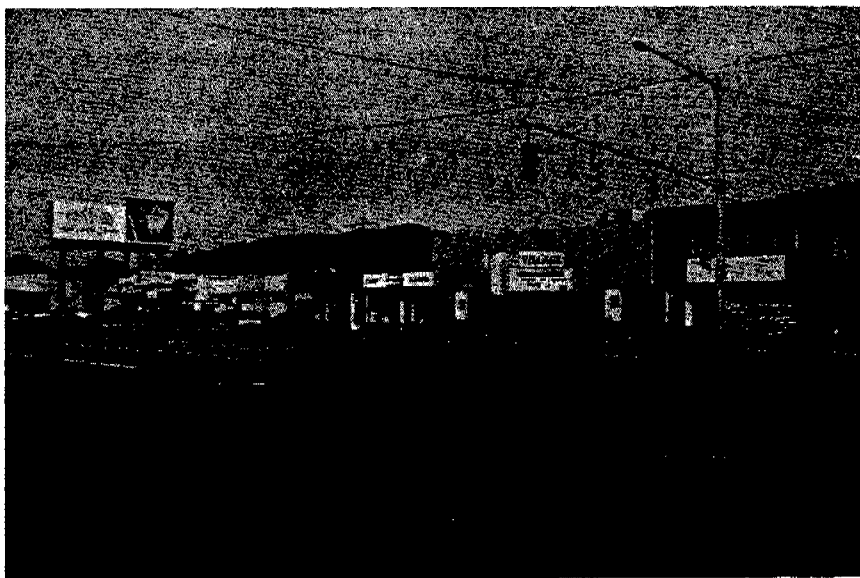


Strip Shopping Center (343)
C
Use Code 034
(Above Normal Partitions)
Construction Type 1



Strip Shopping Center (344)
C
Use Code 034
(Above Normal Partitions)
Construction Type 1

Strip Shopping Center (344)
C
sectionalized as to use
Use Code 034
Use Code 062
Use Code 083
Construction Type 1

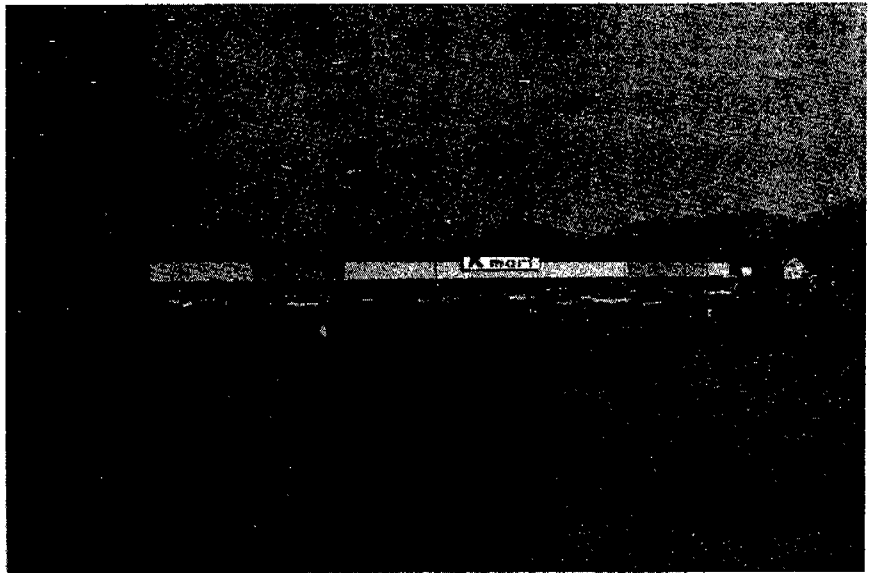


Discount Department Store (345)

C

Use Code 083

Construction Type 2



Discount Department Store (345)

C

Use Code 033

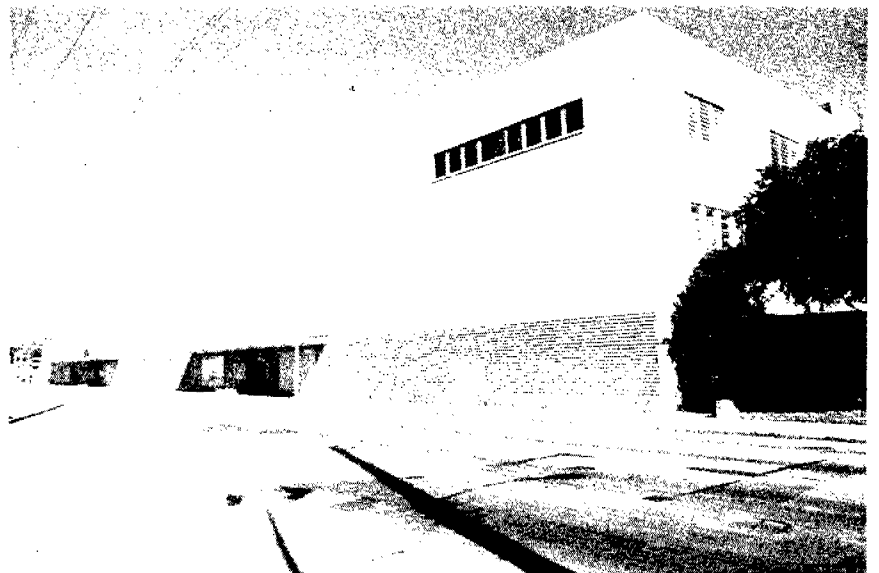
Construction Type 2

Department Store (346)

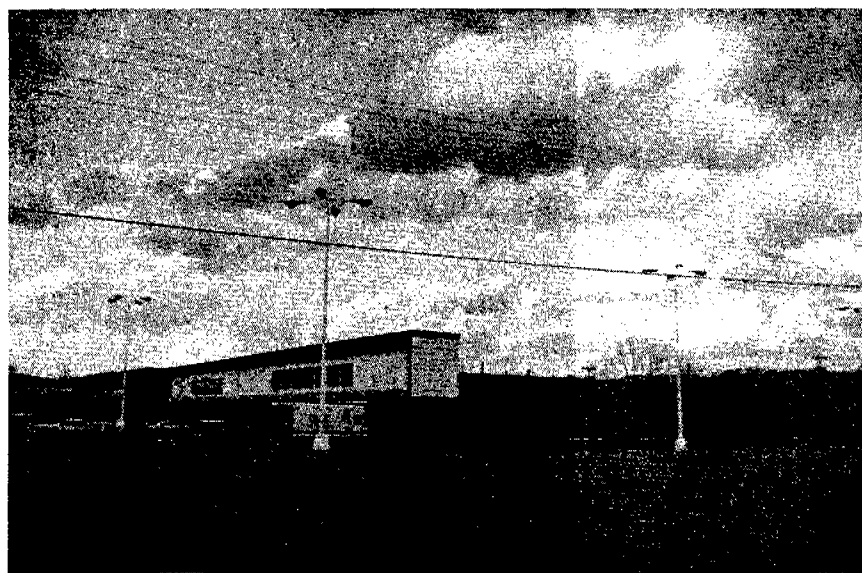
B

Use Code 032

Construction Type 2

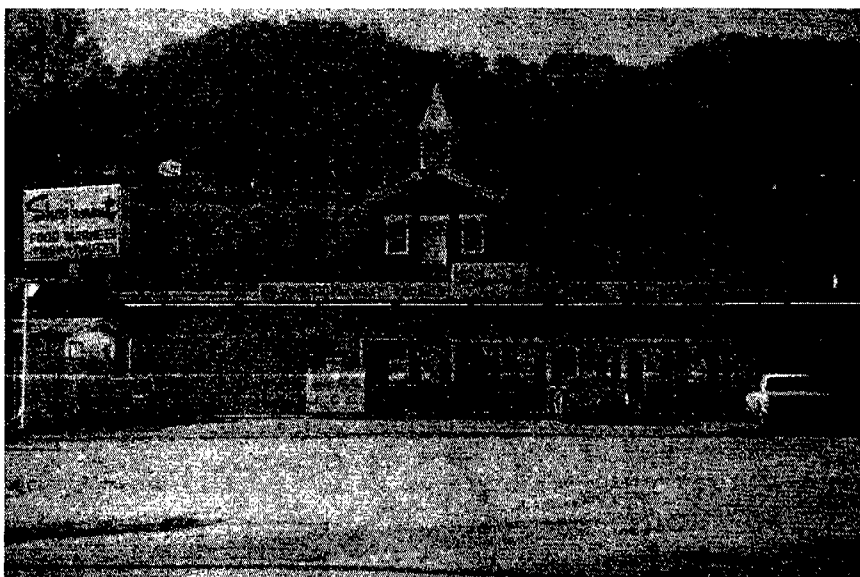


Supermarket (347)
C+
Use Code 033
Construction Type 2

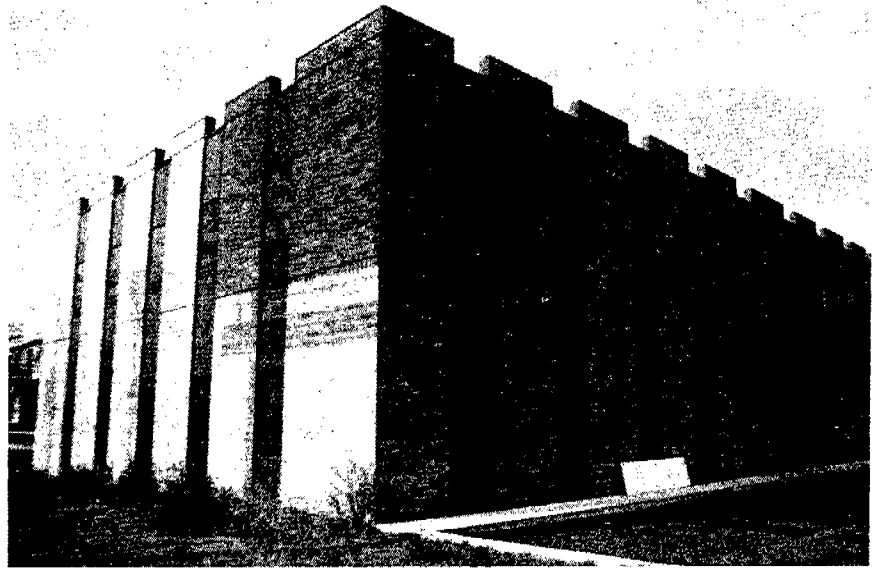


Supermarket (347)
C
Use Code 033
Construction Type 2

Convenience Food Market (348)
C
Use Code 038
Construction Type 1



Medical Office (349)
B
Use Code 052
Construction Type 2



Bank (351)
A
Use Code 051
Construction Type 2

Bank (351)
B+
Use Code 051
Construction Type 1

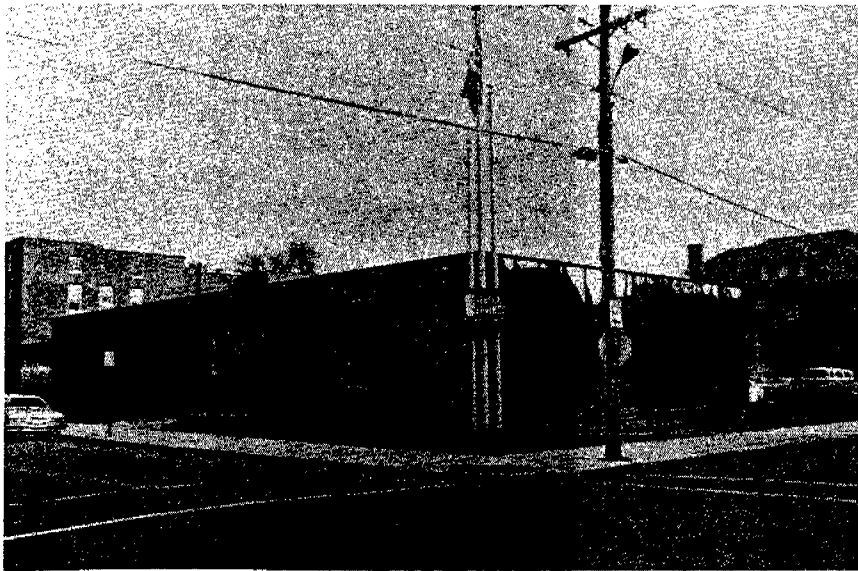
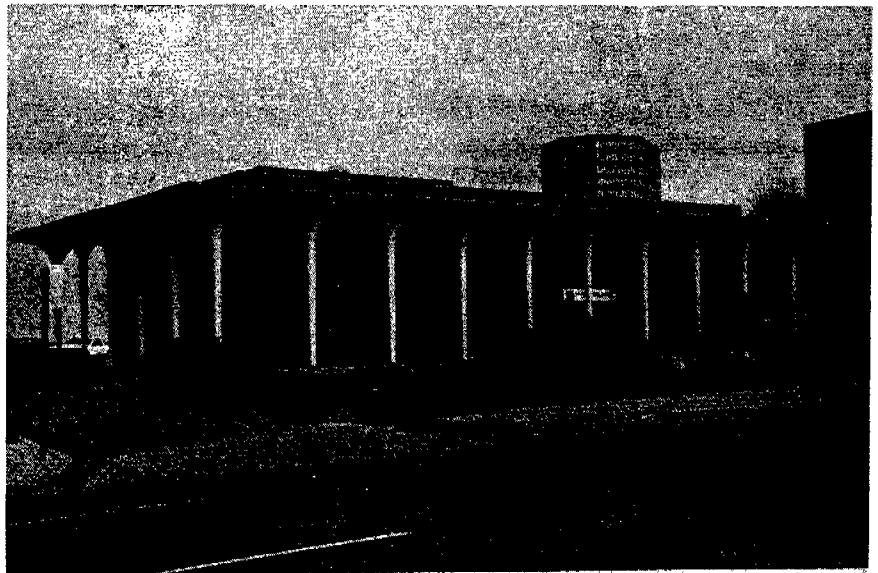


Savings Institution (352)

A

Use Code 051

Construction Type 2



Savings Institution (352)

B

Use Code 051

Construction Type 2

Savings Institution (352)

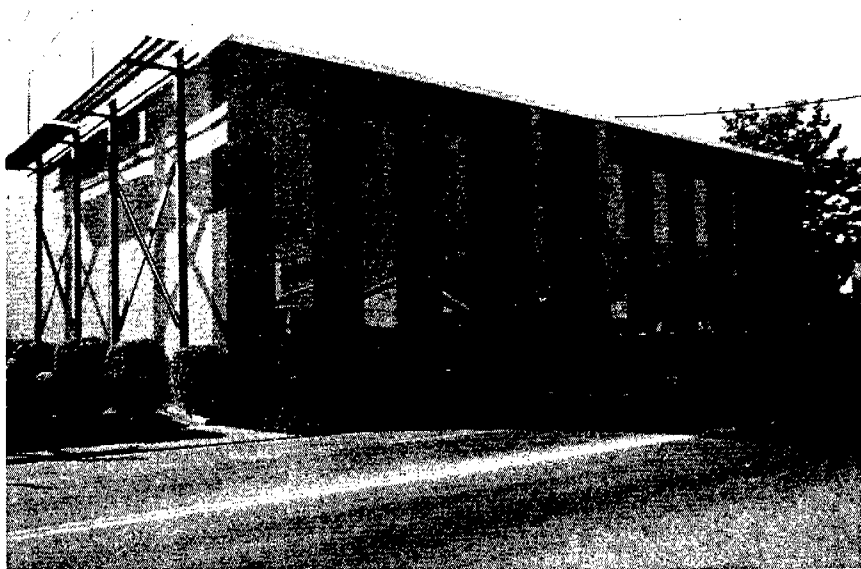
B

Use Code 051

Construction Type 2



Office Building/Low Rise (353)
B
Use Code 053
Construction Type 2



Office Building/Low Rise (353)
C
Use Code 053
Construction Type 2

Office Building/Low Rise (353)
C
Use Code 053
Construction Type 1



Office Building/High Rise (354)

A

Use Code 051

Use Code 053

Construction Type 2



Office Building/High Rise (354)

A

Use Code 051

Use Code 053

Construction Type 2

Office Building/High Rise (354)

A

Use Code 053

Construction Type 2



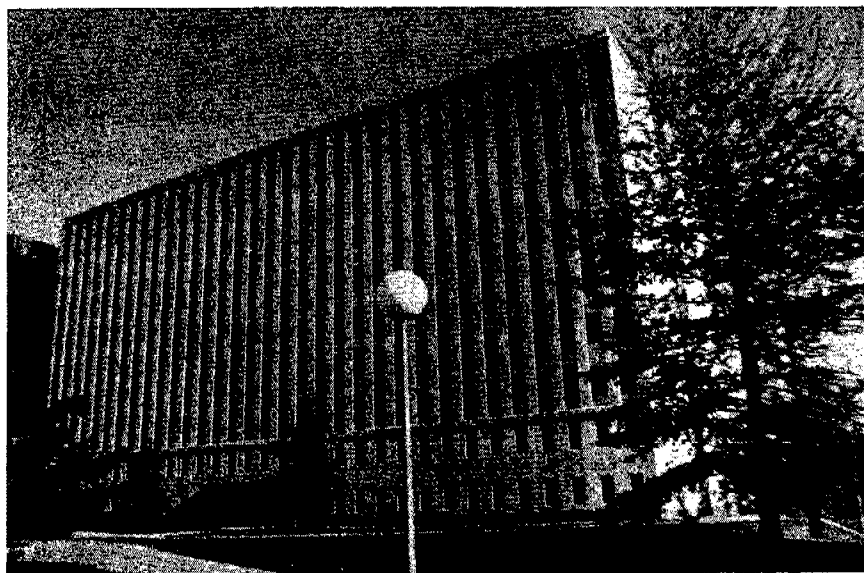
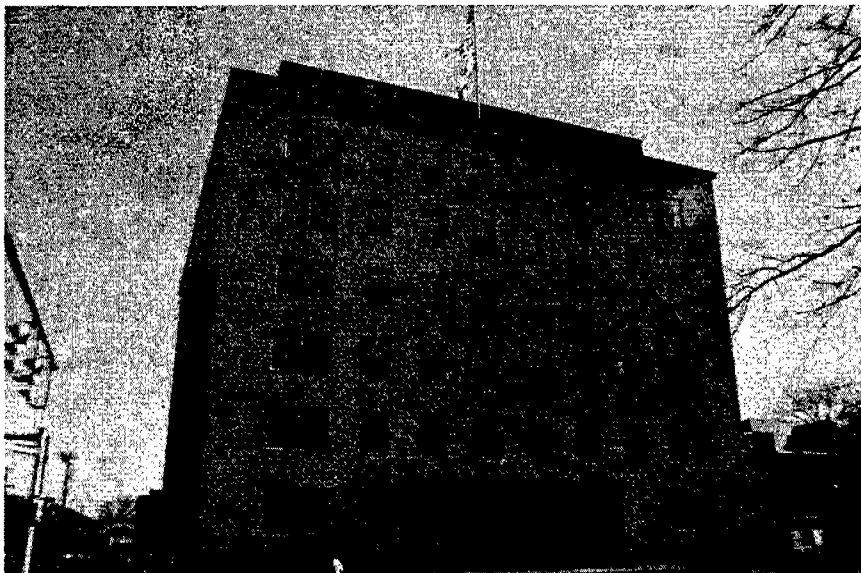
Office Building/High Rise (354)

B+

Use Code 053

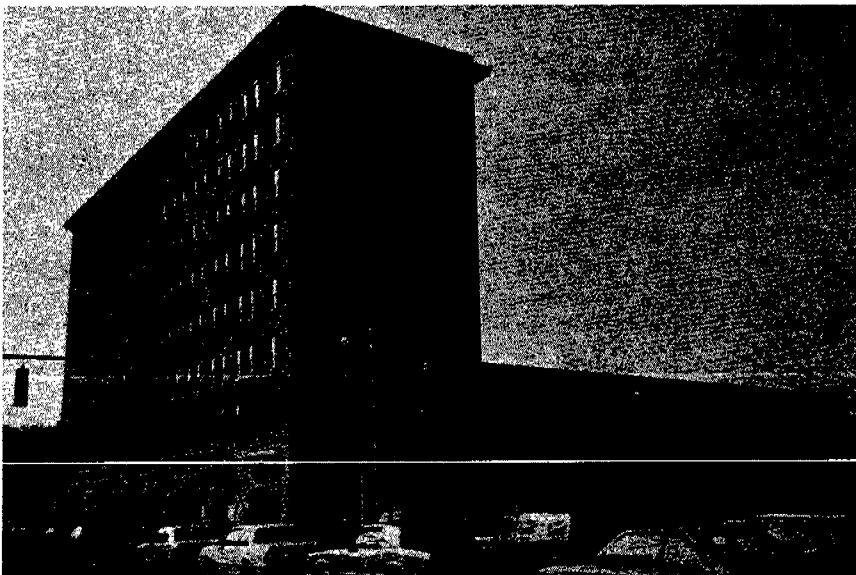
Construction Type 2

Office Building/High Rise (354)
B+
Use Code 053
Construction Type 2



Office Building/High Rise (354)
B
Use Code 053
Construction Type 2

Office Building/High Rise (354)
B
Use Code 034
Use Code 053
Construction Type 2



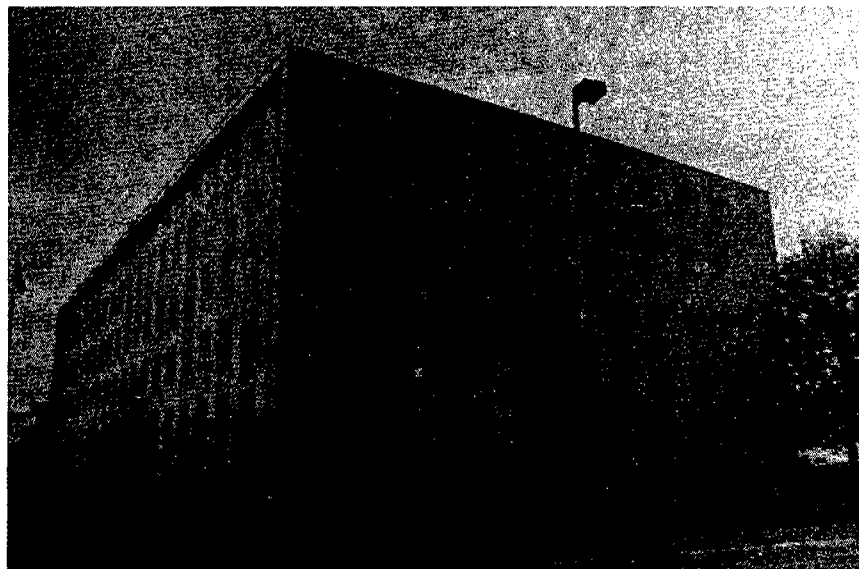
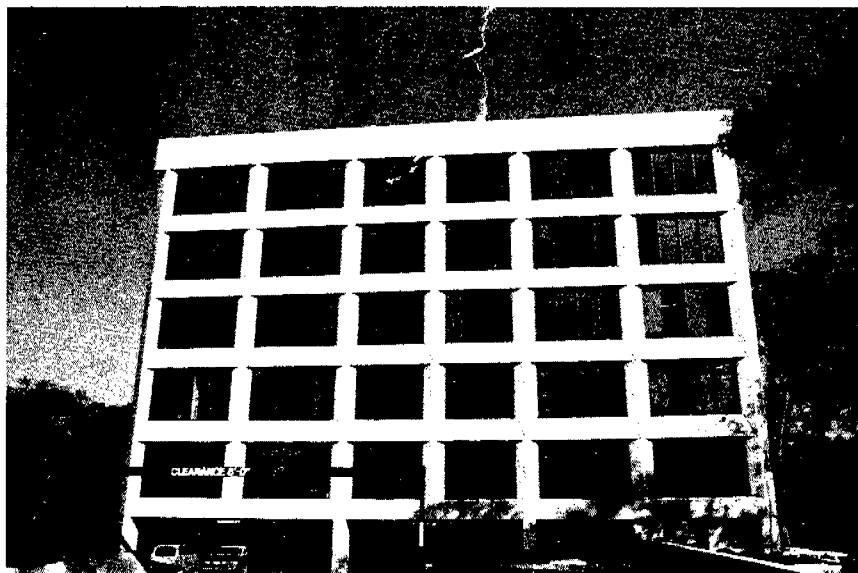
Office Building/High Rise (354)

B

Use Code 053

Use Code 090

Construction Type 2



Office Building/High Rise (354)

B-

Use Code 053

Construction Type 2

Office Building/High Rise (354)

B-

Use Code 053

Construction Type 2

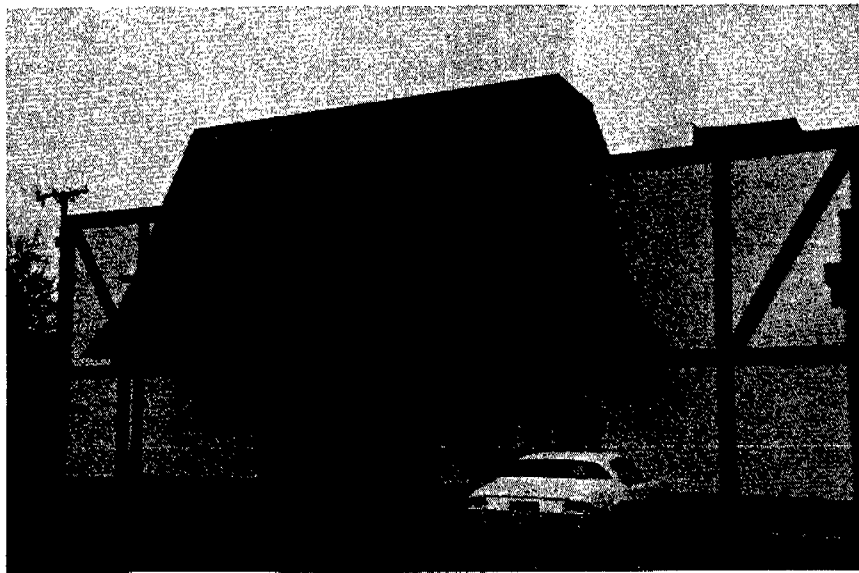
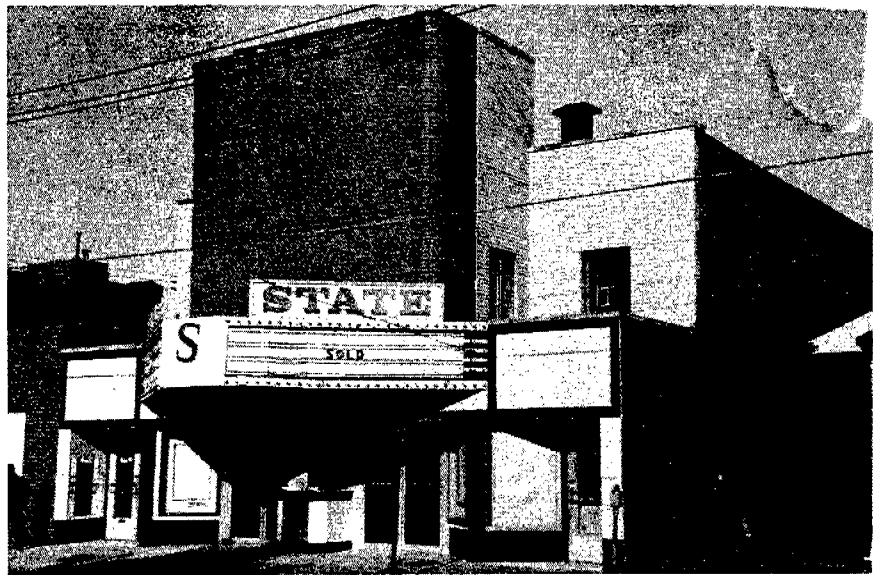


Motion Picture Theater (364)

B-

Use Code 061

Construction Type 1



Cinema/Theater (365)

C

Use Code 062

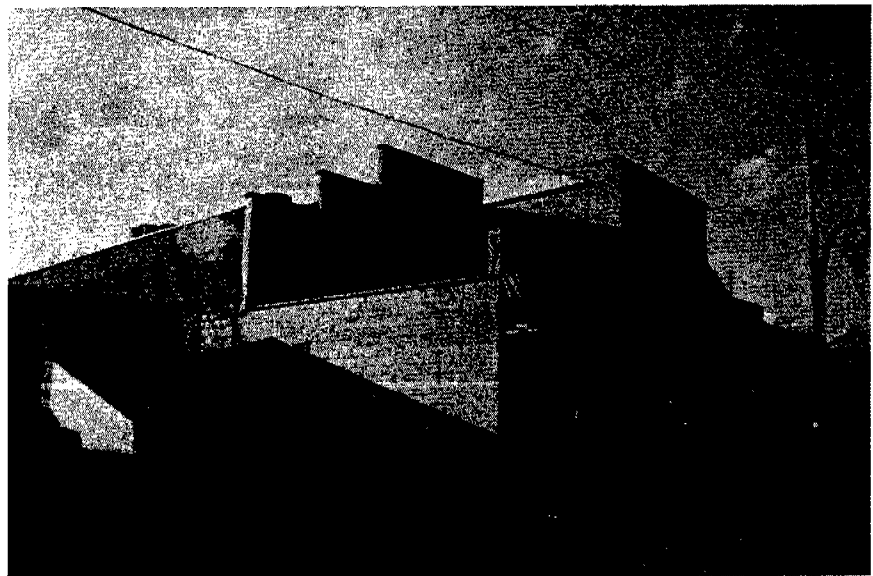
Construction Type 1

Cinema/Theater (365)

C-

Use Code 062

Construction Type 1



Downtown Row Type (371)

C

Use Code 034

Use Code 081

Construction Type 1



Downtown Row Type (371)

C

Use Code 034

Use Code 061

Use Code 081

Use Code 082

Construction Type 1

Downtown Row Type (371)

C

Use Code 034

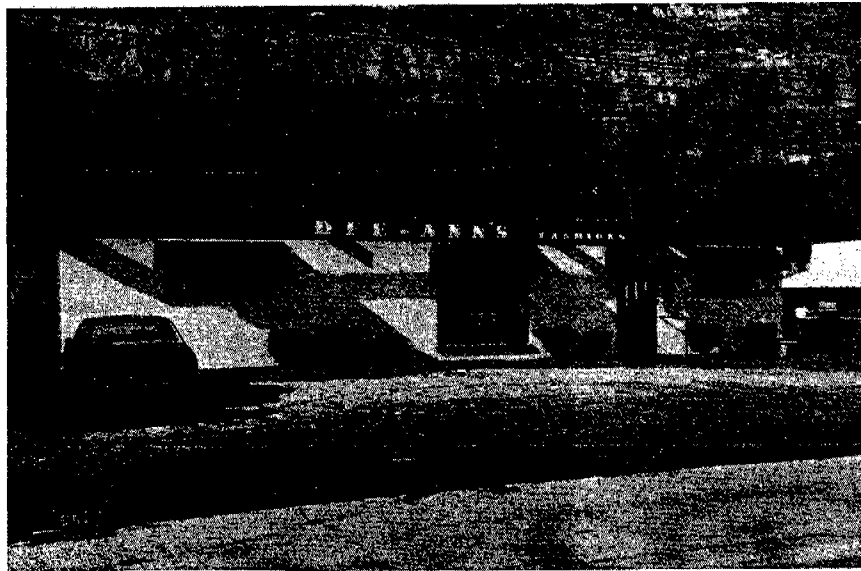
Use Code 081

Use Code 082

Construction Type 1

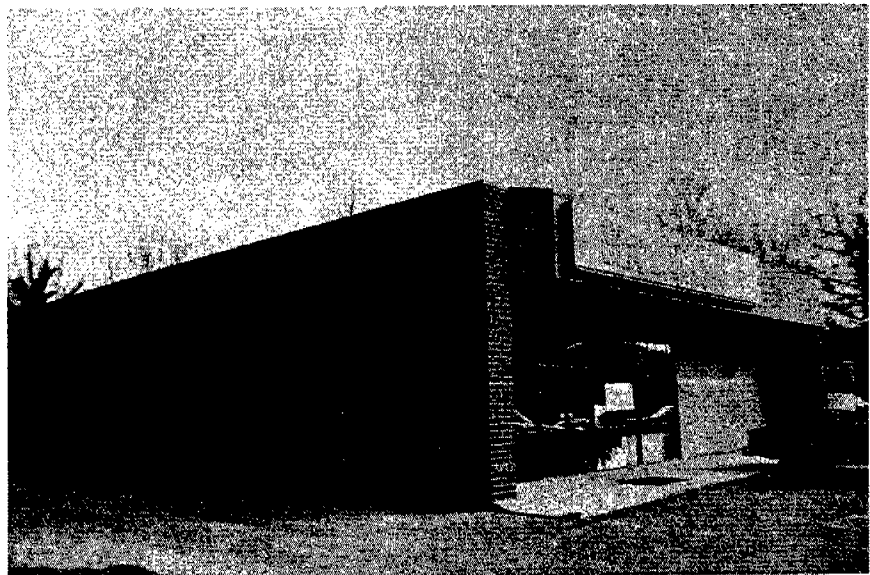


Retail - Single Occupancy (373)
C
Use Code 034
Construction Type 1



Retail - Single Occupancy (373)
C
Use Code 034
Construction Type 1

Retail - Single Occupancy (373)
C
Use Code 034
Construction Type 1



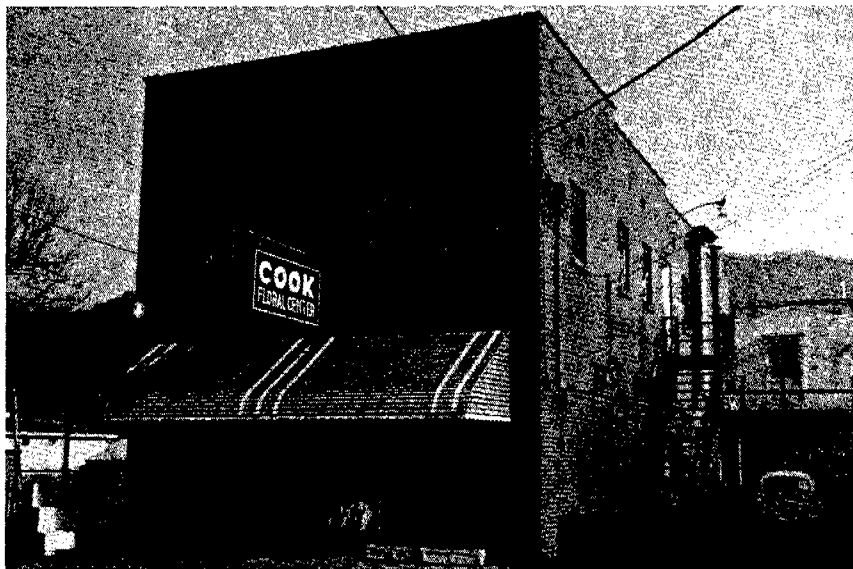
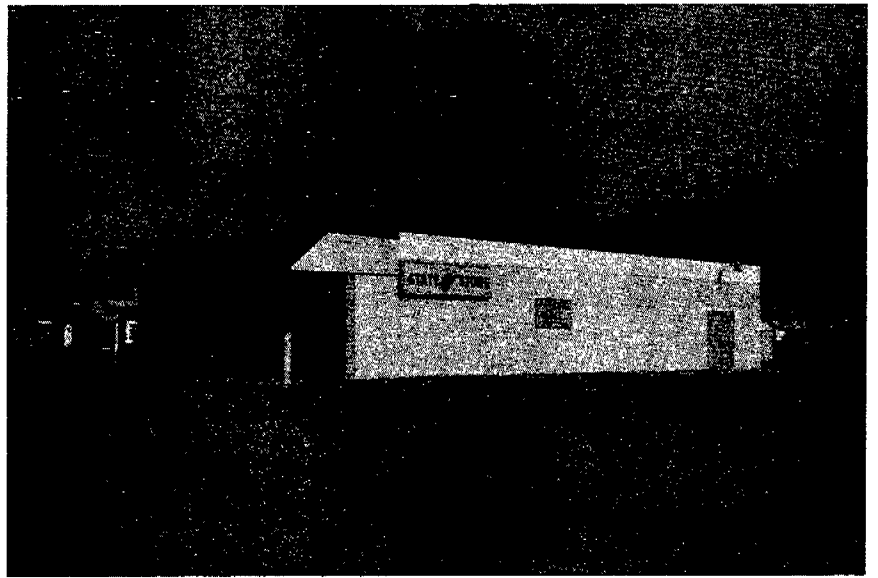
Retail - Single Occupancy (373)

C

Use Code 034

Use Code 084

Construction Type 1



Retail - Single Occupancy (373)

C-

Use Code 034

Use Code 081

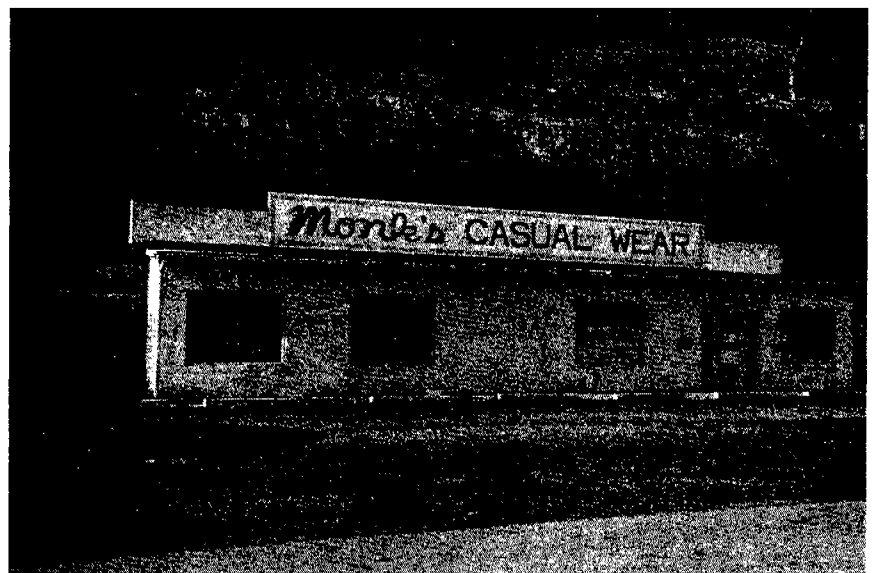
Construction Type 1

Retail - Single Occupancy (373)

D

Use Code 083

Construction Type 1

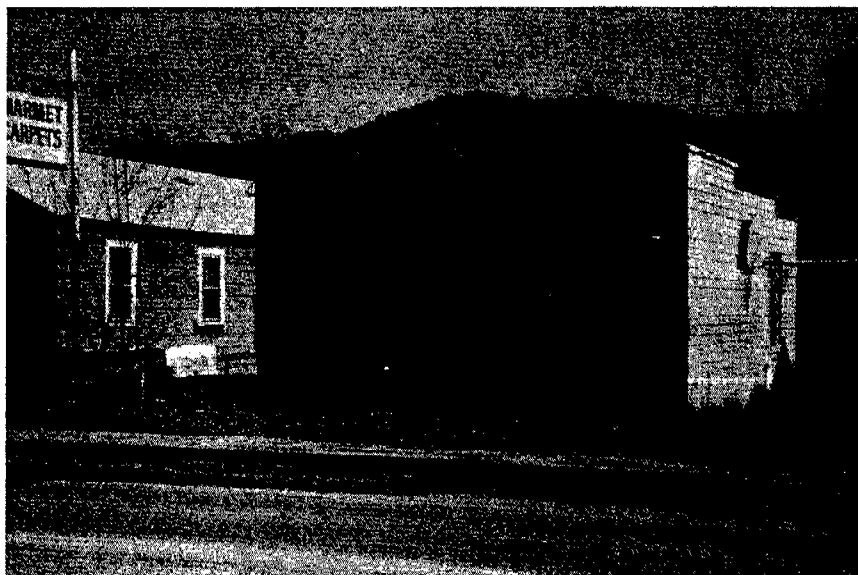


Retail - Single Occupancy (373)
D-
Use Code 083
Construction Type 1



Retail - Single Occupancy (373)
E+
Use Code 083
Construction Type 1

Retail - Single Occupancy (373)
E
Use Code 083
Construction Type 1



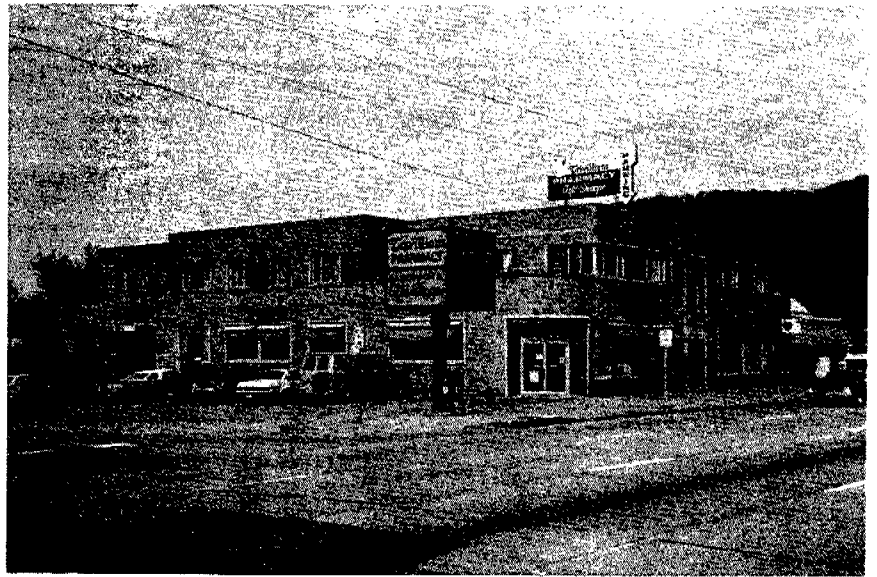
Retail - Multi Occupancy (374)

C+

Use Code 034

Use Code 082

Construction Type 2



Retail - Multi Occupancy (374)

C

Use Code 034

Construction Type 1

Retail - Multi Occupancy (374)

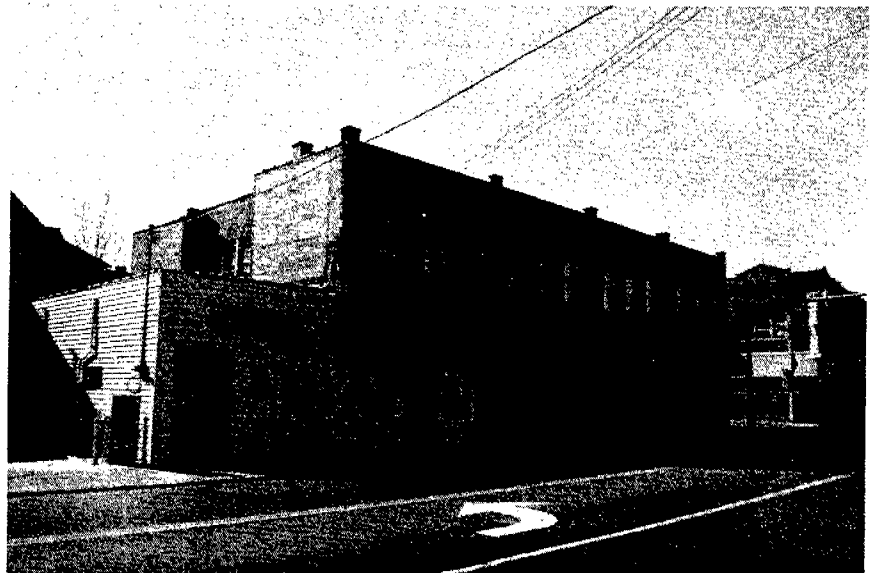
C

Use Code 081

Use Code 082

Use Code 083

Construction Type 1



Retail - Multi Occupancy (374)

C

Use Code 082

Use Code 083

Use Code 084

Construction Type 1



Retail - Multi Occupancy (374)

C

Use Code 082

Use Code 083

Use Code 084

Construction Type 1

Retail - Multi Occupancy (374)

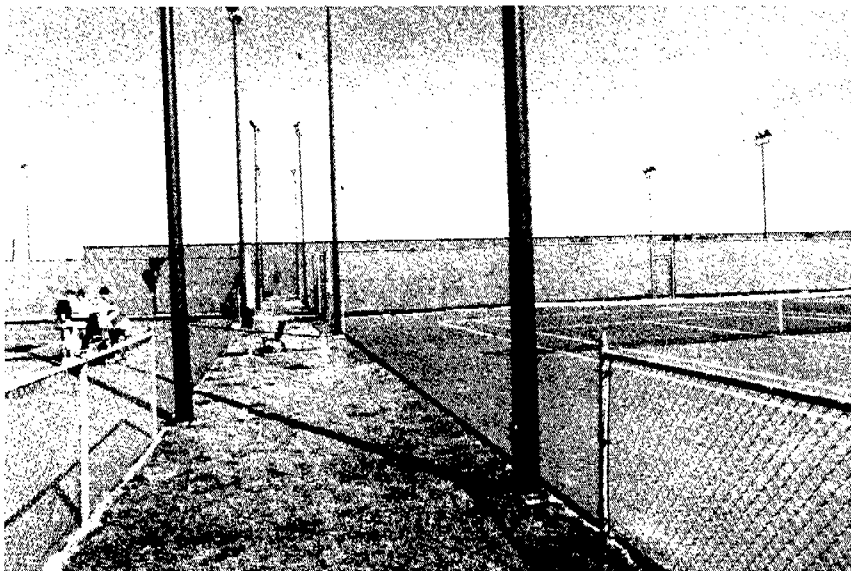
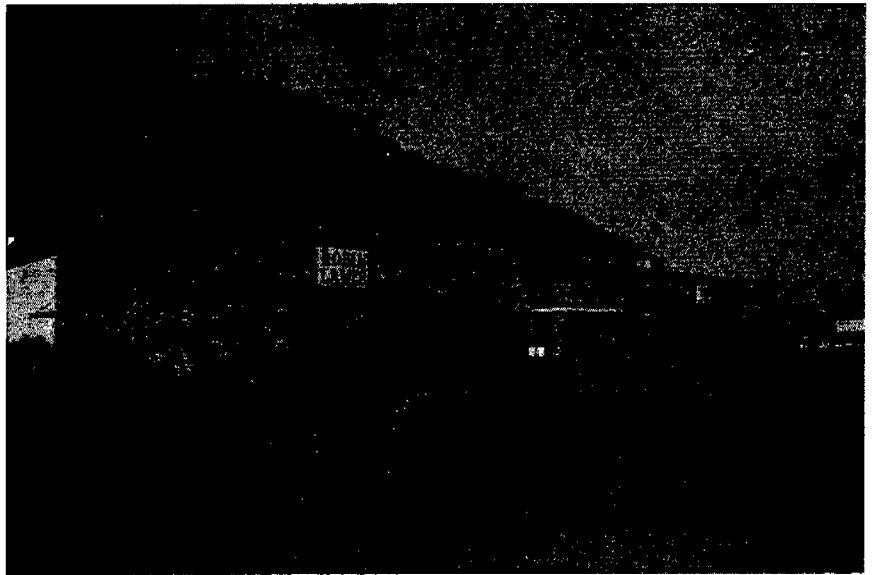
D

Use Code 083

Construction Type 1

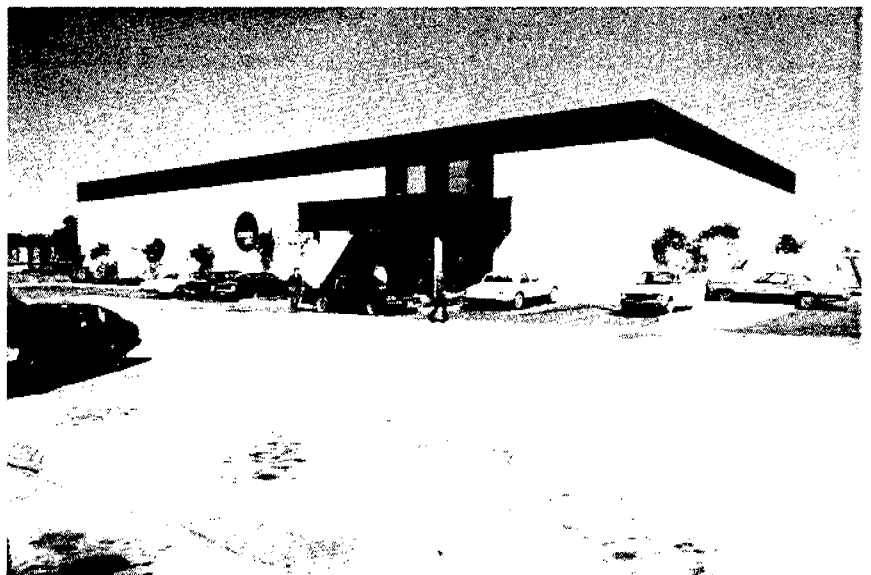


Bowling Alley (381)
C
Use Code 083
Construction Type 2



Tennis Club - Indoor (385)
C-
Use Code 048
Construction Type 4

Racquet Club - Indoor (386)
C+
Use Code 049
Construction Type 2

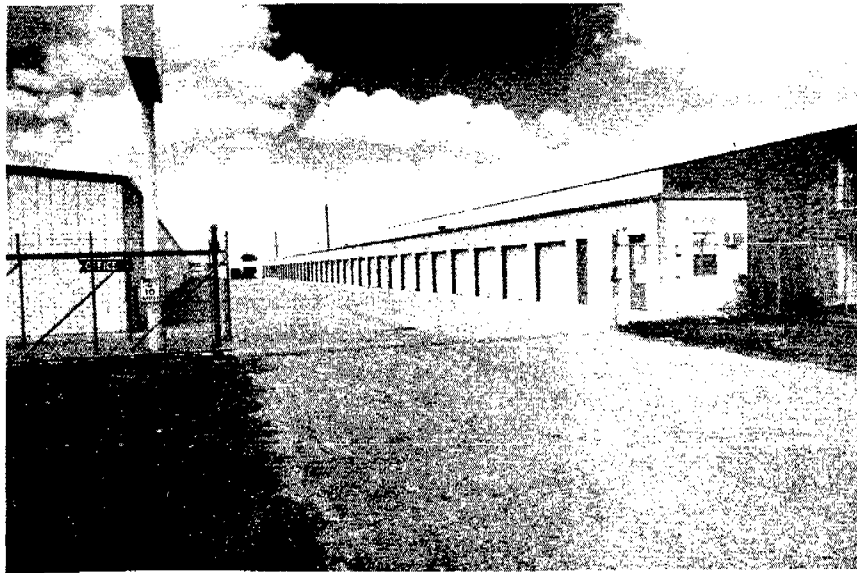
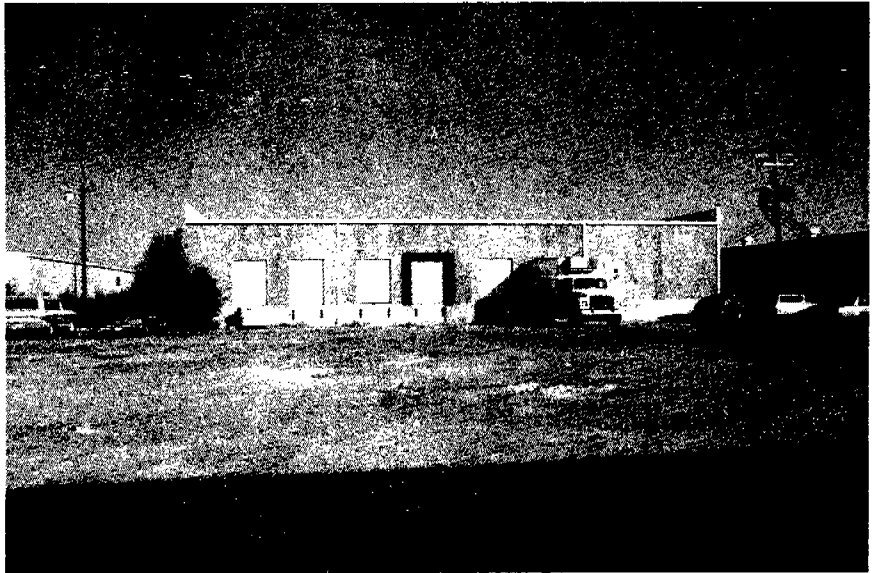


Cold Storage Facilities (391)

C

Use Code 045

Construction Type 1



Mini Warehouse (396)

C

Use Code 041

(Above Normal Partitions)

Construction Type 1

Mini Warehouse (396)

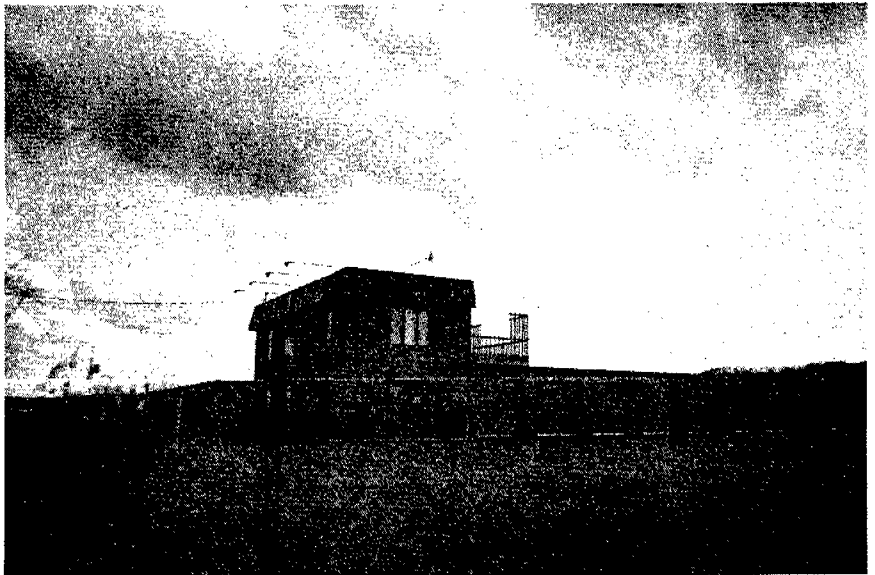
C

Use Code 041

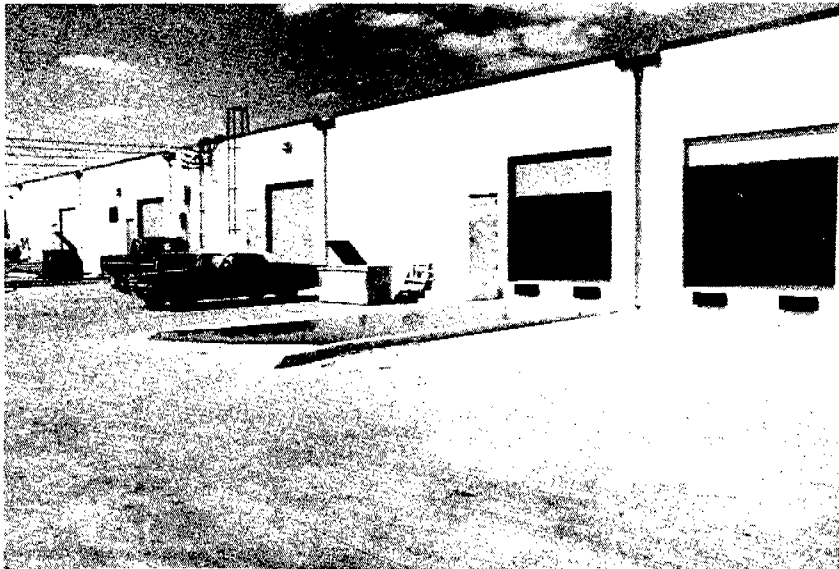
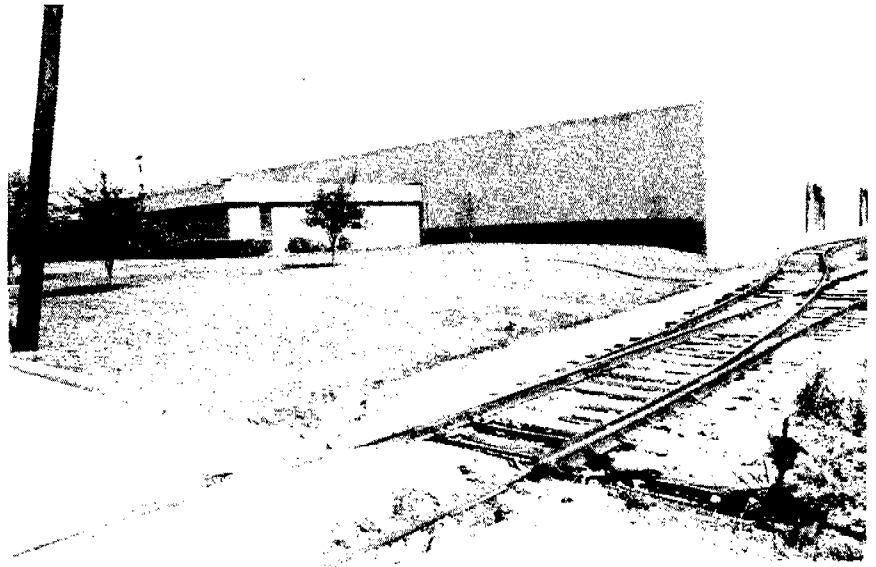
(Above Normal Partitions)

Use Code 082

Construction Type 1



Warehouse (398)
C
Use Code 045
Use Code 082
Construction Type 1

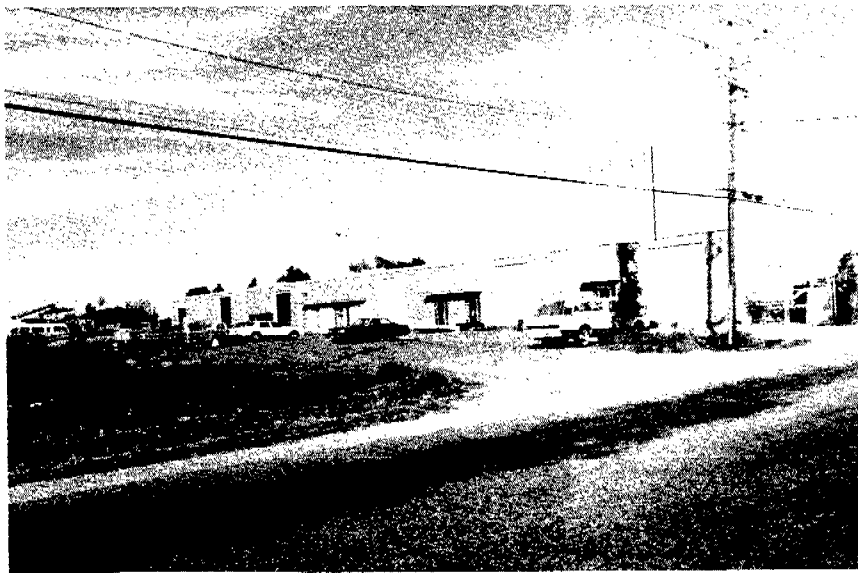
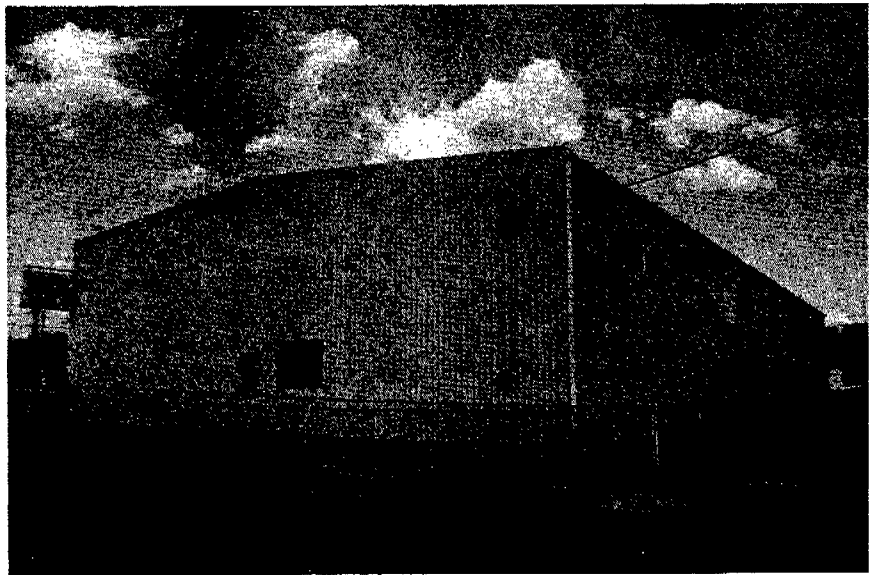


Warehouse (398)
C
Use Code 045
Construction Type 1

Warehouse (398)
C
Use Code 045
Construction Type 1



Warehouse (398)
C
Use Code 045
Use Code 085
Construction Type 4

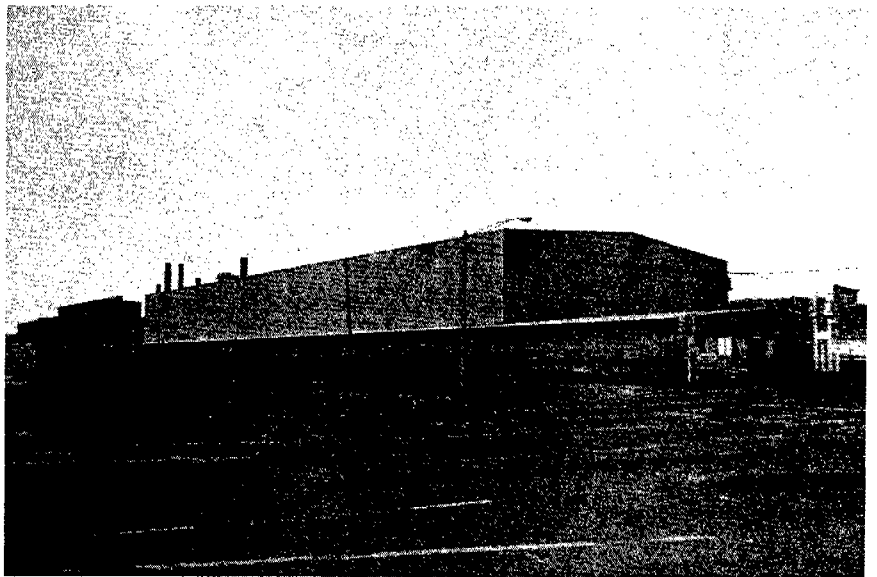


Warehouse (398)
C
Use Code 045
Construction Type 4

Warehouse (398)
C
Use Code 045
Construction Type 4

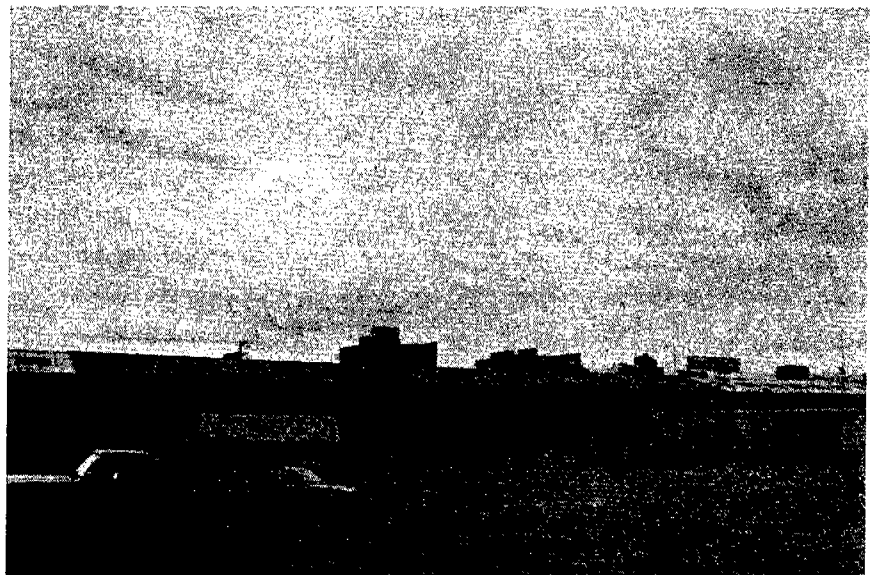


Manufacturing (401)
C+
Use Code 043
Construction Type 2

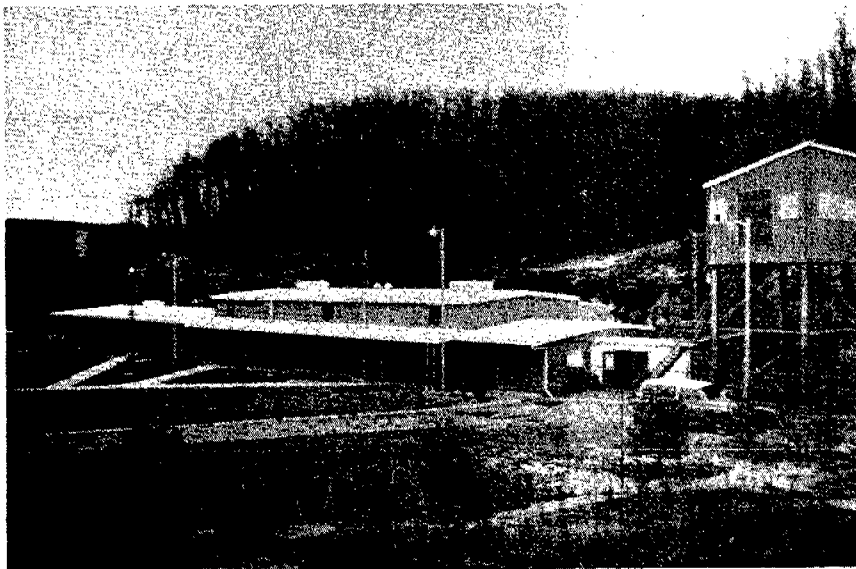


Manufacturing (401)
C+
Use Code 043
Construction Type 2

Manufacturing (401)
C
Use Code 043
Construction Type 2

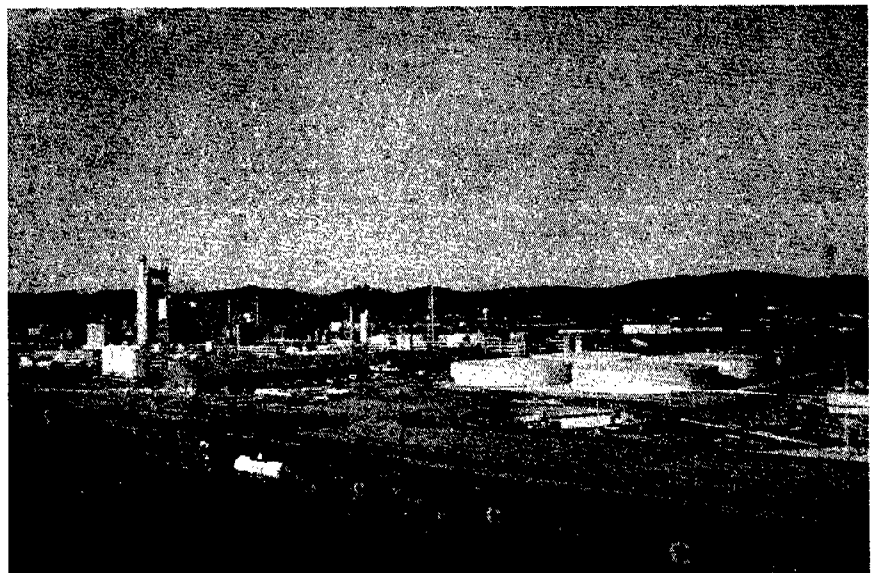


Manufacturing (401)
C
Use Code 045
Construction Type 1

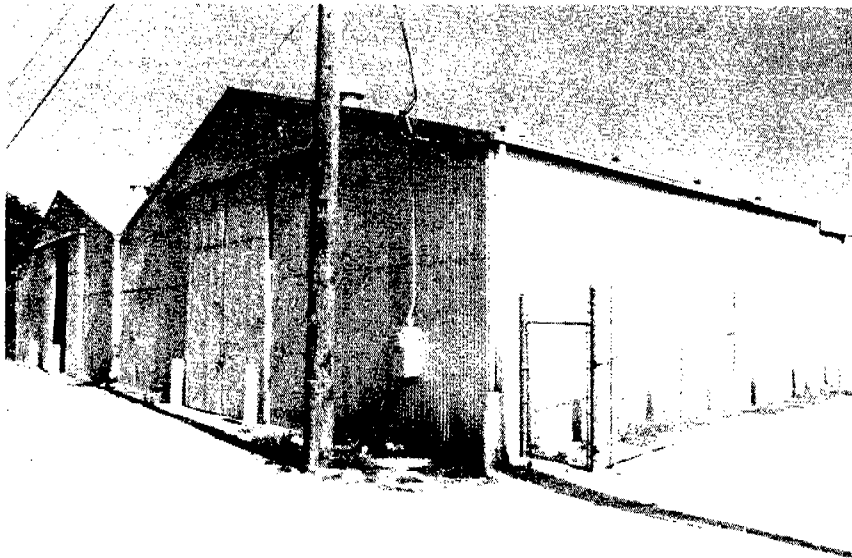
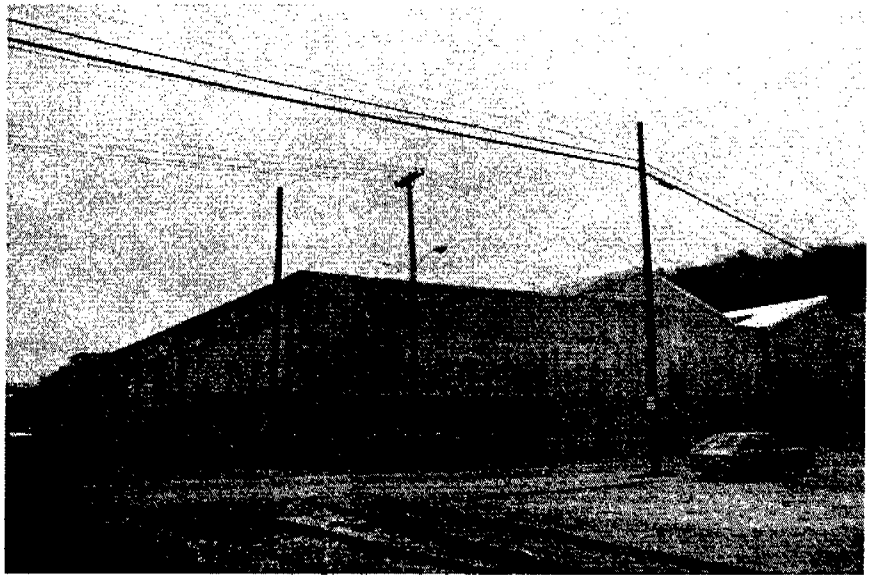


Manufacturing (401)
C
Use Code 043
Construction Type 4

Manufacturing (401)
C
Use Code 043
Construction Type 2



Manufacturing (401)
C-
Use Code 044
Construction Type 1



Manufacturing (401)
D
Use Code 044
Construction Type 4

Manufacturing (401)
D
Use Code 044
Construction Type 4



MOBILE HOME PARKS

The pricing schedule included in this section is provided as a guide to assist the appraiser in arriving at a reasonable and equitable estimate of the cost of developing a variety of commercial mobile home and trailer parks. Typical site-costs are given for five Grades of parks, the general specifications are as follows:

A Grade	Excellent quality and excellently planned mobile home parks designed to accommodate the largest tractor-drawn or on-site erected mobile homes, and to provide the user with the utmost in residential amenities, including spacious lots with extensive and attractive landscaping, ample off-street parking, and a wide variety of recreational facilities. Site areas will generally range from 4,500 to 5,500 sq. ft.
B Grade	Good quality and well planned mobile home parks designed to accommodate the larger tractor-drawn mobile homes with room to spare for lawns and gardens, and featuring attractive landscaping, off-street parking, and complete recreational facilities. Site areas will generally range from 3,500 to 4,500 sq. ft.
C Grade	Average quality and well planned mobile home parks designed to accommodate mobile homes up to 55' to 60' long, and to provide the user with adequate utility services and facilities, but rather limited recreational facilities and other such amenities. Site areas will generally range from 2,500 to 3,500 sq. ft.
D Grade	Fair quality and minimally planned trailer parks intended primarily for semi-permanent occupancy, built to accommodate car-drawn trailers up to 40' to 45' long, and offering only minimal utility and recreational facilities. Site areas will generally range from 1,750 to 2,500 sq. ft.
E Grade	Cheap quality trailer parks designed to accommodate transient-type trailers, and to provide the user with the minimum required facilities. Site areas will generally range from 1,000 to 1,750 sq. ft.

Application of the pricing schedule involves determining the Grade which is the most representative of the subject property, selecting the corresponding base site-cost, and adjusting the base site-cost to account for any variations between the subject property and the model specifications.

BASE COST COMPONENTS

The costs per site have been developed to include the cost of normal basic on-site improvements and do not include the cost of the land, service and recreational buildings, or major recreational structures, such as swimming pools. The base components are as follows:

Engineering . . . includes the design plans and specifications of the park (exclusive of buildings), engineering and surveying fees, and public fees and permits.

Grading . . . includes the normal grading involved in leveling the site for drainage and roughing out roads, but does not include any abnormal site preparation, such as the excavation and terracing required for hill-side sites.

Street Paving . . . includes base preparation and paving.

Patios and Walks . . . includes all flat work other than street paving.

Sewer . . . includes all on-site lines, but does not include hook up charges, sewage disposal systems, or any off-site connections to trunk lines.

Water . . . includes on-site mains and site services, but does not include wells, pumps, or any off-site connections to source lines.

Electrical . . . includes on-site conduit, electrical and telephone wiring, site outlets, and street and common area lighting commensurate with the Grade, but does not include the cost of any off-site connections.

Gas . . . includes on-site piping, and site and building connections, but does not include any off-site mains.

Other Features . . . include the cost of average entrance ornamentation, landscaping, and common area development commensurate with the park Grade. (Note: Outdoor recreational facilities, such as swim pools, tennis courts, etc. are not included and should be computed separately.)

BASE COST ADJUSTMENTS

Many mobile homes and trailer parks are apt to possess some features which are typical of one Grade and some features which are typical of another. For example, an A Grade park may exhibit B Grade "other features" such as entrance decor, landscaping, and recreational facilities; or similarly, a park

may be C Grade in all respects except for good quality streets. In such cases, the appraiser must analyze each park in terms of its individual components in order to determine the contribution of each component to the overall cost per site. In order to facilitate this, the specifications and corresponding costs for each component are detailed, thus enabling the appraiser to adjust the base cost either upward or downward to account for any significant variations.

PERCENT (%) GOOD GUIDELINES

Mobile home parks generally can be expected to have a life expectancy of from 15 to 30 years, depending on the quality of the park. The components of a mobile home park, as described above, are subject to the same depreciating forces as are any other real estate improvements. Physical deterioration itself is difficult to observe, but is generally directly related to the functional and economic depreciation of the park. In a going and profitable park, the actual rate of physical deterioration is arrested somewhat by regular and normal maintenance. A park that is normally maintained will have components replaced or renewed as they age. As a park goes out of style functionally and economically, maintenance becomes more and more of a cost burden to the owner and is consequently reduced or curtailed completely, allowing the process of deterioration to accelerate.

A percent good guideline table, based upon these factors relative to the effective age of the park, is included in this section. The effective age of the park may or may not be the same as the actual age (or average age if built in several phases) of the park. Generally, if a park is judged to be in average condition for its age, the effective age will be the same as the actual age. If a park is judged to be in poor condition or good condition for its age, the effective age will be somewhat more or somewhat less than the actual age. Similarly, parks judged very poor to unsound or very good to excellent will have effective ages considerably more to considerably less than their actual ages.

The table is provided only as a guide to assist the appraiser in arriving at a reasonable estimate of *normal* accrued depreciation; due consideration must also be given to any abnormal factors causing further loss of value.

APPLICATION OF PRICING SCHEDULE

Site sizes and construction components may or may not be uniform throughout the park. Various portions of the park may have been developed in different years, and designed to accommodate different types of mobile home units. In such cases, it may be necessary to sectionalize the park and to price each section as a separate unit. The procedure listed below would be equally applicable to an entire park or any section thereof.

1. Identify the park (or section thereof) by name, and record the following data on the property record card (preferably in the top portion of the sketch area):
 - a. Entire "improved" land area. *Do not* include unimproved areas held in reserve for future expansion. (Make an additional note on reserve land area if any.)
 - b. Total number of spaces.
 - c. Year of completion. (If developed in phases, describe the number of spaces completed each year.)
 - d. Compute the average site size by dividing the total improved land area by the number of sites. If individual sites vary significantly in size, make a note of this and if possible, estimate the range of site sizes within the computed average site size.
 - e. Width and composition of streets, extent of patios and walks, utilities available to sites.
2. Analyze the various construction components of the subject property, giving special consideration to . . . the extent of planning . . . whether or not abnormal grading was required . . . the extent and quality of the streets, curbing, patios and walks . . . the quality of utility installation: minimum or good code? . . . the use of private sewage treatment facilities . . . the source of water: public or private? . . . the electrical service to each site . . . availability of hydrants and gas at each site . . . whether electrical conduits and other transmission lines were installed above or below ground . . . the extent and quality of entrance decor, landscaping, and recreational facilities . . . and any other characteristics essential to establishing the proper grade level of the park.

3. Determine the quality Grade of the park by comparing its components, as analyzed above, with the given specifications for each Grade and select the corresponding base cost per site.

In many instances, a park will exhibit a composite quality which falls somewhere between two grades. In such cases, it is necessary to interpolate between the corresponding base site costs.

4. Note (on the property record card, along with the data recorded in Step No. 1) any significant variations between the construction components of the subject property and the base specifications for the selected Grade.
5. Adjust the base cost to account for significant variations between the construction components of the subject property and the base specifications for the selected Grade, as considered in Step No. 4.

This step is only necessary if the adjustment is not adequately accounted for by "intermediate grading" as described in Step No. 3.

6. Multiply the average replacement cost per site, as derived in Step No. 5, by the total number of sites, to arrive at the total replacement cost.
7. Determine the effective age based on the condition, desirability and usefulness of the park relative to its actual (or average) age. Determine the proper percent good allowance based on the effective age, and apply it to the total replacement cost derived in Step No. 6 to arrive at the depreciated value of the park.
8. Sketch, list, and compute, by using the appropriate pricing schedule, the replacement cost and depreciated value of all improvements not included in the base site costs. This will include all permanent buildings and recreational facilities, such as swim pools, tennis courts, etc.

See pricing example on the following page.

PRICING EXAMPLE

Village Mobile Home Park: 50 sites on a developed land area of 2.3 acres, with an average size of 2,000 sq. ft., minimally planned with low cost streets 20' wide, no asphalt parking, and nominal asphalt patios and walkways per site; minimal code utility installation with no gas hook-ups and 20 amp service at each site; minimal landscaping, and no on-site recreational facilities.

Example A . . . judged to be a fair to cheap quality (D to E Grade) park throughout . . . effective age: 3 years old.

Base Cost - midway between D and E Grades (rounded to the nearest \$10)	\$ 2,580.00
Total number of sites	x 50
Total Replacement Cost	\$ 129,000.00
Percent Good (effective age: 3 years old) (rounded to the nearest 5%)	x .85
Total Replacement Cost Less Depreciation	\$ 109,650.00

Add depreciated value of all improvements not included in the base site costs.

Example B . . . judged to be a D grade park with E grade patios and walks, water service, and other features.

Base Cost	\$ 3,220.00
Patios and walks (E Grade)	- 180.00
Water service (E Grade)	- 220.00
Other features (E Grade)	- 225.00
Replacement Cost per site (rounded to the nearest \$10)	\$ 2,600.00
Total number of sites	x 50
Total Replacement Cost	\$ 130,000.00
Percent Good (effective age: 3 years old) (rounded to nearest 5%)	x .85
Total Replacement Cost Less Depreciation	\$ 110,500.00

Add depreciated value of all improvements not included in the base site costs.

MOBILE HOME PARKS

GRADE	A		B		C		D		E	
COMPONENT	Specifications	Cost	Specifications	Cost	Specifications	Cost	Specifications	Cost	Specifications	Cost
Base Site Area	4500 S.F.		3700 S.F.		2900 S.F.		2100 S.F.		1500 S.F.	
Park Size Guideline	50-350 Sites		50-300 Sites		50-200 Sites		25-150 Sites		10-100 Sites	
Engineering	Extensive engineering & architectural planning; fees and permits	640	Completely detailed engineering & architectural planning; fees and permits	480	Well detailed engineering & architectural planning; fees and permits	360	Limited plans and specifications; fees and permits	235	Minimal engineering & architectural planning	145
Site Grading with Roads roughed in	Graded for drainage, view & appearance	940	Graded for drainage, view & appearance	780	Graded for drainage & trailer site leveling	650	Graded for drainage & minimum site leveling	500	Graded for drainage & minimum site leveling	330
Street Paving	Good asphalt roadways 36' to 40' wide with curbs; extra car parking	1750	Good asphalt roadways 30' to 36' wide with curbs; extra car parking	1130	Average asphalt paving 24' to 30' wide with some curbing or edging	625	Low cost asphalt roads 18' to 22' wide. No curbs or edging	370	Low cost asphalt or gravel roads 12' to 18' wide	155
Patios & Walks	550 to 650 S.F. concrete per site for trailer stand, patio & walks	920	400 to 500 S.F. concrete per site for trailer stand, patio & walks	770	300 S.F. concrete or good quality asphalt for trailer stand & patio	490	200 S.F. low cost concrete or asphalt for patio & parking	295	Nominal asphalt patios; scant walks	115
Sewers	Good code installation; high quality system	960	Good code installation; good quality system	840	Good code installation; average quality system	740	Minimum code installation; fair quality system	650	Minimum code installation; or septic tank	560
Water	High quality system; hydrants at sites	630	Good quality system; hydrants at sites	565	Average quality system; hydrant at sites	510	Minimum code installation	445	Service to common hydrants, no trailer hook-ups	225
Electricity	Underground conduit; 80 to 100 amps per space; high quality street & common area lighting	550	Underground conduit; 40 to 60 amps per space; good quality street & common area lighting	510	Underground conduit; 30 to 40 amps per space; average street & common area lighting	410	Overhead wiring, 20 to 25 amps per space; minimal street & common area lighting	410	Overhead wiring, low amperage circuits; no street or common area lighting	310
Gas	Low pressure gas to all sites & buildings	400	Low pressure gas to all sites	380	Low pressure gas to all sites	340	None to trailer spaces	—	None to trailer spaces	—
Other Features	Attractive landscaping, extensive recreation facilities, & high quality entrance ornamentation	700	Attractive landscaping, recreation facilities, & good quality entrance ornamentation	555	Average landscaping, recreation facilities & entrance ornamentation	375	Minimal landscaping & recreation facilities	315	Minimum landscaping; no recreation facilities	90
Total Cost per Site-	7490		6010		4500		3220		1930	

PERCENT (%) GOOD GUIDELINES					
EFFECT. AGE	MOBILE HOME PARK GRADE				
	A	B	C	D	E
1	95	95	95	95	95
2	95	95	95	90	85
3	95	95	90	85	80
4	95	90	85	80	75
5	90	85	80	75	65
6	90	85	80	70	60
7	85	80	75	65	50
8	85	80	70	60	45
9	80	75	65	55	40
10	75	70	60	50	35
12	70	65	55	40	30
14	65	60	45	35	25
16	60	50	40	30	20
18	55	45	35	25	
20	55	45	35	20	
22	50	40	30		
24	45	35	25		
28	40	30	20		
32	40	25			
36	35	20			
40	30				

GOLF COURSES

Golf courses are designed and built in a variety of types and sizes. The pricing schedules in this section are provided as a guide to assist the appraiser in arriving at a reasonable and equitable estimate of the cost of developing the various types of courses.

REGULATION COURSES

A regulation golf course usually consists of 18 holes of varied length. There are generally four short holes, 130 to 200 yards (par 3); ten average holes 350 to 400 yards (par 4); and four long holes 450 to 550 yards (par 5). Average costs per hole are given for five grades of courses, the general specifications are as follows:

AA Grade	Excellent course designed for professional play; rolling terrain; well landscaped with wide tree lined fairways and large, excellent quality greens and tees; numerous natural and man-made hazards; generally 7200 yards long with a par 72 rating.
A Grade	Excellent course design for championship play; rolling terrain; well landscaped with wide fairways and large, very good quality greens and tees; many natural and man-made hazards; generally 6900 yards long with a par 72 rating.
B Grade	Good course design for private club membership; rolling terrain; well landscaped with wide fairways and large, good quality greens and tees; natural and some man-made hazards; generally 6500 yards long with a par 70 rating.
C Grade	Average course designed for municipal or general public play; flat terrain; landscaped fairways; average size and quality greens and tees; some natural and few, if any, man-made hazards; generally 6000 yards long with a par 67 to 70 rating.
D Grade	Simply developed course often referred to as a "cow-pasture course"; flat terrain; very little landscaping; small greens and tees; few natural hazards; generally 5400 yards long with a par 64 to 67 rating.

BASE PRICE COMPONENTS

The costs per hole have been developed to include the cost of normal on-course improvements and do not include the cost of land, clubhouse, or any recreational facilities. The base price components are as follows:

Grading and Clearing . . . includes the removal of brush and trees from the fairways, greens, or tees; landscaping and the seeding of grass.

Sprinkler System . . . includes the water source, pumps, piping, and sprinkler heads.

Greens . . . includes the building, seeding and care of the greens until the opening of the course.

Tees . . . includes the building and care of the trees until the opening of the course.

Bunkers . . . includes the building and care of the bunkers until the opening of the course.

Service and Cart Roads . . . includes base preparation, paving, and bridges over hazards.

Architect's Fees . . . includes all plans and supervision during construction.

OTHER COURSES

Miniature Course	The entire course is comprised of a putting surface which has various obstacles and hazards placed between the tee and the cup.
Pitch and Putt Course	The course has greens, bunkers, tees, fairways, and very little, if any, rough area separating the holes. The holes are usually 60 to 120 yards long and the course often has lighting for night play.
Par 3 Course	The course is the same as a regulation course, but on a smaller scale with all the holes rated par 3, 140 to 160 yards long. The course may have lighting for night play.

Executive Course	Also called a par 60 course; the course is the same as a regulation course, but on a smaller scale with the holes 200 to 300 yards long. The holes are mostly par 3 with some par 4 and par 5 ratings.
Driving Range	Consists of a piece of land usually 10 to 15 acres with elevated tees along one side used for practice of hitting tee shots on regulation courses.
Practice Putting Greens	Consists of a large green with numerous cups used for putting practice.

PERCENT (%) GOOD GUIDELINES

The components of a golf course, as described above, are subject to the same depreciating forces as are any other real estate improvement. Physical deterioration itself is difficult to observe, but is generally directly related to the functional and economic depreciation of the course. In a going and profitable course, the actual rate of physical depreciation is arrested by regular maintenance. However, if maintenance is lax, the course will deteriorate quickly. The rate of accrued depreciation then could be said to be primarily a function of the overall condition, desirability, and usefulness of the course. A normal percent good table, based upon the factors related to the actual age of the course, is included in this section. The table is provided only as a guide to assist the appraiser in arriving at a reasonable estimate of normal accrued depreciation; due consideration must be given to any abnormal factors causing further depreciation.

GENERAL APPLICATION

The primary variables in golf courses are size, layout, sprinkler system, greens, tees, fairways, and bunkers. Costs of courses may vary from \$15,000 per hole for a course with minimal improvements to \$100,000 per hole for the best championship courses. The costs given are for average courses in each quality grade. Included in the cost per hole is normal clearing and grading, complete sprinkler systems, landscaping, greens, tees, bunkers, service and cart roads, and architect's fees. Costs do not include buildings, swimming pools, parking areas, or any other off-course improvements. Listed below is the procedure to be used for the appraisal of golf courses.

1. Identify the course by name and record the following data on the property record card (preferably in the top portion of the sketch area).
 - a. The type of course (regulation size, pitch and putt, miniature, etc.).
 - b. The year of completion (if developed in phases, describe the number of holes completed each year).
 - c. The number of holes and the amount of land used for the course.
 - d. The course length and par.
 - e. The terrain and topographical features.
 - f. The average size of the greens, tees, and the number of bunkers.
 - g. The type of sprinkler system.
2. Analyze the various components of the subject property, giving special consideration to . . . the extent of planning . . . the natural contour of the land . . . clearing and grading of fairways, greens, and tees . . . the extent and quality of the sprinkler system: whether it is automatic, manual, covers the entire course or only the tees and greens . . . the average green and tee size . . . the average number of bunkers per hole . . . the quality of cart and service roads . . . any other characteristics essential to establishing the proper grade level of the course.
3. Determine the Quality Grade of the course by comparing its components, as analyzed above, with the given specifications for each grade and select the corresponding base cost per hole.

In many instances, the course will exhibit a composite quality which falls somewhere between two grades. In such cases it is necessary to interpolate between the base hole costs.

4. Note (on the property record card, along with the data recorded in Step #1) any significant variations between the construction components of the subject property and the base specifications for the selected Grade.
5. Adjust the base cost to account for significant variations between the construction components of the subject property and the base specifications for the selected Grade, as considered in Step #4.

This step is only necessary if the adjustment is not adequately accounted for by "intermediate grading", as described in Step #3.
6. Multiply the average replacement cost per hole, as derived in Step #5, by the total number of holes to arrive at the total replacement cost of the course.
7. Determine the proper depreciation allowance based upon the condition, desirability, and usefulness of the course relative to its age, and apply it to the total replacement cost as derived in Step #6, to arrive at the depreciated value of the course.
8. Sketch, list, and compute by using the appropriate pricing schedule, the replacement cost and depreciated value of all improvements not included in the base cost.

See pricing example on following page.

PRICING EXAMPLE

Wind Hill Lakes Golf Course, 18 hole regulation size, 6500 yards long, par 70, on 150 acres, two years old. Rolling terrain, 8000 S.F. greens, 2 tee locations and 2 to 3 bunkers per hole. Automatic sprinklers on greens and tees, manual on fairways.

Example: this course is judged to be a B Grade course with A Grade greens; average condition, desirability, and usefulness for a two year old course.

Base Cost (B Grade)	\$	59890
Greens (A Grade less B Grade)	+	9520
Replacement Cost per Hole (rounded to nearest \$5)	\$	69410
 Total Number of Holes	x	18
Total Replacement Cost	\$	1,249,380
 Percent Good (2 years old; average CDU Rating)	x	95%
Total Replacement Cost less Depreciation	\$	1,186,910

Add the depreciated value of all improvements not included in the base hole costs.

REGULATION SIZE GOLF COURSES

GRADE	AA		A		B		C		D	
COURSE SPECIFICATIONS	Professional Championship Course; 18 holes on 180 acres; 7200 yards long; rated par 72; rolling terrain		Championship Course; 18 holes on 160 acres; 6900 yards long; rated par 72; rolling terrain		Private Club Course; 18 holes on 130 acres; 6500 yards long; rated par 70; rolling terrain		Public and Municipal Courses; 18 holes on 110 acres; 6000 yards long; rated par 67 to 70; flat terrain		Minimal quality; simply developed; 18 holes on 90 acres; 5400 yards long; rated par 64 to 67; flat terrain	
COMPONENT	Specifications	Cost	Specifications	Cost	Specifications	Cost	Specifications	Cost	Specifications	Cost
Grading and Clearing	Fairway, green and tee areas. Removing brush, trees and seeding with grass	15970	Fairway, green and tee areas. Removing brush, trees and seeding with grass	15470	Fairway, green and tee areas. Removing brush, trees and seeding with grass	14980	Fairway, green and tee areas. Removing brush, trees and seeding with grass	14260	Fairway, green and tee areas. Removing brush, trees and seeding with grass	12970
Sprinkler System	Completely automatic on greens, fairways and tees	14960	Automatic on greens and tees. Auto. or manual on fairways	8100	Automatic on greens and tees, manual on fairways	7790	Automatic or manual on greens and tees. Manual on fairways	7130	Manual on greens, tees and fairways	5570
Greens	10,000 S.F. of top quality construction with drainage tile	44900	8000 S.F. of top quality construction with drainage tile	31670	5000 S.F. of good quality construction with drainage tile	22150	3000 S.F. of average quality construction with some drainage tile	14260	2000 S.F. of fair construction natural drainage	9260
Tees	2400 S.F. of top quality construction with 3 tee locations	2500	2100 S.F. of good quality construction with 2 to 3 tee locations	2210	1800 S.F. of good quality construction with 2 tee locations	2100	1800 S.F. of average quality construction with 2 tee locations	1910	1500 S.F. of fair quality construction with 1 to 2 tee locations	1670
Bunkers	Average 3 to 4 per hole	4990	Average 3 per hole	4060	Average 2 to 3 per hole	3590	Average 2 per hole	3080	Average 1 to 2 per hole	2590
Service and Cart Roads	Good quality asphalt paved	4490	Good quality asphalt paved	3310	Good quality asphalt paved	2690	Average quality gravel or asphalt paved	2140	Gravel	1670
Architect's Fees	Plans and supervision of construction	11980	Plans and supervision of construction	8840	Plans and supervision of construction	6590	Plans and supervision of construction	4750	Plans and some supervision of construction	3340
Total Cost per Hole	99790		73660		59890		47530		37070	
Total Cost per Acre	9980		8290		8290		7780		7410	

NORMAL PERCENT GOOD TABLE

CDU Rating and Actual Age				CDU Rating and Actual Age			
Good to Very Good	Average	Fair to Poor	Percent Good	Good to Very Good	Average	Fair to Poor	Percent Good
1-3	1-2	1	95	18	14	11	55
4-6	3-4	2	90	19	15-16	12	50
7-8	5-6	3-4	85	20-21	17	13	45
9-10	7-8	5-6	80	22	18	14	40
11-12	9	7	75	23-24	19	15	35
13-14	10-11	8	70	25-26	20-21	16-17	30
15	12	9	65	27-29	22-24	18-19	25
16-17	13	10	60	30+	25+	20+	20

NON-REGULATION SIZE COURSES

MINIATURE GOLF COURSES...Cost Per Hole.

They usually have 18 holes with a minimum land area of 10,000 S.F. Costs may range from 2400 per hole for a substandard course to 7800 per hole for a very elaborate course. The costs include all on-course improvements, but do not include office or concession buildings, parking areas or any other off-course improvements.

- GRADE A:** 18 holes of various sizes and different putting obstacles of tunnels, elaborate wooden or brick structures, and some moving obstacles. Concrete base and walls covered with felt or carpet 7400
- GRADE B:** 18 holes of various sizes and different putting obstacles of tunnels, good wooden or brick structures, and some moving obstacles, concrete base and walls covered with some felt or carpet 6000
- GRADE C:** 18 holes of various sizes and different putting obstacles of tunnels, small wooden structures. Concrete base with carpet or felt with wood side walls 4800
- GRADE D:** 18 holes of various sizes and different putting obstacles. Few wooden structures or tunnels. Concrete or asphalt base with carpet or felt on green area only. Wood side walls 3700
- GRADE E:** 18 holes of various sizes and different putting obstacles. Few, if any, wooden structures or tunnels. Asphalt base with no carpet or felt, wood side walls 2400

PITCH AND PUTT...Cost Per Hole.

18 holes on 20 to 30 acres, 1800 yards long, including sprinkler system, excluding lighting and structures 16000 to 22900

PAR 3...Cost Per Hole.

18 holes on 30 to 40 acres, 2800 yards long, including sprinkler system, excluding lighting and structures 20400 to 28000

EXECUTIVE COURSE...Cost Per Hole.

18 holes on 50 to 60 acres, 4600 yards long, including sprinkler system, excluding lighting and structures 28000 to 35600

DRIVING RANGE...Cost Per Tee.

Included in the costs are tees and preliminary grading and landscaping. (Average 3 tees per acre) 1200 to 2400

PRACTICE PUTTING GREENS

Price from the regulation course schedule base price components.

Additions and Deductions Per Hole	Add for Lighting	Deduct for No Sprinkler
Pitch and Putt	4100	2900
Par 3	4700	3600
Executive	—	4800
Driving Range	800	—
Putting Green	800	—

UNIT-IN-PLACE COSTS
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INTRODUCTION

Unit-in-Place Cost Tables have been included in the Manual to be used as a guide by the appraiser in making unit-in-place adjustments to the existing Pricing Schedules.

The Pricing Schedules in the Manual have been developed by applying unit-in-place costs in the construction of various hypothetical or model buildings. It is advisable to use these Pricing Schedules whenever feasible limiting the application of the Unit-in-Place Cost Tables to special purpose type buildings which are not readily adaptable to the existing Schedules.

Making a complete valuation by using unit-in-place costs is a job that requires both a great deal of time, technical knowledge, and skill. An appraiser must have a thorough understanding of all aspects of construction especially those factors which tend to influence overall costs, and an equally thorough understanding of the extent to which these factors are taken into account in the particular unit-in-place costs which he uses. Among the most significant variables which the appraiser must consider are basic material prices, the quality of material, the cost of labor, labor-efficiency, the quality of workmanship, profit and overhead, and the extent of pre-job and on-the-job architect and engineering fees.

The Unit-in-Place Cost Tables in the Manual have been developed to include 1) volume prices of average quality materials; 2) the cost of union labor with labor-efficiency typical of average quality workmanship; 3) normal contractor overhead and profit; and 4) normal architect fees. The Cost Tables can be effectively applied to conventionally designed construction conforming with these conditions. However, the effective application of the Cost Tables to types of construction which vary from these conditions is solely dependent upon the ability of the appraiser to determine the extent of the variations and to adjust his Replacement Cost accordingly.

Among the factors which the appraiser must most frequently consider are the size of the project, the overall quality of construction, and the variations in design.

PROJECT SIZE

The material prices and labor-efficiency considered in the development of the Unit-in-Place Cost Tables are those typical of sizeable construction projects involving carload lots of materials, and labor-efficiency averaged over an extended construction period and under normal conditions. When using the Unit-in-Place Cost Tables on smaller commercial type projects, it is necessary to account for the variations in the basic material prices and labor-efficiency by adding 10-30% to the Base Cost Tables.

QUALITY OF CONSTRUCTION

The Unit-in-Place Cost Tables reflect average quality material and workmanship. Both of these factors may vary considerably, resulting in a grade of construction ranging from very poor to very high quality. The following Quality Grade Specifications are provided to assist the appraiser in selecting the proper Grade.

A to AA Grade	Very high quality of material and excellent quality of workmanship throughout. Specially built construction requiring architect fees to cover both design and supervision, and engineering fees commensurate with the type of construction ranging from normal fees at the lower level of this Grade range to extensive fees at the AA level.
B Grade	Above average quality materials and a good quality workmanship throughout, requiring architect fees.
C Grade	Average quality materials and workmanship throughout, conforming with specifications of the Unit-in-place Cost Tables as developed in the Manual.
D Grade	Below average quality materials and fair to poor quality workmanship throughout, not requiring architect fees.
E Grade	Very cheap grade of materials, usually "culls" and "seconds", and a very poor quality of workmanship resulting from unskilled, inexperienced, "do-it-yourself" type labor, not requiring architect fees.

Generally, the quality of materials and workmanship is fairly consistent throughout the construction of a specific building. It is therefore usually

more feasible to weigh each component and to make a composite judgment of the overall Quality Grade. The following Quality Grade Factor Table is provided to assist the appraiser in adjusting for overall quality variations.

QUALITY GRADE FACTORS

AA Plus	(+)	2.50	B Plus	(+)	1.35	D Plus	(+)	.85
AA		2.10	B		1.26	D		.78
AA Minus	(-)	1.85	B Minus	(-)	1.17	D Minus	(-)	.70
A Plus	(+)	1.67	C Plus	(+)	1.08	E Plus	(+)	.60
A		1.55	C		1.00	E		.50
A Minus	(-)	1.45	C Minus	(-)	.92	E Minus	(-)	.40

DESIGN

Since unit-in-place costs are developed from basic construction components, they obviously cannot include an allowance for variations in design. Labor-efficiency in construction varies considerably from building to building depending upon its particular design. In elaborate or specially designed buildings, it is not uncommon for the cost of putting a specific unit in place to be two to three times as great as putting the same unit in place in a conventionally designed building, resulting in a proportionately higher cost. In computing the Replacement Cost, it is necessary to account for this variation in labor-efficiency and also to account for the higher architect and engineering fees caused by the special design.

This adjustment, in addition to those for other variations, must be made by applying a Design Factor to the total Replacement Cost. The selection of the proper Design Factor is largely a product of the experience and sound judgment of the appraiser. He must have the ability to analyze variable construction components and to determine the influence of each upon the overall cost.

EXCAVATION AND FOUNDATION CONSTRUCTION

BULK EXCAVATION

Bulk Excavation—Left on Site . . . Per Cu. Ft.	.22
Normal Haul—Small Quantities . . . Per Cu. Ft.	.31
Normal Haul—Large Quantities . . . Per Cu. Ft.	.25
Caisson Cost—Including Excavation Concrete, Casing Complete Per Cu. Ft.	15.96
Rock Excavation Per Cu. Ft.	.28

TRENCH EXCAVATION

Trench Excavation including Backfill, Normal Haul	
Trenches 3' deep Per C/Y	4.67
Trenches 4' deep Per C/Y	4.67
Trenches 5' deep Per C/Y	4.67
Trenches 6' deep Per C/Y	4.01
Trenches 8' deep Per C/Y	4.01
Trenches 10' deep Per C/Y	2.98

2" WOOD SHEET PILING

Sheet Piling Trenches 5' to 8' deep . . Per S/F . .	4.10
Sheet Piling Trenches 10' to 15' deep . . Per S/F . .	5.80
Bsmts. or Founds. 8' to 12' deep . . Per S/F . .	4.70
Bsmts. or Founds. 14' to 20' deep . . Per S/F . .	6.50

STEEL SHEET PILING

QUANTITY COST PER S/F

Small	Average	Large
26.40	18.00	13.80

If Pulled and Reused—Deduct 50%

WOOD PILES

Size of Piles

12" Butts. per L/F . .	10.80
14" Butts. per L/F . .	11.00
16" Butts. per L/F . .	11.40
Treated Piles— Add 2.20 per L/F	

PRE-STRESSED, PRE-CAST CONCRETE PILES

12" per L/F	11.70
16" per L/F	15.00
20" per L/F	20.40

STEEL PIPE PILES—CONCRETE FILLED

10" per L/F	28.80
12" per L/F	35.05
14" per L/F	45.50

CONCRETE Poured IN PLACE STEP TAPERED STEEL PILES (RAYMOND)

12" per L/F	12.70
16" per L/F	14.60

STEEL "H" PILES

8" x 8" — 36# per L/F	14.20
10" x 10" — 42# per L/F	16.30
— 57# per L/F	20.80
12" x 12" — 53# per L/F	20.00
— 74# per L/F	26.30
14" x 14" — 73# per L/F	26.50
— 89# per L/F	31.20
— 102# per L/F	35.50
— 117# per L/F	39.10

FOUNDATION CONCRETE

Concrete for Foundations, Footings, Grade Beams & Walls that can be placed by Transit Mixer—PSI 4,000 lbs. av. Per C/F	1.70

FOUNDATION FORMS

Footing Forms Per S/F	2.45
Column Pier Forms Per S/F	3.95
Wall Forms to 8' high Per S/F	3.60
Wall Forms to 14' high Per S/F	4.10
Wall Forms to 22' high Per S/F	5.05
Wall Forms for Radial Concrete Walls— ADD 50% to 100%	

NORMAL FOUNDATION WALL & FOOTING

Cost of Foundation to Grade for normal buildings (with-out Basement) including excavation, backfill, forms and reinforcing steel, per L/F 1'—0" high.

8" Conc. Wall & Conc. Footing per L/F . .	5.00
12" Conc. Wall & Conc. Footing per L/F . .	7.40
16" Conc. Wall & Conc. Footing per L/F . .	8.20
20" Conc. Wall & Conc. Footing per L/F . .	9.00
8" Concrete Block Wall & Footing per L/F . .	6.60
12" Concrete Block Wall & Footing per L/F . .	7.90

WATERPROOFING BASEMENT WALLS

Membrane 1 Ply Fabric. per S/F	.72
Membrane 2 Ply Fabric. per S/F	.91
Membrane 3 Ply Fabric. per S/F	1.04
Integral Waterproofing in Concrete Mix per C/Y	2.16

CONCRETE

CONCRETE ONLY - PER C/Y

Price variations depend on quantities, and whenever placed by transit mixer, wheeled, or hoisted and wheeled. Add excavation, backfill, forms & reinforced steel.

Mass—Mats & Heavy Slabs	15.40
Walls—Heavy	13.20
Walls—Light	12.35
Structural—Heavy	20.70
Structural—Light	17.70
Foundation—Heavy	7.60
Foundation—Light	6.80

REINFORCED CONCRETE WALLS—PER S/F SURFACE

Including Forms & Reinforcing Steel.

Wall Height To Top of Footing.

Thick	Plain Walls	Pilastered Walls
4"	8.10	11.05
6"	8.70	11.35
8"	9.35	12.00
10"	9.95	12.90
12"	10.60	13.75
14"	11.20	14.65
16"	11.80	15.55
18"	12.50	16.45
20"	13.10	17.40
24"	14.40	19.10

REINFORCED CONCRETE COLUMNS—PER L/F

Size	Round	Square	Size	Round	Square
12"	24.50	32.80	24"	56.50	65.50
14"	—	37.10	26"	—	74.30
16"	32.40	40.90	28"	—	79.70
18"	—	45.80	30"	82.80	90.40
20"	43.40	51.60	32"	—	93.50
22"	—	58.40	36"	113.20	109.80

STEEL

STRUCTURAL STEEL FRAMING—PER LB

Light Weight—Small Quantity	1.14
Light Weight—Large Quantity	.78
Heavy Weight—Small Quantity	1.50
Heavy Weight—Large Quantity	1.26
Anglechord Steel Trusses—Light	.59
Pressed Steel Trusses—Heavy	.66
Open—Web Steel Joist—Light	.65
Open—Web Steel Joist—Heavy	.70

ELECTRIC WELDED REINFORCING MESH - PER S/F

Slabs, Floors & Walks—10 ga.	.50
Slabs, Floors & Walks—8 ga.	.65
Slabs, Floors & Walks—6 ga.	.85
Slabs, Floors & Walks—4 ga.	1.10
In Walls ADD .10 per S/F	

REINFORCING STEEL—PER LB

Footings & Slabs—Light	.97
Footings & Slabs—Heavy	.92
Walls, Cols. & Beams—Light	1.28
Walls, Cols. & Beams—Heavy	1.12

TIMBER

Timber Framing 4" x 12"	Per Bd. Ft.	1.25
Treated Timber Framing	Per Bd. Ft.	1.40
Timber Trusses	Sq. Ft. Covered Area	2.90
Glued Laminated Timbers (Light) 5" x 12"	Per Ln. Ft.	8.65
Glued Laminated Timbers (Heavy) 6" x 30"	Per Ln. Ft.	27.85

WALL CONSTRUCTION

EXTERIOR STUDS—PER S/F SURFACE

Including Plates & Framing for Normal Openings	
2" x 4" 16" O.C., 8' high	.65
2" x 6" 16" O.C., 8' high	.70

INSULATION—NON RIGID TYPE—PER S/F SURFACE

Fiberglass—Kraft Faced One Side, 12" Thick	.85
Fiberglass—Kraft Faced One Side, 6" Thick	.50
Fiberglass—Kraft Faced One Side, 3½" Thick	.35
Urethane Foam—3 1/4" Thick	1.90

SHEATHING—PER S/F SURFACE

	Walls	Roof
1" Wood—Horizontal	.90	.90
1" Wood—Diagonal	.95	.95
3/8" Plywood	.65	—
1/2" Plywood	.70	.70
5/8" Plywood	.85	.85
3/4" Plywood	—	.95

SIDING—PER S/F SURFACE

Cedar Bevel Siding, 5/8"	1.20
Cedar Rustic Siding, 3/8"	1.15
Fir Rough Siding	1.10
Redwood Sawn Plain, 3/8"	1.40
Redwood Shiplap Siding, 5/8"	1.50
Wood Shingle Siding—Fire Rated	2.35
Asbestos Protected Metal	2.50
Asbestos Shingles	1.20
Asphalt Shingles	.85
Corr. Iron Siding (26 Ga.) Plain	1.30
Corr. Iron Siding (26 Ga.) Colored	1.55
Corr. Asbestos Siding	2.30
Corr. Aluminum .024" Thick (Unpainted)	1.50
Corr. Aluminum .024" Thick (Painted)	1.75
Corr. Aluminum .032" Thick (Unpainted)	1.75
Corr. Aluminum .032" Thick (Painted)	2.00
Corr. Fiber Glass Panels—Fire Rated	2.80
Stucco on Frame	1.50
Stucco on Masonry	1.80
Wood Vertical Sheet Siding	1.30

GLASS BLOCK—PER S/F SURFACE

8" x 8" x 4" Thick Plain Face	9.10
12" x 12" x 4" Thick Plain Face	10.70
8" x 8" x 4" Colored Glass	10.10
12" x 12" x 4" Colored Glass	9.10

INSULATED WALL PANELS—PER S/F SURFACE

1 1/2" Insulation & Galvanized Steel Interior	
Galvanized Steel Exterior	6.70
Aluminum Exterior	5.90
Protected Metal Exterior	6.25
Porcelain on Aluminum Exterior	13.20
Stainless Steel Exterior—26 Ga.	7.80
Colored Aluminum Exterior	6.10

MASONRY—PER S/F SURFACE

4" Face Brick—Veneer—Normal	5.10
4" Face Brick—Veneer—1st Grade	5.40
4" Common Brick—Veneer	4.55
8" Common Brick Wall	9.00
12" Common Brick Wall	10.55
16" Common Brick Wall	13.70
4" Concrete Block Wall	2.50
6" Concrete Block Wall	2.75
8" Concrete Block Wall	3.50
12" Concrete Block Wall	4.70
4" Concrete Block Backup	2.50
6" Concrete Block Backup	2.75
8" Concrete Block Backup	3.50
4" Face Brick & 4" Common Brick	9.60
4" Face Brick & 8" Common Brick	14.05
4" Face Brick & 4" Concrete Block	7.55
4" Face Brick & 6" Concrete Block	7.80
4" Face Brick & 8" Concrete Block	8.50
4" Face Brick & 4" Tile	12.25
4" Face Brick & 8" Tile	15.25
4" Local Stone Veneer	8.50
Limestone Facing	10.80
1" Artificial Stone Wainscot	16.60
1" Slate	15.25
2" Slate	18.95
2" Glazed Tile—1 Side—Interior	6.25
4" Glazed Tile—1 Side—Interior	7.10
8" Glazed Tile—1 Side—Interior	10.20
5 Coats—Plaster on Int. Masonry Wall	.30
1 1/2" Marble—Domestic	18.60
1" Marble—Foreign	23.30

PRECAST TILT-UP CONCRETE PANELS

PLANKS—S/F

6" Hollow Core	3.70
8" Hollow Core	3.95
12" Hollow Core	4.70

WALL—S/F

Flat Panel	10.70
Shaped Panel	14.50
Window Panel	17.65

BEAMS—LN. FT.

12" x 12"	36.70
12" x 18"	45.00
12" x 24"	59.40

COLUMNS—LN. FT.

12" x 12"	26.75
18" x 18"	43.80
24" x 24"	55.20

PRECAST TEES—S/F

SINGLE

10' x 24" Deep	5.15
10' x 36" Deep	6.35
10' x 48" Deep	7.20
6' x 12" Deep	6.10
6' x 24" Deep	7.30

DOUBLE

6' x 12" Deep	4.55
6' x 18" Deep	5.05
6' x 24" Deep	5.50

FLOOR CONSTRUCTION

CONCRETE GROUND SLABS—PER S/F

4" Concrete Including Base	1.45
4" Concrete—Mesh Rein.—Incl. Base	1.85
6" Concrete—Mesh Rein.—Incl. Base	2.40
8" Concrete—Mesh Rein.—Incl. Base	4.15
10" Concrete—Mesh Rein.—Incl. Base	5.30

CONCRETE STRUCTURAL SLABS—PER S/F

Floor Thickness	Flat Slab
5"	6.50
6"	6.95
7"	7.40
8"	7.90
9"	8.40
10"	9.05

Floor Topping Thickness	Conc. Topping on 3" Rib Met. Deck
2 1/2"	5.40
3"	5.50
3 1/2"	5.65
4"	5.75

For Beam & Girder job Deduct 5% from Flat Slab.

PRESTRESSED CONCRETE JOIST—PER L/F

6" x 12"	8" x 12"	10" x 12"	12" x 12"
4.90	5.30	6.25	7.55

HOLLOW CORE SLABS (FLEXICORE)—PER S/F

4"	6"	8"	10"
3.60	3.95	4.40	5.05

LONG SPAN STEEL DECKING—PER S/F

Cellular decking with cells used for Ventilation or Electrical Distribution.

1 1/2" Depth	3.95
3" Depth	4.30
4 1/2" Depth	5.30
6" Depth	5.65
7 1/2" Depth	6.10

WOOD AND TIMBER CONSTRUCTION—PER S/F

1" Wood Subfloor—Horizontal	.90
1" Wood Subfloor—Diagonal	.95
1/2" Plywood	.65
5/8" Plywood	.80
5/8" Particle Board	.65
5/8" Wood Fiber Board	.70

Per Bd. Ft.

2" x 8" Wood Joist	.88
2" x 10" Wood Joist	.89
2" x 12" Wood Joist	.90
4" x 12" Timber Framing	1.25
Treated Timber Framing	1.40

Per Bd. Ft.

2" x 4" Wood Sleepers on Concrete, Treated	1.45
2" x 6" Wood Sleepers on Concrete, Treated	1.20

FINISHED FLOORS—PER S/F

1 1/2" Cement Topping	1.20
Each Additional 1/2" ADD	.85
Monolithic Finish	2.20
Fir Flooring 1" x 4" T & G	2.00
Oak Flooring 2 1/4" T & G	2.45
Sanding and Finish—ADD	.90
2" Wood Block Flooring—Creosoted	2.30
2 1/2" Wood Block Flooring—Creosoted	2.80
3" Wood Block Flooring—Creosoted	3.30
3/16" Asphalt Tile—Dark Marbleized	.90
3/16" Asphalt Tile—Med. Lt. Marbleized	1.00
3/16" Asphalt Tile—Light Col. Marbleized	1.10
1/8" Greaseproof Asphalt Tile	.90
1/8" Vinyl Asbestos Tile	1.20
1/8" Solid Vinyl Tile—Travertine	2.05
1/8" Rubber Tile	1.75
3/32" Linoleum—Light	1.25
1/8" Linoleum—Heavy	1.55
Neoprene Tile Floor	4.90
Ceramic Tile Floor—On Mortar	3.50
Ceramic Tile Walls on Mastic	3.30
Ceramic Tile Walls on Mortar	4.10
2 3/4" Quarry Tile—Epoxy Grout	5.50
2 3/4" Quarry Tile—Acid Resistant	6.70
1" Slate Flooring	15.25
2" Terrazzo Bonded on Concrete	4.55
3" Terrazzo Not Bonded to Concrete	5.75
1 1/2" Marble—Domestic	18.60
1" Marble—Foreign	23.30
2" Slate—Flooring	18.95

ROOF CONSTRUCTION

ROOFING—PER S/F

Roll Roofing—55# Smooth Surface	.35
Roll Roofing—90# Mineral Surface	.50
Compo, Roofing 3 Ply	.70
Compo, Roofing 4 Ply	.90
Compo, Roofing 4 Ply & Gravel	1.00
Compo, Roofing 5 Ply & Gravel	1.15
Fiberglass Shingles 220 #	.50
Fiberglass Shingles 240 #	.55
Fiberglass Shingles 260 #	.60
Asphalt Shingles 235#	.85
Asphalt Shingles 300#	.90
Asphalt Shingles 350#	1.15
Concrete Tile—Standard	1.55
Slate Shingles	3.50
Spanish Tiles—Wired	3.25
Wood Shingles #1 Cedar	1.50
Wood Shingles—Fire Treated	2.15
Porcelain Enamel Tiles—18 Ga.	3.90
Corr. Aluminum .024" Thick—Unpainted	1.40
Corr. Aluminum .024" Thick—Painted	1.60
Corr. Aluminum .032" Thick—Unpainted	1.75
Corr. Aluminum .032" Thick—Painted	2.00
Corr. Iron 24 ga.—1" insulated—Unpainted	2.20
Corr. Iron 24 ga.—1" insulated—Painted	2.50
Corr. Asbestos	2.30
Corr. Fiber glass panels—Fire Rated	2.80

WOOD DECKING—PER S/F

1" Wood Fiber Decking	.95
Marine—Plywood Decking, 1/2"	2.40
Marine—Plywood Decking, 5/8"	2.50
Marine—Plywood Decking, 3/4"	2.65
2" Laminated Wood Decking	1.70
3" Laminated Wood Decking	2.75
4" Laminated Wood Decking	3.60

WOOD RAFTERS & PURLINS—PER BD. FT.

2" x 6" to 2" x 12" Flat Roof	.95
2" x 6" to 2" x 12" Gable Roof	1.20
2" x 6" to 2" x 12" Steep or Cut-Up Roof	1.45

INSULATION—RIGID TYPE—PER S/F

1" Wood Fiber Board	.40
2" Wood Fiber Board	.80
Polyurethane Core—1" Thick	.70
Polyurethane Core—2" Thick	1.10
Polyurethane Core—3" Thick	1.45

POURED GYPSUM DECKING—PER S/F

Cement Fiber Plank, T & G, . . . 2" Thick	1.45
Cement Fiber Plank, T & G, . . . 2 1/2" Thick	1.60
Cement Fiber Plank, T & G, . . . 3" Thick	1.75
Sub-Purlins 6' Span	.40
Sub-Purlins 8' Span	.55
ADD for Form Boards Below:	
Acoustical 1" Thick	1.15
Acoustical 2" Thick	1.75
Asbestos Cement Board 1/4" Thick	.80
Gypsum Board 1/2" Thick	.65
Mineral Fiber 1" Thick	.70
Mineral Fiber 2" Thick	.95
Wood Fiber 1" Thick	.80
ADD to Form Boards Above:	
Poured Gypsum 2" Thick	.60
Poured Gypsum 2 1/2" Thick	.70
Poured Gypsum 3" Thick	.85

PRECAST CONCRETE SLAB—PER S/F

2"	2 1/2"	3"
7.30	7.60	7.90

Pre-cast, Pre-stressed Concrete Channel.

STEEL DECKING—PER S/F

	Inter. Rib	Wide Rib	Composite 2" Lok-Floor
18 Ga. Painted	1.25	1.55	1.40
18 Ga. Galv.	1.40	1.70	1.50
20 Ga. Painted	1.10	1.30	1.20
20 Ga. Galv.	1.20	1.45	1.30
22 Ga. Painted	.95	1.20	1.00
22 Ga. Galv.	1.10	1.30	1.15

LONG SPAN STEEL DECKING—PER S/F

Web Depth	20 Ga.	18 Ga.	16 Ga.
4 1/2" Depth	4.40	4.70	4.90
6" Depth	4.55	4.85	5.15
7 1/2" Depth	5.15	5.50	5.90

INTERIOR FINISH

WOOD FURRING

1" x 2" on Masonry Wall—Per Ln. Ft.	.50
1" x 2" on Concrete Wall—Per Ln. Ft.	.70
1" x 2" on Wood Wall—Per Ln. Ft.	.40
5 Coats Plaster on Masonry Walls—Per S/F	.30

WALL BOARDS

	Per S/F
1/4" Sheetrock—Taped & Tex.	.35
1/2" Sheetrock—Taped & Tex.	.55
5/8" Sheetrock—Taped & Tex. Fire-rated.	.65
5/8" Sheetrock—Moisture Resistant	.70
1/4" Tempered Hardboard	.55
3/8" Tempered Hardboard	.60
Formica.	7.40

PREFINISHED PANELING

	Per S/F
Birch.	1.25
Cherry.	1.45
Oak	1.55
Walnut	1.85

STRUCTURAL GLAZED TILE

	Per S/F
2" Wall—Single Face	6.25
4" Wall—Single Face	7.10
6" Wall—Single Face	8.10
4" Wall—Double Face.	9.00
ADD For Finish on Unglazed Side	.20

LATH & PLASTER

	Per S/F
3/8" Gypsum Lath & Plaster Wall.	3.50
1/2" Gypsum Lath & Plaster Wall.	3.60
Metal Lath & Plaster Wall	3.85
Metal Lath & Acoustical Plaster	4.10
For Ceiling Work ADD to above.	10%

PARTITIONS

2" x 4" Stud Partitions, Finished 2 Sides Including Normal Openings	Per S/F
1/2" Sheetrock (Dry Wall)—Fire Rated	3.60
Gypsum Lath & Plaster.	4.70
Metal Lath & Plaster	5.40
Metal Partitions.	8.75
Masonry Partitions—Use Masonry Wall Price and ADD for Finish 2 sides	

CEILING INSULATION—NON-RIGID TYPES

	Per S/F
Fiberglass—Blankets or Batts—12" Thick	.85
Fiberglass—With Foil one side—10" Thick	.65
Fiberglass—With Foil one side—6" Thick	.50
Ultra Therm—Acoustical—6" Thick.	.50
Perlite—2" Thick.	.55
Vermiculite—Poured—2" Thick	.70
Vermiculite—Poured—3" Thick	.90

ACOUSTICAL CEILINGS

	Per S/F
Fiberglass—Suspended	1.90
Mineral Fiber—Glued	2.40
Mineral Fiber—Suspended	2.75
Steel Metal Pan—Suspended.	3.25
Alum. Metal Pan—Suspended.	3.70
Stainless Steel Pan—Suspended	4.70
Luminous Ceiling—Panels	2.65

PAINTING

	Per S/F
Interior Plaster 2 Coat Brush	.41
Interior Plaster 2 Coat Roller.	.37
Exterior Wood 2 Coat Brush	.38
Exterior Wood 2 Coat Roller	.40
Stucco Exterior 2 Coat Roller	.34
Stucco Exterior 2 Coat Spray	.32
Masonry Walls 2 Coat Brush	.82
Masonry Walls 2 Coat Roller	.84
Masonry Walls 2 Coat Spray	.74
Hand Sanding, Puttying, Prep.	.13

DOORS

OVERHEAD WOOD OR METAL DOORS—S/F OF SURF. AREA

Size	Wood Per S/F	Metal Per S/F
To 100 S/F	7.20	7.50
To 200 S/F	6.00	7.20
Over 200 S/F	5.40	6.60

Mech. Operation ADD 350 ; Electric Operation ADD 850

WOOD COLD STORAGE DOORS—EACH

Size	Chiller/ Cooler	Freezer	Sharp Freeze
2'-0" x 3'-0"	340	360	400
2'-6" x 6'-6"	830	910	1020
3'-0" x 6'-6"	980	1090	1220
4'-0" x 6'-6"	1200	1340	1510
5'-0" x 6'-6"	1510	1680	1900
6'-0" x 6'-6"	1800	2020	2280
8'-0" x 6'-6"	2060	2380	2720

Cooler & Freezer Doors are usually inset Doors.

Sharp Freeze Doors are usually overlap Doors.

For Metal Doors ADD 25% to Above Cost.

For Stainless Steel Doors Double Above Cost.

COLD STORAGE INSULATION

PER S/F OF SURFACE AREA WALLS, FLOORS, CEILINGS.

Type	Insulation Thickness				
	1"	2"	4"	6"	8"
Cork Board	1.60	2.75	4.75	6.50	8.15
Styrofoam	1.50	2.30	3.55	4.45	5.30
Fiberglass	1.40	2.05	3.10	3.85	4.55
Foamglass	1.55	2.65	4.55	6.25	7.75
Mineral Wool	.95	1.55	2.65	3.50	4.30
Polyurethane:	—	—	—	—	—
—Spray	1.60	2.75	4.85	6.65	—
—Board	1.50	2.50	4.30	5.80	—

Cost is for Installation, Vapor Barrier, Hot Asphalt, Skewers, Furring, Sealing.

WINDOWS

	Per S/F
Wood Sash Windows	7.30
D.H. Wood Sash	10.90
Aluminum Frame Windows	9.60
Steel Sash Windows	5.00
Continuous Steel Sash	4.40

STAIRS

	Per Flight
Average Fir or Y.P. Stairs	800
Average Hardwood Stairs	1060
Pan Type Steel Stairs—Conc. Treads	1980
Reinforced Concrete Stairs	2100
Fire Escape—First Flight	1190
Fire Escape—Each Additional Flight	1060

ROOF VENTILATION

GRAVITY ROOF/WALL VENTILATORS/EXHAUSTERS

Size In CFM	Ventilators Each Installed Motorized	Exhausters Each Installed Motorized
145	180	—
250	220	—
325	290	580
630	380	680
875	490	790
1200	700	970
2500	1510	1320
3000	1690	1420
5000	1910	1510
6800	2040	1690

BOILERS

HORIZONTAL RETURN FIRE TUBE BOILERS

LOW PRESSURE (15 LB.) FIREBOX TYPE

Installed Complete, including Pumps, Piping, Controls & Foundation.

Rated H.P.	Cost Per H.P.	Cost Installed
20 HP	550	11000
30 HP	470	13900
50 HP	370	18700
75 HP	310	23500
100 HP	280	27800
150 HP	230	35000
200 HP	200	41400
300 HP	180	52300
400 HP	160	61700

ADD for Fuel Oil Tanks & Stack

SCOTCH MARINE BOILERS

HIGH PRESSURE (125 LB)

Installed Complete, including Pumps, Piping, Controls & Foundation.

Rated H.P.	Cost Per H.P.	Cost Installed
20 HP	700	13800
30 HP	580	17300
50 HP	460	23200
75 HP	380	29000
100 HP	340	34100
150 HP	290	43000
200 HP	250	50600
300 HP	220	63600
400 HP	190	74800

ADD for Fuel Oil Tanks & Stack

FUEL OIL TANKS

Underground Fuel Oil Storage Tanks, Including Excavation, Backfill & Normal Piping.

Capacity Gallons	Cost Installed
550	1090
675	1150
840	1220
1,000	1330
1,550	1750
2,000	2210
3,000	2960
4,000	3650
6,000	4940
8,000	5820
10,000	7120
15,000	10300
20,000	13500

Increase Cost 35% For Fiber Steel Tanks.

HORIZONTAL RETURN FIRE TUBE BOILERS

HIGH PRESSURE (125 LB.) FIREBOX TYPE

Installed Complete, including Pumps, Piping, Controls & Foundation.

Rated H.P.	Cost Per H.P.	Cost Installed
20 HP	720	14500
30 HP	610	18400
50 HP	400	19800
75 HP	340	24800
100 HP	300	29400
150 HP	250	37100
200 HP	220	43900
300 HP	180	55400
400 HP	170	65300

ADD for Fuel Oil Tanks & Stack

STEAM GENERATORS

Automatic Steam Generators, Oil or Gas Fired. Installed Complete.

PRICE PER HORSEPOWER

H.P. Rating	Lbs. of Steam Per Hour	15 Lb. Steam Pressure	125 Lb. Steam Pressure
15	518	600	700
30	1035	350	410
60	2070	260	310
100	3450	240	260
150	5175	210	250
200	6900	180	220

WATER STORAGE TANKS

ELEVATED STEEL TANKS

Capacity of Tank	If Tower is 50' High	If Tower is 75' High	If Tower is 100' High	If Tower is 150' High
25,000 Gal.	115,800	130,200	147,400	187,400
50,000 Gal.	129,600	145,300	163,100	205,200
75,000 Gal.	142,700	159,100	177,600	221,000
100,000 Gal.	155,200	173,600	193,300	240,700
150,000 Gal.	190,700	209,200	228,800	274,900
200,000 Gal.	215,800	235,400	257,800	307,800
300,000 Gal.	278,900	307,100	338,000	409,700
400,000 Gal.	339,400	364,300	394,600	466,900
500,000 Gal.	407,800	436,700	466,900	534,700
750,000 Gal.	545,900	578,800	615,600	693,200
1,000,000 Gal.	710,300	756,400	805,000	914,400

For Hurricane or Earthquake Areas

Add 18% to cost with 50' tower

Add 19% to cost with 75' tower

Add 20% to cost with 100' tower

Add 22% to cost with 125' tower

Prices include Steel Tank, Foundation, Riser Pipe, Frost Case, Ladder and Walkway, Tower, completely installed.

3" REDWOOD TANKS

Capacity of Tank	Mounted on Bldg. Roof	Add per L/F of Tower on Roof
20,000 Gal.	18700	380
30,000 Gal.	24400	430
40,000 Gal.	29500	480
50,000 Gal.	34300	600

Use same price for 3" Fir Tanks.

If Redwood Tank is on Steel Tower in yard, use 60% of Steel Tank price.

STACKS

COST PER FOOT OF HEIGHT

Base Diameter Outside	Brick Stack	Concrete Stack	10 Ga. Steel Stack
2'	—	—	125
3'	—	—	161
4'	—	—	193
5'	—	—	222
6'	462	396	251
7'	534	456	—
8'	600	515	—
9'	658	572	—
10'	722	625	—
12'	846	743	—
14'	971	846	—
16'	1087	958	—
18'	1205	1061	—
20'	1315	1172	—
22'	1433	1277	—
24'	1543	1380	—
28'	1765	1583	—
32'	1980	1784	—

Above costs include normal Foundation, Ladder, Lightning Rods, Painting. For Square/Rectangular Chimneys, use 1/3 the perimeter in place of the diameter.

PAVING

Blacktop on 4" Base	Reinf. Concrete	Crushed Stone
2" Topping 65	4" . . 1.50	4" . . .30
3" Topping 90	6" . . 1.70	6" . . .35
4" Topping 95	8" . . 1.80	8" . . .40

per inch of base

RAILROAD SIDING

Cost Per L/F including Rails, Ties, and Ballast. Add 1800 for each Siding Bumper. Add 63.30 per L/F for 9' Concrete Railroad Bed.

Size Of Rail (B x H)	Weight Of Rail (Per Yd.)	Cost Installed	Add For Switch And Turnout
3 1/2 x 3 1/2	40#	35.00	8800
4 1/4 x 4 1/4	60#	43.90	10700
5 x 5	80#	51.50	12200
5 3/8 x 6	100#	58.30	13700
5 1/2 x 6 5/8	115#	63.10	14600
6 x 6 3/4	130#	67.40	15500

RAILROAD TRACK SCALES

Capacity	Cost
125 Ton	68,600

Prices Include Concrete Pit, scale and installation.

TRUCK SCALES

Mech./Elect. Capacity	Cost
10 Ton	10900
15 Ton	13800
50 Ton	32900
60 Ton	34400
80 Ton	35500
100 Ton	39000
125 Ton	43900

ADD 18,600 for Computer Outlet.

ADD 2,520 for Remote Read System.

ADD 9,840 for Weight Printer (Printomatic).

Prices include Platform. Pit, scale and installation.

WOVEN WIRE FENCE

Based on 10' Sections w/3 strands of barbed wire/1 side, Galv. (L/F includes space for Gates).

	6' High	8' High	10' High
#6 Wire per L/F	8.70	11.90	16.20
#9 Wire per L/F	7.60	10.40	14.10

Add for Gates 6.60 per S/F of Gates.

Add for Top Rail 1.00 per L/F.

Deduct for no barbed wire 1.25 per L/F.

Add for small quantity—10%.

Deduct for large quantity—10%.

COLE-LAYER-TRUMBLE CO.

UTILITY PIPING

PER L/F Corrugated Steel

8"	7.90
10"	9.25
12"	10.70
16"	14.50
20"	18.35
24"	23.05
36"	38.65
48"	57.50
60"	78.00

Reinforced Concrete Pipe

8"	7.50
12"	10.20
16"	13.80
24"	21.85
30"	29.65
36"	37.50
48"	56.65
60"	78.50
72"	104.05
84"	130.45
96"	160.80

Black Pipe

4"	8.65
6"	15.10
8"	23.05
10"	31.45

Vitrified Clay Pipe

4"	6.25
6"	6.95
8"	8.05
10"	10.10
12"	12.25
18"	24.85
24"	31.55
30"	45.50

P.V.C. Water 200#

4"	4.70
6"	6.95
8"	9.95

Valves

4"	410	each
6"	710	each
8"	1090	each
10"	1510	each
12"	2060	each

Hydrants

2-Way	740	each
3-Way	880	each

PERCENT GOOD SCHEDULES AND TABLES

It is often advisable to develop schedules and tables to be used as a guide for the appraiser to determine value. The use of such tables is especially applicable in mass appraisals for tax equalization purposes where it is essential to establish and maintain uniformity. Percent Good tables, however, based on actual age alone are impractical. Remodeling, for instance, has the effect of prolonging the remaining life of a building, thus making its effective age considerably different than its actual age. Consideration must be given to all the factors operating to influence the overall condition, desirability, and degree of usefulness of each structure.

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DWELLING PERCENT GOOD CDU RATING SYSTEM

As houses grow older, they wear out; they become less desirable, less useful. This universal decline in value is called *depreciation*, and appraisers are required to determine the degree of this loss in each property they examine. If all houses deteriorated at the same rate, this decline in value would be a simple function of the age of the structure — a certain percentage per year. However, houses depreciate at varying rates depending on a score or so of variables.

Every building is acted upon by two value reducing forces. One tends to shorten its physical life, the other shortens its economic life. Both forces act concurrently, overlap, and affect each other. A new house, or any type of structure for that matter, has its greatest value at the moment of completion. Its expectancy of life — both physical and economic — is longest on the day the key is handed over by the builder. The building is then most desirable and most useful. The future benefits which the occupant may expect to enjoy are at the maximum. From that day forward, however, decay and wear and tear act to lessen the value of the structure by curtailing its remaining capacity for use.

At the same time the house is “wearing out”, it is also “going out of style”. It is becoming less desirable. It is progressively becoming less useful, both from the effect of forces within the property (obsolescence), and outside of it as well (encroachment of undesirable influences such as less desirable property uses).

Neither physical decline nor functional loss are constant in their action. Deterioration is a relatively steady process offset periodically by maintenance. Worn-out elements of the building are repaired or replaced at intervals, depending upon the policy of the owner. Cheaper houses generally deteriorate faster than better ones. Obsolescence and encroachment may come slowly, or happen almost overnight. The forces which cause both deterioration and functional/economic depreciation may act and often do act simultaneously, but they are not necessarily related. A house may decline in physical condition, and yet throughout its entire life remain relatively functional.

Obviously enough, the age of a house remains an important factor in estimating accrued depreciation. A certain number of houses will receive “normal” maintenance and will experience “average” economic loss due to obsolescence and functional depreciation. These buildings will depreciate at an average rate as they grow older.

Other houses will lose value at lesser or more rapid rates. CDU Ratings provide a logical reasoning process, by means of which normal age depreciation may be modified according to the appraiser's best determination of the *relative loss of value* in a structure, as compared with the *average loss* that might be expected. Thus, the age of a dwelling is an unreliable indicator of the degree of depreciation from its cost new. For houses depreciate not merely because they grow older — but because they wear out and become less desirable and less useful from a variety of causes.

To assist the appraiser in establishing the "CDU Ratings" of buildings, several simple classifications have been established. These classifications or ratings are entirely natural, and will fit the normal impressions of the appraiser as he examines a building. Following is a tabulation of CDU Ratings, with their accompanying definitions of the observed physical condition of the building, and its degree of desirability and usefulness for its age and for its type.

CDU RATING GUIDE

CDU RATING OF DWELLING	DEFINITION
Excellent	Building is in perfect condition; very attractive and highly desirable.
Very Good	Slight evidence of deterioration; still attractive and quite desirable.
Good	Minor deterioration visible; slightly less attractive and desirable, but useful.
Average	Normal wear and tear is apparent; average attractiveness and desirability.
Fair	Marked deterioration — but quite usable; rather unattractive and undesirable.
Poor	Definite deterioration is obvious; definitely undesirable, and barely usable.
Very Poor	Condition approaches unsoundness; extremely undesirable and barely usable.
Unsound	Building is definitely unsound and practically unfit for use.

Age is reflected as an index of the normal deterioration and obsolescence in a structure which may be expected over the years. *Condition* represents a variable measure of the effects of maintenance and remodeling on a building. *Desirability* is a measure of the degree of appeal a particular building may have to prospective purchasers. *Usefulness* is a measure of the utility value of the structure for the purpose for which it may be used.

Percent good is defined as the resultant estimate of the diminishing value of an improvement, after subtracting the amount of estimated depreciation from the Replacement Cost New. For example, a structure which is estimated to be 45 percent depreciated as of a given time has a percent good of 55. Therefore, depreciation and percent good are complements of each other.

Once the CDU Rating of a building has been established through a consideration of its condition, desirability, and usefulness for its age and its type, reference to the Basic Percent Good Table will indicate the appropriate value percent remaining for a structure possessing these qualities, in the degree observed and noted by the appraiser.

The degree of deterioration and obsolescence, or loss of value from all causes, both within and without the property, is automatically taken into account. This is accomplished by means of a simple rating of the capabilities and qualities of the structure, in precisely the same terms as would a prospective purchaser. Sound valuation theory presupposes the existence of a prospective buyer with intelligence enough to compare the advantages and disadvantages of competing properties, and to rate the property he is examining according to its relative degree of desirability and usefulness.

APPLYING THE CDU SYSTEM

To apply the CDU System, the appraiser rates each house according to his composite impression of its relative *condition*, *desirability*, and *usefulness* — for its *age* and *type*. The following four actual cases illustrate this convenient and practical method of determining percent good in houses.

Case One: A fifteen-year-old single family residence situated in an attractive residential suburb of a typical American community. Grade "B" with two baths. Minor deterioration is visible; slightly less attractive and desirable than new, but useful. A qualified observer would rate this house above average on the CDU Rating System. Accordingly, our appraiser has assigned it a CDU Rating of "Good". Referring to the table, we find 80% Good would be appropriate.

Case Two: A one story frame house seven years old. Grade "C" or average quality construction; three bedrooms, one and one-half baths. Structure shows normal wear and tear and has average attractiveness and desirability. The appraiser's impression is, "*for a seven-year-old Grade "C" house, this would be rated as Average.*" From the table we find 85% Good is indicated.

Case Three: This century-old Colonial style frame house is located in a New England seaport community; erected 1858. Grade "B" or good quality construction. Building has been extremely well maintained and completely modernized with central heating, electric lighting, and plumbing added. The structure is in good physical condition in spite of its age. Building is architecturally attractive and quite desirable. The appraiser's impression is, *"for a very old house of Grade "B" quality, this is an Excellent one"*. From the table 65% Good is indicated.

Case Four: A twenty-four-year-old single family residence of Grade "C" quality; one story and basement, frame construction; three bedrooms with bath. Structure has had normal maintenance and is average in physical condition. Within the past two years, an elevated six-lane expressway passing over the adjoining lot has been erected. This encroachment has seriously detracted from the attractiveness and desirability of the property. Accordingly, the appraiser has assigned a CDU Rating of "Very Poor". From the table 40% Good is indicated.

DWELLING PERCENT GOOD

1. Rate the dwelling in terms of its overall condition, desirability, and usefulness.
2. Select the proper percent good relative to its actual age.

BASIC PER CENT GOOD TABLE	
RATING GUIDE	
Excellent	Building is in perfect condition; very attractive and highly desirable.
Very Good	Slight evidence of deterioration; still attractive and quite desirable.
Good	Minor deterioration visible; slightly less attractive and desirable, but useful.
Average	Normal wear and tear is apparent; average attractiveness and desirability.
Fair	Marked deterioration — but quite usable; rather unattractive and undesirable.
Poor	Definite deterioration is obvious; definitely undesirable, and barely usable.
Very Poor	Condition approaches unsoundness; extremely undesirable and barely usable.
Unsound	Building is definitely unsound and practically unfit for use.

Actual Age	CDU RATING OF DWELLING							
	Excel.	V. Good	Good	Average	Fair	Poor	V. Poor	Unsound
0 - 3	100%	97%	95%	90%	85%	80%	75%	60%
4 - 8	97	95	90	85	80	75	70	55
9 - 13	95	90	85	80	75	70	65	50
14 - 18	90	85	80	75	70	65	60	45
19 - 23	85	80	75	70	65	60	50	35
24 - 28	80	75	70	65	60	50	40	25
29 - 38	75	70	65	60	50	40	35	20
39 - 49	70	65	60	55	45	35	30	15
50 & Over	65	60	55	50	40	30	25	10

OTHER BUILDING AND YARD ITEM

PERCENT GOOD GUIDELINES

The appraisal of other buildings and yard improvements for both residential and agricultural properties is a difficult task. Other buildings and yard improvements are rarely purchased or sold separately from the balance of the property. The cost of construction of a swimming pool, which is built for the convenience and comfort of a property owner, will rarely add an equivalent amount to the market value of the property. The cost of construction of a farm outbuilding that can be justified by its contribution to the farming operation will again seldom add an equivalent amount to the market value of the property.

In effect, other buildings and yard improvements have value in direct proportion to their degree of utility or usefulness. This is an extension of the principle of contribution, which affirms that the value of any factor in production is dependent upon the amount which it contributes to the overall net return, irrespective of the cost of its construction. Any effective approach to the valuation of other buildings and yard improvements must reflect the action of investors. Informed farm owners and operators would not invest in buildings which could not pay for themselves by either maintaining or adding to the required level of productivity. Homeowners would not invest in swimming pools, detached garages, etc., which would not supply the degree of comfort and/or convenience they desire.

The physical condition of an other building or yard improvement bears a direct relationship on the desirability and usefulness of that improvement. It is, therefore, possible to apply the CDU system previously explained to generate a percent good estimate for different types of improvements of varying ages, based on condition, desirability, and usefulness.

The CDU Rating System has been modified to assist the appraiser in developing applicable depreciation guidelines based upon the condition, desirability and usefulness of various outbuildings and yard improvements.

For the appraisal of other building and yard improvements, the term *CDU Rating* is modified to become *Condition Rating*. The term Condition Rating will still give the same consideration to all the factors which influence the overall condition, desirability, and degree of usefulness of each structure. The eight CDU Ratings have been modified to become six Condition Ratings. These ratings are again intended to fit the normal impressions of an appraiser as he examines an improvement. Condition Ratings, with their accompanying definitions are as follows:

Cond. Rating of Improv.	DEFINITION
Excellent	Improvement is in "like new" condition; very useful and highly desirable.
Good	Minor deterioration visible; slightly less desirable, but useful.
Average	Normal wear and tear is apparent; average usefulness and desirability.
Fair	Marked deterioration — but usable; rather undesirable.
Poor	Definite deterioration is obvious; definitely undesirable, and barely usable.
Unsound	Building is definitely unsound and practically unfit for use.

Six individual Percent Good Tables have been developed to assist the appraiser in valuing the various other building and yard improvements that are normally encountered. The following is a list of the six tables, the type of applicable improvements, and their respective structure type code utilized in the MAS system.

1. Select the proper table based on the type of structure.
2. Rate the structure in terms of its overall condition, desirability, and usefulness.
3. Select the proper percent good relative to its actual age.

TABLE 1

1. AB1 - bank barn
2. AD1- dairy and horse barn
3. RA1- attached frame garage
4. RA2- attached masonry garage
5. RG1- detached frame garage
6. RG2- detached masonry garage

PERCENT GOOD TABLE 1						
STRUCTURE TYPE CODES AB1, AD1, RA1, RA2, RG1, RG2						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	90	90	90	90	85	
6 - 10	85	85	80	80	75	50
11 - 15	80	75	75	70	65	35
16 - 20	75	70	70	60	55	25
21 - 25	70	65	60	55	45	15
26 - 30	65	60	50	50	35	10
31 - 35	60	55	45	40	30	10
36 - 40	60	50	45	40	25	10
41 - 45	55	50	40	35	25	5
46 - 50 & Over	55	45	40	30	20	5

TABLE 2

1. AB2 - flat barn
2. AM1- attached, concrete block milk house
3. AM2- attached, glazed tile milk house
4. AM3- detached, concrete block milk house
5. AM4- detached, glazed tile milk house
6. AM5- concrete block milking parlor
7. AM6- glazed tile milking parlor
8. AS1 - concrete stave silo, with roof
9. AS2 - concrete stave silo, without roof

PERCENT GOOD TABLE 2						
STRUCTURE TYPE CODES AB2, AM1, AM2, AM3, AM4, AM5, AM6, AS1, AS2						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	90	90	90	90	85	80
6 - 10	85	80	80	80	70	50
11 - 15	75	75	70	65	60	35
16 - 20	70	65	60	55	45	25
21 - 25	65	60	55	45	40	15
26 - 30	60	50	45	35	30	10
31 - 35	55	45	40	30	25	10
36 - 40	50	45	40	25	20	10
41 - 45	50	40	35	25	20	5
46 - 50 & Over	45	35	30	20	15	5

TABLE 3

1. AC1 - wood board frame corn crib
2. AC2 - welded wire frame corn crib
3. AH1 - 1^s frame or metal poultry house
4. AH2 - 2^s frame or metal poultry house
5. AH3 - 3^s frame or metal poultry house
6. AH4 - 1^s concrete block poultry house
7. AH5 - 2^s concrete block poultry house
8. AH6 - 3^s concrete block poultry house
9. AO1 - underground potato storage barn
10. AO2 - above ground potato storage barn
11. AO3 - tobacco barn
12. AR1 - granary
13. AS3 - Butler LMS silo
14. AS4 - porcelain silo - Harvestore
15. AS5 - prefabricated steel silo
16. AS6 - high moisture prefabricated steel silo
17. AY1 - circular slurry system
18. AY2 - rectangular slurry system

PERCENT GOOD TABLE 3						
STRUCTURE TYPE CODES AC1, AC2, AH1, AH2, AH3, AH4, AH5, AH6, AO1, AO2, AO3, AR1, AS3, AS4, AS5, AS6, AY1, AY2						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	90	90	90	90	85	80
6 - 10	80	80	80	75	70	50
11 - 15	75	70	70	65	60	35
16 - 20	70	60	60	55	50	25
21 - 25	60	55	50	45	40	15
26 - 30	55	50	45	35	30	10
31 - 35	50	45	35	30	25	10
36 - 40	45	40	30	25	20	10
41 - 45	45	35	30	25	20	5
46 - 50 & Over	40	30	25	20	15	5

TABLE 4

1. AF1 - concrete feed bunk
2. AF2 - post and plank feed bunk
3. AF3 - concrete fence bunk
4. AF4 - post and plank fence bunk
5. AL1 - lean to
6. AP1 - four side closed, metal pole building
7. AP2 - four side closed, wood pole building
8. AP3 - one side open, metal pole building
9. AP4 - one side open, wood pole building
10. AP5 - four side open, metal pole building
11. AP6 - four side open, wood pole building
12. AQ1 - quonset type building
13. AV1 - swine farrowing barn
14. AW1 - swine finishing barn
15. AW2 - swine confinement barn
16. AX1 - prefabricated steel building
17. RB1 - frame boat house
18. RB2 - masonry boat house
19. RC1 - carport
20. RC2 - canopy
21. RS1 - frame utility shed
22. RS2 - metal utility shed

PERCENT GOOD TABLE 4						
STRUCTURE TYPE CODES AF1, AF2, AF3, AF4, AL1, AP1, AP2, AP3, AP4, AP5, AP6, AQ1, AV1, AW1, AW2, AX1, RB1, RB2, RC1, RC2, RS1, RS2						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	85	80	80	75	70	60
6 - 10	70	65	60	55	45	30
11 - 15	55	50	45	40	30	15
16 - 20	45	40	35	30	20	10
21 - 25	35	30	25	20	15	5
26 - 30 & Over	30	25	20	15	10	5

TABLE 5

1. AC3 - 35° roof, 5 gauge wire corn crib
2. AC4 - 45° roof, 5 gauge wire corn crib
3. AC5 - 35° roof, 2 gauge wire corn crib
4. AC6 - 45° roof, 2 gauge wire corn crib
5. AG1 - steel grain bin, without drying bin
6. AG2 - steel grain bin, with drying bin
7. AK1 - bunker silo
8. AT1 - concrete or plank trench silo
9. AT2 - dirt trench silo
10. GH1 - greenhouse, frame
11. GH2 - greenhouse, metal/pipe
12. GH3 - greenhouse, plastic
13. RD3 - boat dock, heavy construction

PERCENT GOOD TABLE 5						
STRUCTURE TYPE CODES AC3, AC4, AC5, AC6, AG1, AG2, AK1, AT1, AT2, GH1, GH2, GH3, RD3						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	80	80	75	70	65	50
6 - 10	60	60	55	45	35	25
11 - 15	50	45	35	30	20	15
16 - 20	40	30	25	20	15	10
21 - 25 & Over	30	25	20	15	10	5

TABLE 6

1. RD1 - boat dock, light construction
2. RD2 - boat dock, medium construction
3. RP1 - plastic liner pool
4. RP2 - prefabricated vinyl pool
5. RP3 - reinforced concrete pool
6. RP4 - fiberglass pool
7. RP5 - gunite pool
8. TC1 - asphalt tennis court
9. TC2 - concrete tennis court
10. TC3 - clay tennis court

PERCENT GOOD TABLE 6						
STRUCTURE TYPE CODES RD1, RD2, RP1, RP2, RP3, RP4, RP5, TC1, TC2, TC3						
ACTUAL AGE	CONDITION RATING					
	Excel	Good	Average	Fair	Poor	Unsound
0 - 5	70	65	60	55	45	30
6 - 10	45	40	35	25	20	10
11 - 15 & Over	30	25	20	15	10	5

Note: The tables above are supplied as guidelines to the appraiser and are not intended to replace sound appraisal judgment. However, the tables were derived by testing known subjects on past projects, and will work well under average circumstances.

COMMERCIAL/LIGHT INDUSTRIAL DEPRECIATION SELECTION GUIDE

Select the correct numeric entry in the matrix based on the physical condition and functional utility of the building.

Determine the economic life of the building based on the structure type code and construction type.

Select the correct percent good from the appropriate expected life table based on the matrix selection and age of the building.

<u>Functional</u> Physical	G	N	F	P	None
Renovated	1	2	3	5	6
G	1	2	4	6	7
N	2	3	5	6	8
F	4	5	6	8	10
P	6	7	8	9	0

**ECONOMIC LIFE TABLE FOR
COMMERCIAL/INDUSTRIAL SYSTEM**

STRUCTURE TYPE CODE	DESCRIPTION	LT STEEL/ WOOD FRAME	FIRE RESIST/ FIRE PROOF
211	Apartment Garden - 3 story and under	40	50
212	High Rise Apartment	—	50
314	Hotel/Motel High Rise	—	50
315	Hotel/Motel Low Rise	30	40
316	Nursing Home	50	50
318	Boarding & Rooming House	40	50
319	Mixed Residential/Commercial	40	50
321	Restaurant	40	40
323	Food Stand	20	20
325	Fast Food	20	20
326	Ice House	30	40
327	Bar/Lounge	30	40
328	Night Club/Dinner Theatre	30	40
331	Auto Dealer - Full Service	30	40
332	Auto Service Garage	30	40
333	Service Station - Full	20	20
334	Service Station - Self	20	20
335	Truck Stop	30	40
336	Car Wash - Manual	20	20
337	Car Wash - Automatic	30	40
338	Parking Garage/Deck	—	40
341	Regional Shopping Mall	40	50
342	Community Shopping Center	40	50
343	Neighborhood Shopping Center	30	40
344	Strip Shopping Center	30	40
345	Discount Department Store	40	50
346	Department Store	40	50
347	Supermarket	30	40
348	Convenience Food Market	30	40
351	Bank	40	60
352	Savings Institution	40	50
353	Office Building - Low Rise	40	50
354	Office Building - High Rise	—	60
355	Office Condominium	40	50
356	Retail Condominium	40	50
361	Funeral Home	40	50
362	Veterinary Clinic	30	40
363	Legitimate Theatre	—	60
364	Motion Picture Theatre	40	50
365	Cinema Theatre	30	40
366	Radio, TV, Motion Picture Studio	40	50
367	Social/Fraternal Hall	30	40
368	Hangar	30	40
369	Day Care Center	30	40
371	Downtown Row Type	40	50
373	Retail - Single Occupant	30	40
374	Retail - Multi-Occupant	30	40
381	Bowling Alley	30	40
382	Skating Rink	30	40
383	Health Spa	30	40
384	Swimming - Indoor Pool	20	30
385	Tennis Club - Indoor	30	40
386	Racquet Club - Indoor	30	40
387	Country Club	40	50
388	Club House	30	40
391	Cold Storage Facilities	30	40
392	Lumber Storage	20	30
395	Truck Terminal	30	40
396	Mini-Warehouse	30	40
397	Office/Warehouse	40	50
398	Warehouse	30	40
399	Prefabricated Warehouse	30	—
401	Manufacturing Processing	40	50
405	Research & Development	40	50
610	Recreational/Health	30	40
611	Library	50	60
612	School	50	60
613	Colleges & Universities	50	60
620	Religious	50	60
630	Auditorium	50	60
640	Hospitals	50	60
660	Police or Fire Station	50	60
670	Correctional	50	60
680	Cultural Facilities	50	60
690	Rail/Bus/Air Terminal	50	60
710	Telephone Equipment Building	50	60
720	Radio, TV Transmitter Building	30	40

COMMERCIAL/LIGHT INDUSTRIAL DEPRECIATION SELECTION GUIDE

Select the correct numeric entry in the matrix based on the physical condition and functional utility of the building.

Determine the economic life of the building based on the structure type code and construction type.

Select the correct percent good from the appropriate expected life table based on the matrix selection and age of the building.

<u>Functional</u> Physical	G	N	F	P	None
Renovated	1	2	3	5	6
G	1	2	4	6	7
N	2	3	5	6	8
F	4	5	6	8	10
P	6	7	8	9	0

ECONOMIC LIFE TABLE FOR COMMERCIAL/INDUSTRIAL SYSTEM

STRUCTURE TYPE CODE	DESCRIPTION	LT STEEL/ WOOD FRAME	FIRE RESIST/ FIRE PROOF
211	Apartment Garden - 3 story and under	40	50
212	High Rise Apartment	—	50
314	Hotel/Motel High Rise	—	50
315	Hotel/Motel Low Rise	30	40
316	Nursing Home	50	50
318	Boarding & Rooming House	40	50
319	Mixed Residential/Commercial	40	50
321	Restaurant	40	40
323	Food Stand	20	20
325	Fast Food	20	20
326	Ice House	30	40
327	Bar/Lounge	30	40
328	Night Club/Dinner Theatre	30	40
331	Auto Dealer - Full Service	30	40
332	Auto Service Garage	30	40
333	Service Station - Full	20	20
334	Service Station - Self	20	20
335	Truck Stop	30	40
336	Car Wash - Manual	20	20
337	Car Wash - Automatic	30	40
338	Parking Garage/Deck	—	40
341	Regional Shopping Mall	40	50
342	Community Shopping Center	40	50
343	Neighborhood Shopping Center	30	40
344	Strip Shopping Center	30	40
345	Discount Department Store	40	50
346	Department Store	40	50
347	Supermarket	30	40
348	Convenience Food Market	30	40
351	Bank	40	60
352	Savings Institution	40	50
353	Office Building - Low Rise	40	50
354	Office Building - High Rise	—	60
355	Office Condominium	40	50
356	Retail Condominium	40	50
361	Funeral Home	40	50
362	Veterinary Clinic	30	40
363	Legitimate Theatre	—	60
364	Motion Picture Theatre	40	50
365	Cinema Theatre	30	40
366	Radio, TV, Motion Picture Studio	40	50
367	Social/Fraternal Hall	30	40
368	Hangar	30	40
369	Day Care Center	30	40
370	Greenhouse	20	20
371	Downtown Row Type	40	50
373	Retail - Single Occupant	30	40
374	Retail - Multi-Occupant	30	40
381	Bowling Alley	30	40
382	Skating Rink	30	40
383	Health Spa	30	40
384	Swimming - Indoor Pool	20	30
385	Tennis Club - Indoor	30	40
386	Racquet Club - Indoor	30	40
387	Country Club	40	50
388	Club House	30	40
391	Cold Storage Facilities	30	40
392	Lumber Storage	20	30
395	Truck Terminal	30	40
396	Mini-Warehouse	30	40
397	Office/Warehouse	40	50
398	Warehouse	30	40
399	Prefabricated Warehouse	30	—
401	Manufacturing Processing	40	50
405	Research & Development	40	50
610	Recreational/Health	30	40
611	Library	50	60
612	School	50	60
613	Colleges & Universities	50	60
620	Religious	50	60
630	Auditorium	50	60
640	Hospitals	50	60
660	Police or Fire Station	50	60
670	Correctional	50	60
680	Cultural Facilities	50	60
690	Rail/Bus/Air Terminal	50	60
710	Telephone Equipment Building	50	60
720	Radio, TV Transmitter Building	30	40

MAIN BUILDING DEPRECIATION BREAKDOWN

% Good at Bottom Out Value/Cnst Type 2-3

AGE	1	2	3	4	5	6	7	8	9	10
1	97	97	97	97	97	97	97	97	96	95
2	94	94	94	94	94	93	93	93	91	87
3	91	91	91	91	90	90	90	88	85	78
4	89	89	88	88	88	87	86	84	78	69
5	87	86	86	85	85	84	83	80	72	60
6	85	84	83	83	82	81	80	76	66	52
7	83	82	81	80	79	78	77	72	60	45
8	82	80	79	78	77	75	73	68	54	39
9	80	79	77	76	74	73	70	64	50	34
10	79	77	75	74	72	70	68	60	45	30
11	78	76	73	72	70	67	65	56	41	26
12	76	74	71	70	68	65	62	53	37	23
13	75	73	70	68	65	63	59	50	34	21
14	74	72	68	66	63	60	57	47	31	19
15	74	71	67	64	62	58	55	44	29	17
16	73	70	65	63	60	56	52	42	26	15
17	72	68	64	61	58	54	50	40	24	14
18	72	68	63	60	56	52	48	37	22	12
19	71	67	61	58	55	51	46	35	21	11
20	71	66	60	57	53	49	44	33	19	11
21	70	65	59	55	51	47	42	32	18	10
22	70	64	58	54	50	46	41	30	17	09
23	70	64	57	53	49	44	39	28	15	08
24	70	63	56	51	47	43	38	27	14	08
25	70	62	55	50	46	41	36	26	14	07
26	70	62	54	49	45	40	35	24	13	06
27	70	61	53	48	43	39	34	23	12	06
28	70	61	52	47	42	37	32	22	11	06
29	70	60	51	46	41	36	31	21	11	05
30	70	60	50	45	40	35	30	20	10	05

MAIN BUILDING DEPRECIATION BREAKDOWN

% Good at Bottom Out Value/Cnst Type 1-4

AGE	1	2	3	4	5	6	7	8	9	10
1	98	98	98	98	98	98	97	97	97	97
2	95	95	95	95	95	95	95	95	93	91
3	93	93	93	93	93	93	92	92	89	85
4	91	91	91	91	90	90	90	88	85	78
5	90	89	89	89	88	88	87	85	80	71
6	88	88	87	87	86	86	85	82	75	64
7	86	86	85	85	84	83	82	79	70	58
8	85	84	83	83	82	81	80	76	66	52
9	84	83	82	81	80	79	77	73	61	47
10	82	81	80	79	78	77	75	70	57	42
11	81	80	78	77	76	75	73	67	53	38
12	80	79	77	76	74	73	70	64	50	34
13	79	78	75	74	73	71	68	61	46	31
14	78	76	74	73	71	69	66	58	43	28
15	77	75	73	71	69	67	64	56	40	26
16	76	74	71	70	68	65	62	53	37	23
17	76	73	70	68	66	63	60	51	35	21
18	75	72	69	67	64	62	58	49	33	20
19	74	71	68	66	63	60	56	46	30	18
20	74	71	67	64	62	58	55	44	29	17
21	73	70	66	63	60	57	53	43	27	15
22	73	69	65	62	59	55	51	41	25	14
23	72	68	63	61	57	54	50	39	24	13
24	72	68	63	60	56	52	48	37	22	12
25	71	67	62	58	55	51	47	36	21	12
26	71	66	61	57	54	50	45	34	20	11
27	71	66	60	56	53	48	44	33	19	10
28	70	65	59	55	51	47	42	32	18	10
29	70	65	58	54	50	46	41	30	17	09
30	70	64	57	53	49	45	40	29	16	08
31	70	63	56	52	48	44	39	28	15	08
32	70	63	56	51	47	43	38	27	14	08
33	70	63	55	51	46	42	37	26	14	07
34	70	62	54	50	45	40	36	25	13	07
35	70	62	53	49	44	40	35	24	13	06
36	70	61	53	48	43	39	34	23	12	06
37	70	61	52	47	43	38	33	22	11	06
38	70	61	51	47	42	37	32	21	11	05
39	70	60	51	46	41	36	31	21	10	05
40	70	60	50	45	40	35	30	20	10	05

MAIN BUILDING DEPRECIATION BREAKDOWN

% Good at Bottom Out Value/Cnst Type 2-3

AGE	1	2	3	4	5	6	7	8	9	10
1	98	98	98	98	98	98	98	98	98	97
2	96	96	96	96	96	96	96	96	95	94
3	95	94	94	94	94	94	94	93	92	89
4	93	93	93	92	92	92	92	91	88	84
5	91	91	91	91	90	90	90	88	85	78
6	90	90	89	89	89	88	88	86	81	73
7	89	88	88	87	87	86	86	83	77	67
8	87	87	86	86	85	85	84	81	73	62
9	86	86	85	84	84	83	82	78	69	57
10	85	84	83	83	82	81	80	76	66	52
11	84	83	82	81	80	79	78	73	62	48
12	83	82	81	80	79	78	76	71	59	44
13	82	81	79	78	77	76	74	68	56	40
14	81	80	78	77	76	74	72	66	52	37
15	80	79	77	76	74	73	70	64	50	34
16	79	78	76	74	73	71	69	61	47	32
17	78	77	75	73	72	69	67	59	44	29
18	78	76	74	72	70	68	65	57	42	27
19	77	75	72	71	69	67	64	55	39	25
20	76	74	71	70	68	65	62	53	37	23
21	76	73	70	69	66	64	60	51	35	22
22	75	73	69	67	65	62	59	49	33	20
23	75	72	68	66	64	61	57	48	32	19
24	74	71	68	65	63	60	56	46	30	18
25	74	71	67	64	62	58	55	44	29	17
26	73	70	66	63	60	57	53	43	27	16
27	73	69	65	62	59	56	52	41	26	15
28	72	69	64	61	58	55	51	40	25	14
29	72	68	63	60	57	54	49	39	23	13
30	72	68	63	60	56	52	48	37	22	12
31	71	67	62	59	55	51	47	36	21	12
32	71	67	61	58	54	50	46	35	20	11
33	71	66	60	57	53	49	45	34	19	11
34	71	66	60	56	52	48	44	33	19	10
35	70	65	59	55	51	47	42	32	18	10
36	70	65	58	54	51	46	41	31	17	09
37	70	64	57	54	50	45	40	30	16	09
38	70	64	57	53	49	44	40	29	16	08
39	70	63	56	52	48	43	39	28	15	08
40	70	63	56	51	47	43	38	27	14	08
41	70	63	55	51	46	42	37	26	14	07
42	70	62	54	50	46	41	36	25	13	07
43	70	62	54	49	45	40	35	25	13	07
44	70	62	53	49	44	39	34	24	12	06
45	70	61	53	48	43	39	34	23	12	06
46	70	61	52	47	43	38	33	22	12	06
47	70	61	52	47	42	37	32	22	11	06
48	70	60	51	46	41	36	31	21	11	05
49	70	60	51	46	41	36	31	21	10	05
50	70	60	50	45	40	35	30	20	10	05

MAIN BUILDING DEPRECIATION BREAKDOWN

% Good at Bottom Out Value/Cnst Type 1-4

AGE	1	2	3	4	5	6	7	8	9	10
1	98	98	98	98	98	98	98	98	98	98
2	97	97	97	97	97	97	97	97	96	95
3	95	95	95	95	95	95	95	95	93	91
4	94	94	94	94	94	93	93	93	91	87
5	93	93	92	92	92	92	92	91	88	83
6	91	91	91	91	90	90	90	88	85	78
7	90	90	90	89	89	89	88	86	82	73
8	89	89	88	88	88	87	86	84	78	69
9	88	88	87	87	86	86	85	82	76	64
10	87	86	86	85	85	84	83	80	72	60
11	86	85	85	84	83	83	81	78	69	56
12	85	84	83	83	82	81	80	76	66	52
13	84	83	82	81	81	80	78	74	63	48
14	83	82	81	80	79	78	77	72	60	45
15	82	81	80	79	78	77	75	70	57	42
16	82	80	79	78	77	75	73	68	54	39
17	81	80	78	77	76	74	72	66	52	37
18	80	79	77	76	74	73	70	64	50	34
19	79	78	76	75	73	71	69	62	47	32
20	79	77	75	74	72	70	68	60	45	30
21	78	76	74	73	71	69	66	58	43	28
22	78	76	73	72	70	67	65	56	41	26
23	77	75	72	71	69	66	63	55	39	25
24	76	74	71	70	68	65	62	53	37	23
25	76	74	71	69	66	64	61	52	36	22
26	75	73	70	68	65	63	59	50	34	21
27	75	72	69	67	64	62	58	49	33	20
28	74	72	68	66	63	60	57	47	31	19
29	74	71	67	65	63	59	56	46	30	18
30	74	71	67	64	62	58	55	44	29	17
31	73	70	66	63	61	57	53	43	27	16
32	73	70	65	63	60	56	52	42	26	15
33	73	69	65	62	59	55	51	41	25	14
34	72	68	64	61	58	54	50	40	24	14
35	72	68	63	60	57	53	49	38	23	13
36	72	68	63	60	56	52	48	37	22	12
37	71	67	62	59	55	51	47	36	21	12
38	71	67	61	58	55	51	46	35	21	11
39	71	66	61	57	54	50	45	34	20	11
40	71	66	60	57	53	49	44	33	19	10
41	71	65	59	56	52	48	43	32	18	10
42	70	65	59	55	51	47	42	32	18	10
43	70	65	58	55	51	46	42	31	17	09
44	70	64	58	54	50	46	41	30	17	09
45	70	64	57	53	49	45	40	29	16	08
46	70	64	57	53	49	44	39	28	15	08
47	70	63	56	52	48	43	38	28	15	08
48	70	63	56	51	47	43	38	27	14	08
49	70	63	55	51	46	42	37	26	14	07
50	70	62	55	50	46	41	36	26	14	07
51	70	62	54	50	45	40	36	25	13	07
52	70	62	54	49	45	40	35	24	13	06
53	70	62	53	49	44	39	34	24	12	06
54	70	61	53	48	43	39	34	23	12	06
55	70	61	52	48	43	38	33	23	12	06
56	70	61	52	47	42	37	32	22	11	06
57	70	61	51	47	42	37	32	21	11	05
58	70	60	51	46	41	36	31	21	11	05
59	70	60	50	46	41	36	31	20	10	05
60	70	60	50	45	40	35	30	20	10	05

MAIN BUILDING DEPRECIATION BREAKDOWN

% Good at Bottom Out Value/Cnst Type 2-3

AGE	1	2	3	4	5	6	7	8	9	10
1	99	99	99	99	99	99	99	99	98	98
2	97	97	97	97	97	97	97	97	97	96
3	96	96	96	96	96	96	96	95	95	93
4	95	95	95	95	94	94	94	94	92	90
5	94	94	93	93	93	93	93	92	90	86
6	92	92	92	92	92	92	91	90	87	82
7	91	91	91	91	90	90	90	88	85	78
8	90	90	90	90	89	89	88	87	83	74
9	89	89	89	88	88	87	87	85	79	70
10	88	88	87	87	87	86	85	83	77	66
11	87	87	86	86	86	85	84	81	75	62
12	87	86	85	85	84	84	83	79	72	59
13	86	85	84	84	83	82	81	78	68	55
14	85	84	83	83	82	81	80	76	66	52
15	84	83	82	82	81	80	78	74	64	49
16	83	83	81	81	80	78	77	72	62	46[
17	83	82	80	80	79	77	76	70	68	43
18	82	81	80	79	79	76	74	69	66	41
19	81	80	79	78	76	75	73	67	65	39
20	81	79	78	77	75	74	72	65	63	36
21	80	79	77	76	74	73	70	64	60	34
22	80	78	76	75	73	72	69	62	48	32
23	79	77	75	74	72	70	68	60	46	31
24	78	77	74	73	71	69	67	59	44	29
25	78	76	74	72	70	68	65	57	42	27
26	77	75	73	71	69	67	64	56	40	26
27	77	75	72	70	68	66	63	55	39	25
28	76	74	71	70	68	65	62	53	37	23
29	76	74	71	69	67	64	61	52	36	22
30	76	73	70	68	66	63	60	50	34	21
31	75	73	69	67	65	62	59	49	33	20
32	75	72	69	67	64	61	58	48	32	19
33	74	72	68	66	63	60	57	47	31	18
34	74	71	67	65	62	59	56	46	30	17
35	74	71	67	64	62	58	55	44	29	17
36	73	70	66	64	61	57	54	43	28	16
37	73	70	65	63	60	57	53	42	27	15
38	73	69	65	62	59	56	52	41	26	15
39	72	69	64	62	58	55	51	40	25	14
40	72	68	64	61	58	54	50	39	24	13
41	72	68	63	60	57	53	49	38	23	13
42	72	68	63	60	56	52	48	37	22	12
43	71	67	62	59	55	52	47	36	22	12
44	71	67	61	58	55	51	46	36	21	11
45	71	66	61	58	54	50	46	35	20	11
46	71	66	60	57	53	49	45	34	20	11
47	71	66	60	56	53	49	44	33	19	10
48	71	65	59	56	52	48	43	32	18	10
49	70	65	59	55	51	47	42	32	18	10
50	70	65	58	55	51	46	42	31	17	09
51	70	64	58	54	50	46	41	30	17	09
52	70	64	57	54	50	45	40	29	16	09
53	70	64	57	53	49	44	40	29	16	08
54	70	64	56	53	48	44	39	28	15	08
55	70	63	56	52	48	43	38	27	15	08
56	70	63	56	51	47	43	38	27	14	08
57	70	63	55	51	47	42	37	26	14	07
58	70	62	55	50	46	41	36	26	14	07
59	70	62	54	50	45	41	36	25	13	07
60	70	62	54	50	45	40	35	25	13	07
61	70	62	53	49	44	40	35	24	13	06
62	70	62	53	49	44	39	34	24	12	06
63	70	61	53	48	43	39	34	23	12	06
64	70	61	52	48	43	38	33	23	12	06
65	70	61	52	47	42	37	32	22	11	06
66	70	61	51	47	42	37	32	22	11	06
67	70	61	51	46	41	36	31	21	11	05
68	70	60	51	46	41	36	31	21	11	05
69	70	60	50	45	40	35	30	20	10	05
70	70	60	50	45	40	35	30	20	10	05

LOT SIZING PROCEDURES

The majority of lots are shaped in a way which readily lends them to the application of standard lot sizing procedures and techniques. This section contains an explanation of those procedures. Standardized procedures are essential to maintaining uniformity in land valuations. The appraiser must at all times exercise sound judgment in determining whether or not the procedures are applicable, using them only if they serve his capability to determine accurate, equitable land valuations.

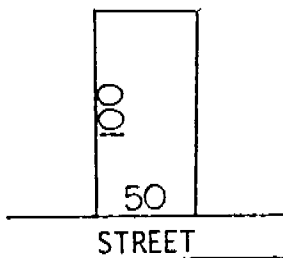
LOT SIZING

Scale: 100' = 1 inch

The most important rule of lot sizing is that the established frontage and depth must form right angles.

The Depth lines must be parallel to each other and the gross Frontage line perpendicular to the Depth lines.

Prior to establishing the size of a lot, the scale of the plat must be established.

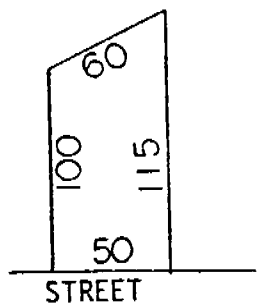


The example to the left is a 100% lot: the vertical lines form right angles with the horizontal lines. There are not any lines in this lot that do not form a 90° angle.

The Lot size would be shown as:

Actual Frontage	Effective Frontage	Effective Depth
50	50	100

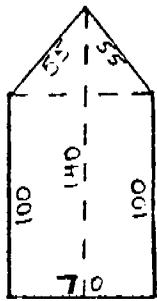
Please note placement of the lot to the street. In the majority of situations, the narrowest portion of the lot is the frontage. Only if this lot were a corner lot would the possibility exist for the frontage to be 100. The position of the house must also be considered in this situation.



This Lot is similar to the previous example. Please note that the 60' line is not perpendicular to the depth lines. However, the 50' line is. The 50' line must be the frontage. The Depth lines form right angles with the frontage, but vary in length. To establish the depth, these must be averaged. $100 + 115 = 215$. 215 divided by 2 equals 107.5. (0.5 or less is rounded down)

The Lot size would be shown as:

Actual Frontage	Effective Frontage	Effective Depth
50	50	107

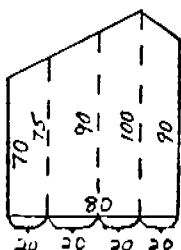


This Lot is another variance in an average depth lot. The frontage is once again the line which is perpendicular to the depth lines. In this example, the frontage is 70'. In many situations, additional lines will need to be drawn to establish an accurate depth. By using only the 100' line as the depth, you would be totally disregarding the rear portion of the lot. Therefore, an additional depth line must be drawn (the dotted line perpendicular to the frontage). Any lines drawn to establish depth must be perpendicular to the frontage line. Also, this line or lines must be of equal increments within the parallel depth lines. The lines drawn to establish depth will have to be measured to scale for computation. The total of all depth lines is averaged for effective depth:

$$\begin{array}{r} 100 \\ 140 \\ 100 \\ \hline 340 \div 3 = 113.33 \end{array}$$

The Lot size would be shown as:

Actual Frontage	Effective Frontage	Effective Depth
70	70	113

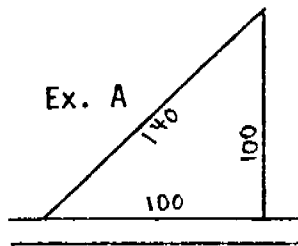


The example to the left is very similar to the previous one. Again, additional depth lines must be drawn perpendicular to the frontage in equal increments and measured to scale. Once measured, they can be added and averaged as shown here:

$$\begin{array}{r} 70 \\ 75 \\ 90 \\ 100 \\ 90 \\ \hline 425 \div 5 = 85 \end{array}$$

The Lot size would be shown as:

Actual Frontage	Effective Frontage	Effective Depth
80	80	85



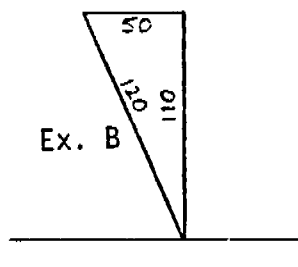
All previous examples have had at least 3 of the frontage and depth lines perpendicular and parallel. In the example to the left, a right triangle, there are only two perpendicular lines. When any Lot or portion of a Lot forms a right triangle, a percentage factor is applied to establish the effective frontage. (Actual frontage is the line that runs parallel to the street, whether or not it actually borders the street).

If the base of the triangle is on the street (Example A), a factor of 65% is used to determine Effective Frontage. If the apex of the triangle is on the street (Example B), a factor of 35% is used to determine Effective Frontage.

In Example A, the Effective Frontage is calculated as follows:

$$100 \times 65\% = 65$$

The depth is the line that is perpendicular to the frontage and in this example equals 100. The Lot size in Example A would be shown as follows:



Actual Frontage	Effective Frontage	Effective Depth
100	65	100

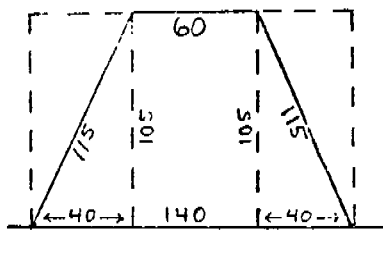
In Example B, the Effective Frontage is calculated as follows:

$$50 \times 35\% = 17.5$$

The Lot size in Example B would be shown as follows:

Actual Frontage	Effective Frontage	Effective Depth
0	17	110

In this example, the width lines are parallel, but the lines used to determine the depth are neither parallel to one another, nor perpendicular to the frontage line. Depth lines must be drawn and measured to scale. After the depth lines (dotted lines) are drawn, you will notice that within this Lot there are three individual lots. There are two 65% triangles and one 100% Lot. The Effective Frontage is calculated as follows:



Gross = 140 (This is the widest portion of the lot which will form right angles with the drawn depth lines).
 -60 (Subtract from Gross width the width of the 100% lot, which has to be measured to scale).
 80 (The difference between Gross and 100%). This is multiplied by 65% because the triangles formed have their base on the street. $80 \times 65\% = 52$

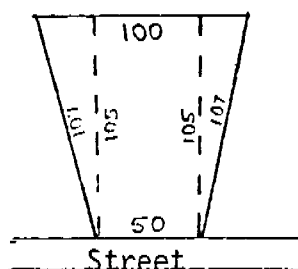
For total Effective Frontage the 100% figure and the 65% figure are added: $60 + 52 = 112$

These computations are shown in the Memorandum of the PRC as follows:

$$\begin{array}{rcl} \text{Gross} & 140 & \\ -60 \times 100\% & = & 60 \\ \hline 80 \times 65\% & = & 52 \\ \hline & & 112 \end{array}$$

Lot size would be shown as follows:

Actual Frontage	Effective Frontage	Effective Depth
140	112	105



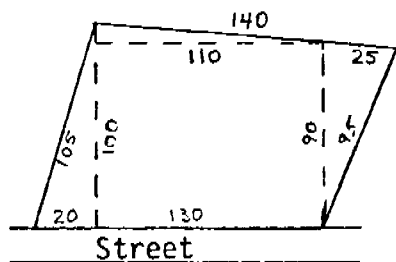
This example is just the reverse of the previous example. It is calculated in the same method, but the 35% factor is used because the apex of the triangles are on the street. *Note:* Depth is measured to scale along perpendicular lines. The computations appear on the Memorandum as follows:

$$\begin{array}{rcl} \text{Gross} & 100 & \\ -50 \times 100\% & = & 50 \\ \hline 50 \times 35\% & = & 17.5 \\ \hline & & 67.5 \end{array}$$

Lot size would be shown as follows:

Actual Frontage	Effective Frontage	Effective Depth
100	67	105

This lot does not have any 2 lines perpendicular or parallel. To decide which line to use for frontage, it is best to use the line which is parallel to the street. After determining the frontage line, begin to square the lot using this line.



The depth lines are drawn perpendicular to the 130' frontage line. The 130' line, however, cannot be solely used for the Gross frontage line because that would totally disregard the footage of the 35% triangle. Gross would be $130 + 25 = 155$.

For calculation, the width of the 100% lot must be drawn and measured to scale, which equals 110 in this example. (The width line is drawn parallel to the frontage and perpendicular to the depth lines).

The calculations would be shown in the Memorandum as follows:

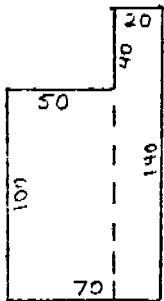
$$\begin{array}{rcl} \text{Gross} & 155 & \\ -110 \times 100\% & = & 110 \\ \hline & 45 & \\ -20 \times 65\% & = & 13 \\ \hline 25 \times 35\% & = & 8.75 \\ \hline & & 131.75 \end{array}$$

Depth calculations are shown as follows:

$$\begin{array}{r} 100 \\ + \quad 90 \\ \hline 190 \div 2 = 95 \end{array}$$

Lot size would be shown as follows:

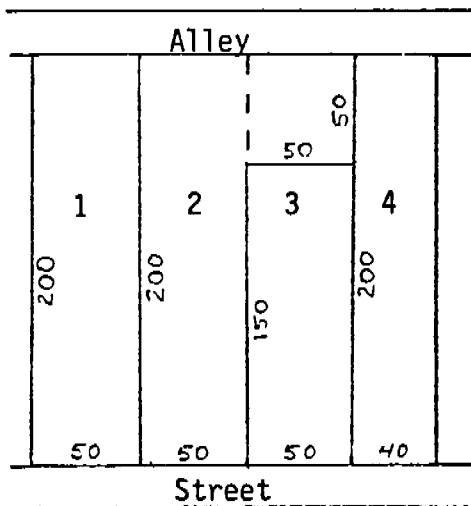
Actual Frontage	Effective Frontage	Effective Depth
130	132	95



This lot is referred to as a double entry lot. The lines are all perpendicular and parallel. However, two distinct lots can be formed for this one lot (note dotted line). This lot would be shown on the PRC as having two frontages and two depths.

Land sizes would be shown as follows:

Actual Frontage	Effective Frontage	Effective Depth
50	50	100
20	20	140



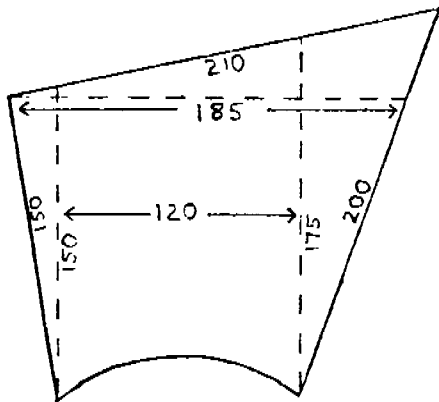
Referring to Lot No. 2, this is also a double entry lot. However, it differs from the previous lot because of the 50 x 50 portion of the lot at the rear has no street frontage. This is called a rear lot and must be noted as such. A Depth Factor adjustment must be applied to show a lesser value than a lot having direct street access. This rear lot has considerably less utility value and compensation must be made.

Note: Never make a Rear Lot unless you have to.

Lot sizes would be shown as follows:

Lot	Actual Frontage	Effective Frontage	Effective Depth
1	50	50	200
2	50	50	50

Descriptor entry for Rear Lot



This type of lot is usually found on a cul-de-sac. The Gross line must be established, using the widest part of the lot. It can be at the rear, middle, or front of the lot. The lines are drawn to position the 100% lot where you feel the house is most likely to exist. (This is the most valuable portion of the lot.) The depth lines are drawn perpendicular to the gross lines and measured to scale for calculation. The Gross line is also scaled.

The calculations are shown in the Memorandum as follows:

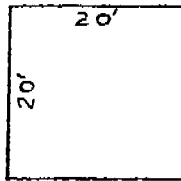
Gross	185		Depth	150
	$\frac{-120}{65} \times 100\%$	$= 120$		$\frac{+175}{325} \div 2 = 162.5$
		$= \underline{22.75}$		
		142.75		

The Lot size would be shown as follows:

Actual Frontage	Effective Frontage	Effective Depth
120	143	162

LOT SQUARE FOOTAGE FORMULAE

1. Square

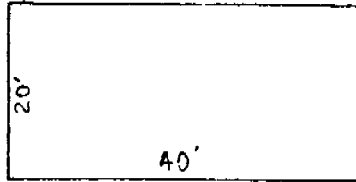


$$\text{AREA} = \text{BASE} \times \text{HEIGHT}$$

Example:

$$\text{Area} = 20' \times 20' = 400 \text{ sq. ft.}$$

2. Rectangle

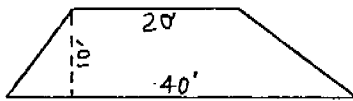


$$\text{AREA} = \text{BASE} \times \text{HEIGHT}$$

Example:

$$\text{Area} = 40' \times 20' = 800 \text{ sq. ft.}$$

3. Trapezoid

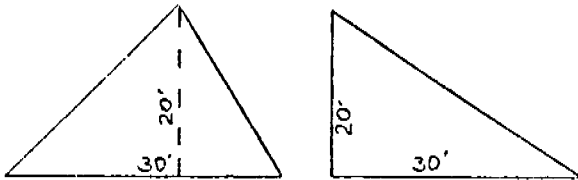


$$\text{AREA} = \frac{\text{HEIGHT} \times (\text{SUM OF 2 BASES})}{2}$$

Example:

$$\text{Area} = \frac{10' \times (20' + 40')}{2} = 300 \text{ sq. ft.}$$

4. Triangle

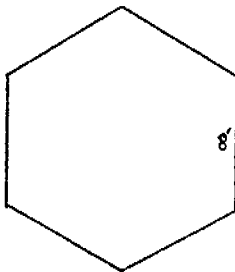


$$\text{AREA} = \frac{\text{HEIGHT} \times \text{BASE}}{2}$$

Example:

$$\text{Area} = \frac{20' \times 30'}{2} = 300 \text{ sq. ft.}$$

5. Regular Polygon

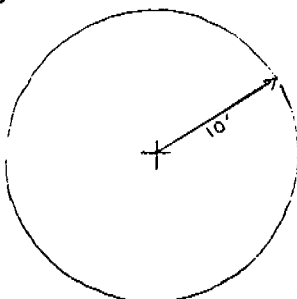


$$\text{AREA} = \text{CONSTANT} \times \text{SIDE SQUARED}$$

Area	(5 sides) =	1.7205	x Side Squared
	(6 sides) =	2.5981	x Side Squared
	(7 sides) =	3.6339	x Side Squared
	(8 sides) =	4.8284	x Side Squared
	(9 sides) =	6.1818	x Side Squared
	(10 sides) =	7.6942	x Side Squared
	(11 sides) =	9.3656	x Side Squared
	(12 sides) =	11.1962	x Side Squared

$$\text{Example: } 2.5981 \times (8 \times 8) = 166 \text{ sq. ft.}$$

6. Circle



$$\text{AREA} = \text{Pi} \times \text{RADIUS SQUARED}$$

Example:

$$\text{Area} = 3.1418 \times (10 \times 10) = 314 \text{ sq. ft.}$$

150 FEET STANDARD LOT DEPTH TABLE

Depth	Factor	Depth	Factor	Depth	Factor	Depth	Factor
		50	56	100	82	150	100
1	2	51	57	101	82	151	100
2	4	52	57	102	83	152	101
3	5	53	58	103	83	153	101
4	7	54	58	104	84	154	101
5	8	55	59	105	84	155	102
6	9	56	60	106	84	156	102
7	11	57	60	107	85	157	102
8	12	58	61	108	85	158	102
9	14	59	61	109	86	159	103
10	15	60	62	110	86	160	103
11	16	61	63	111	86	161	103
12	18	62	63	112	87	162	104
13	19	63	64	113	87	163	104
14	20	64	64	114	88	164	104
15	22	65	65	115	88	165	105
16	23	66	65	116	88	166	105
17	24	67	66	117	89	167	105
18	25	68	66	118	89	168	105
19	27	69	67	119	90	169	106
20	28	70	67	120	90	170	106
21	29	71	68	121	90	175	107
22	30	72	68	122	91	180	108
23	31	73	69	123	91	185	109
24	32	74	69	124	92	190	110
25	34	75	70	125	92	195	110
26	35	76	70	126	92	200	111
27	36	77	71	127	93	205	111
28	37	78	71	128	93	210	112
29	38	79	72	129	94	215	112
30	39	80	72	130	94	220	112
31	40	81	73	131	94	225	112
32	41	82	73	132	95	230	113
33	42	83	74	133	95	235	113
34	43	84	74	134	95	240	113
35	44	85	75	135	96	250	114
36	44	86	75	136	96	260	114
37	45	87	76	137	96	270	115
38	46	88	76	138	96	280	115
39	47	89	77	139	97	290	116
40	48	90	77	140	97	300	116
41	49	91	78	141	97	310	117
42	50	92	78	142	98	320	117
43	50	93	79	143	98	330	118
44	51	94	79	144	98	340	118
45	52	95	80	145	99	350	119
46	53	96	80	146	99	360	119
47	54	97	81	147	99	370	120
48	54	98	81	148	99	380	120
49	55	99	82	149	100	390	121

SUPPLEMENTAL DATA

This section is provided for inserting supplemental forms, procedures, schedules, and tables related to this particular revaluation program.

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State of West Virginia Appraisal Manual

COUNTY TIME AND LOCATION MODIFIERS

Effective Valuation Date July 1, 1983

COUNTY	RESIDENTIAL/ AGRICULTURAL	COMMERCIAL/ INDUSTRIAL
Barbour		
Berkeley		
Boone		
Braxton		
Brooke		
Cabell		
Calhoun		
Clay		
Doddridge		
Fayette		
Gilmer		
Grant		
Greenbrier		
Hampshire		
Hancock		
Hardy		
Harrison		
Jackson		
Jefferson		
Kanawha		
Lewis		
Lincoln		
Logan		
Marion		
Marshall		
Mason		
McDowell		
Mercer		

COUNTY	RESIDENTIAL/ AGRICULTURAL	COMMERCIAL/ INDUSTRIAL
Mineral		
Mingo		
Monongalia		
Monroe		
Morgan		
Nicholas		
Ohio		
Pendleton		
Pleasants		
Pocahontas		
Preston		
Putnam		
Raleigh		
Randolph		
Ritchie		
Roane		
Summers		
Taylor		
Tucker		
Tyler		
Upshur		
Wayne		
Webster		
Wetzel		
Wirt		
Wood		
Wyoming		

NEIGHBORHOOD DELINEATION/ANALYSIS

Instructions for Data Form

PURPOSE

Neighborhood Delineation and Analysis is a study of forces or influences from *outside* which could be considered to have an effect on property value; and also conclusions on the typical housing, economic, social, and demographic characteristics of the geographic area considered a homogeneous neighborhood. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of residential properties where the significant economic forces on those properties are generally uniform.

The Neighborhood Data sheets serve three main functions:

1. Provide an opinion of the typical structure, economic factors and conditions within an area considered to be a neighborhood, for the reviewer to use for his information and to provide a benchmark to compare each property within the neighborhood to each other.
2. Provide a generally similar geographic area to use as a statistical base for sales comparison, both during the initial revaluation and years later to measure change and update values accordingly.
3. Provide a basis to allow development of computer driven land valuation rate tables.

Significant characteristics considered:

1. Physical Boundaries
 - a. Natural — as rivers, mountains, woods, streams, etc.
 - b. Manmade — as roads, highways, railroads, streets, corporation lines, etc.
2. Housing Characteristics — type, quality, age, and condition.
3. Occupancy — as percentage of homes owner-occupied or tenant-occupied, percentage of vacant dwellings, etc.
4. Predominant land use and anticipated changes.
5. Typical land size and land valuation.

WEST VIRGINIA NEIGHBORHOOD DATA FORM INSTRUCTIONS

PROCESS CODE: Circle 1, 2, or 3

1. Add means to add all required data for a neighborhood not previously on file.
2. Change means that this is a revision of some or all of the data currently on file for this neighborhood.
3. Delete means to remove entirely the neighborhood record previously encoded from the master file. Obviously this would be an invalid transaction if no data exists on file for this neighborhood.

BATCH: Enter as required the number of the batch of master file records this form pertains to.

BY: Enter the initials or employee number of the person making out the form.

DATE: Enter numerically the month, day, and last two digits of the year representing the date of completion of the form.

COUNTY: Enter the name of the county in which the neighborhood is located.
This will not be encoded.

COUNTY ID: Enter the two digit numeric code denoting the county identification number.

NEIGHBORHOOD ID: Enter three numeric characters to the left of the vertical hash mark - ranging from 001 to 999 - to denote a specific neighborhood number. A character position to the right of the vertical hash mark is provided to enter an alpha character (A to E) to denote the creation of a subneighborhood within a neighborhood. It is recommended that during the field delineation process temporary ID numbers be assigned and entered in the Memo area. At the conclusion and final reconciliation of the original process, permanent numbers should be assigned and entered on each form, posted and delineated on individual field maps.

Note: The Res/Agr NBHD numbers to be assigned by district to allow immediate identification are -

any county	dist 1	Res./Ag.	01 - 25
	dist 2	Res./Ag.	26 - 50
	dist 3	Res./Ag.	51 - 75

MEMORANDUM: Space is provided to enter significant field or office notes. This area will not be encoded.

IDENTIFICATION AND REFERENCE

11 AREA NAME — Space up to 30 characters is provided to enter a descriptive name that the neighborhood is commonly known by.

Examples: "West End," "Central Business District," "Bunker Hill," etc.

12 TAXING DISTRICT — Space up to 25 characters is provided to enter the taxing district name where the neighborhood is located. For county-level projects this will normally be either the township or city name.

13 AREA NUMBER — Space - two characters - is provided to enter (if applicable) a numeric entry to describe the area.

Example: "Ward 03"

14 SCHOOL DISTRICT - ELEMENTARY — Space up to 16 characters is provided to enter the name of the primary public elementary school for the area.

Examples: "Elm Hill School," "Public School 51," etc.

15 ELEMENTARY SCHOOL NUMBER — Space up to two characters is provided to enter (if applicable) a numeric entry to describe the elementary school.

Example: "Public School 51"

16 SCHOOL DISTRICT - HIGH SCHOOL — Similar to instructions for 14, Elementary School.

17 HIGH SCHOOL NUMBER — Similar to instructions for 15, Elementary School Number.

BOUNDARIES

21, 23, 25, 27 - NORTH, EAST, SOUTH, and WEST — Space up to 27 characters on each line is provided to enter the boundaries of the neighborhood. Boundaries may be streets, roads, lakes, rivers, city and town lines, railroads, significant properties, or in short, any natural or manmade boundaries.

Examples: "Oak Street," "St. Rte. 109," "Blue Lake," "Rapid River," "Town Line,"
"B & O Railroad," "U.S. Steel Plant," etc.

22, 24, 26, 28 - BOUNDARY CODES — Space up to three characters is provided to enter the reason or reasons *why* that boundary was selected as a delineation point for the neighborhood. Delineation codes 1 through 5 are provided on the form.

Example: Field analysis has revealed that the north boundary should be Blue Lake because it is a physical barrier to extension, development, or influence from outside forces to this neighborhood. Enter code "1". If Blue Lake was considered both a physical barrier and a land use change point, both code "1" and code "4" could be entered. A maximum of three codes may be entered for each boundary.

CHARACTERISTICS

Characteristics generally refer to the residential development status of the neighborhood. One choice is required for each item, 31 through 38. Entry is made by circling the appropriate code number for the item.

31 TYPE

1. Urban — neighborhood is a built-up area normally located within the city limits of a medium to large size city. Always incorporated.
2. Suburban — normally a built-up area located outside the city limits, but within normal driving distance to the city for work or shopping. Could be incorporated or unincorporated.
3. Sub-Division — normally a sub-divided and platted area of modern dwellings having highly homogeneous housing characteristics (i.e., similar type, age group, style, quality, value range, etc.), located beyond normal daily commuting distance to the urban center for work or shopping. Normally unincorporated.
4. Rural — generally considered to be an area of relatively sparsely populated, open space normally devoted to agricultural and/or recreational land use. Always unincorporated.
5. Rural Hamlet — normally a small village or town located within a rural area and relatively remote from the urbanized areas of the community. Normally an unincorporated district.

32 PREDOMINANT LAND USE — One choice required. Circle the code which most accurately describes the *current* predominant land use. The choices are:

1. Residential
2. Agricultural
3. Commercial
4. Industrial
5. Other (recreational, governmental, educational, etc.)

33 RATE OF CHANGE IN LIFE CYCLE — A basic axiom of neighborhood analysis presumes that neighborhoods are subject to inevitable change, and change in the life cycle of a residential neighborhood is normal and to be expected. Circle the code which most accurately describes the speed or pace of the change taking place in the subject neighborhood. The choices are:

1. Slow — change almost imperceptible
2. Steady — evidence of significant change taking place, but at a moderate rate.
Example: gradual development of a rural area to more intense residential development
3. Rapid — pronounced and dramatic change taking place within a short time span (one year)
Example: old, blighted residential area experiencing a rapid urban redevelopment

34 NEIGHBORHOOD LIFE CYCLE — As mentioned above, neighborhood analysis presumes that all neighborhoods have a life cycle consisting of:

1. Inception and growth — usually rapid and roughly equivalent to the human cycle of birth and rapid early development.
2. Relative equilibrium — roughly equivalent to the rather slow and almost imperceptible change cycle of the mature and fully developed human adult.

3. **Decline** — the point of marked decay and disintegration normally associated with almost blighted neighborhoods and roughly equivalent to the decline associated with old age.

Circle the code which most accurately describes the current stage of neighborhood life cycle.

35 DEMAND/SUPPLY — Circle the code which most accurately describes the availability of properties for sale within the subject neighborhood. The choices are:

1. **Shortage** — more buyers available than there are properties for sale
2. **In Balance** — availability approximately equal to buyer demand
3. **Over Supply** — more properties available for sale than buyers, and representing a temporary or relatively permanent stagnant market condition

36 DENSITY — Circle the code which most accurately describes the degree of present population and improvement density. Select from:

1. **Low** — as in rural, recreational, open space land use
2. **Medium** — as in areas of single family development in the range of 50% to 75% peak development
3. **High** — as in highly urbanized, virtually 100% developed neighborhoods.

37 RATE OF TURNOVER — Refers to the number of properties currently bought and sold within the subject neighborhood. Circle one of the following:

1. **Low** — usually less than 5% annually of the total residential properties in the neighborhood
2. **Medium** — usually approximately 5% annually of the residential properties in the neighborhood
3. **High** — usually significantly more than 5% annually of the residential properties in the neighborhood.

38 TYPICAL LOT SIZE — Refers to the typical or normal effective frontage for improved properties within the neighborhood. Enter to the nearest 10 feet.

Example: Typical Lot Size
 1 2 0 Front Feet

PREDOMINANT IMPROVEMENT TYPE

This section generally refers to the structural characteristics of the typical properties located in the neighborhood. Circle the most representative choice for each category.

41 TYPE

1. **Predominantly 1 or 2 family residential development**
2. **Multi Family** — predominantly 3 or more family residential development
3. **Other** — predominantly commercial or industrial development

42 QUALITY

1. **A or excellent**
2. **B or good**

3. C or average, standard
4. D or cheap, somewhat sub-standard
5. E or very cheap, marginally habitable

43 TYPICAL AGE (Years Old)

1. New to 3 years old
2. 4 to 8 years old
3. 9 to 18 years old
4. 19 to 28 years old
5. 29 to 38 years old
6. 39 to 49 years old
7. Over 50 years old

44 STRUCTURAL CONDITION

1. VG — very good
2. Good
3. Avg. — average
4. Fair
5. Poor

PREDOMINANT OCCUPANCY

This section deals with an estimate of the current utilization of the typical structures within the neighborhood.

51 OWNER -- Enter (from 000% to 100%) the estimated number of owner occupied homes in the neighborhood.

52 TENANT — Enter (from 000% to 100%) the estimated number of tenant occupied homes in the neighborhood.

53 VACANCY -- Enter the estimated percentage (00% to 99%) of currently unoccupied homes in the neighborhood.

Note: Seasonal residences normally occupied at some time during the year should not be considered vacant.

54 CHANGE IN USE — Circle the most accurate choice describing the current likelihood of a change in significant land use in the neighborhood. Select from:

1. Not Likely
2. Likely
3. Taking Place

55 PROBABLE NEW USE — Circle the most accurate choice describing the likely anticipated future land use in the neighborhood. Select from:

1. None
2. Residential

3. Agricultural
4. Commercial
5. Industrial
6. Other

ESTIMATED MARKET VALUE FOR RESIDENTIAL IMPROVED PROPERTY

This section represents an estimate by the field analyst of the current market value of the typical residential property within the neighborhood. Generally, it can be said that the area can be considered highly homogeneous if at least 75% of the residential property in the neighborhood falls within the minimum - maximum value range and the value range does not exceed a 25%± range from the median value.

Example: Minimum - 25000
Maximum - 35000
Median - 32000

71 MINIMUM — Enter, right justified, in \$500 multiples, the estimated *minimum* residential market value for the typical residential property in the neighborhood.

72 MAXIMUM — Enter, right justified, in \$500 multiples, the estimated *maximum* residential market value for the typical residential property in the neighborhood.

73 MEDIAN — Enter, right justified, in \$500 multiples, the estimated *median* residential market value for the typical residential property in the neighborhood.

74, 75 NOTES

Two lines of thirty character positions each are provided to enter any data which is considered significant enough to possibly alter future neighborhood groupings or market value ranges.

Example: Quality of schools is very poor for neighborhood type.

OTHER OBSERVATIONS AND COMMENTS

Space is provided to record any data which you feel may be significant in determining the neighborhood groupings. This data will not be encoded.

INSTRUCTIONS FOR NEIGHBORHOOD DELINEATION FIELD ANALYSIS

- Step 1 Obtain large scale maps for the community which ideally show all streets, roads, and significant physical features such as rivers, lakes, railroads, etc. Census tracts maps and base maps developed from aerial photography showing photogrammetric features are ideal for this purpose.
- Step 2 Establish preliminary neighborhood boundaries on your base maps using known physical and governmental features as boundaries. The general rule would be to consider all physical separation points, such as rivers, arterial streets, corporation lines, lakes, commercial-industrial areas, highways, etc., as definite neighborhood boundaries.
- Step 3 Assemble and analyze supplementary material for the community which is available and useful.
- Examples:* Zoning maps and zoning restrictions
Planning department maps - such as master development plans
Census Tracts - block statistics
School district maps
Redevelopment planning maps and studies
Current and planned utility maps (sewers, public water)
City, State, or County Engineering maps or studies, such as soil maps, topographic maps, etc.
Real estate sales data, such as multi-list sales, revaluation program, sales verified from data collection, Assessor's Office record of transfers
Community and Chamber of Commerce area studies and literature such as population trends, building permits
Industrial plant listing, employment base summaries
- Step 4 Now begin the field inspection process by conducting a thorough street by street exterior inspection of the community. Based on physical observation and data collected and analyzed to date, establish individual neighborhood boundaries, recognizing the specific delineation points where the residential property exhibits significant physical and economic change from adjacent areas.
- Step 5 After establishing the boundaries of each neighborhood,
- a. fill out the neighborhood data form and assign it a temporary number;
 - b. post the established neighborhood boundaries and temporary numbers to a master map.
- Remember, consistency of choice is our primary objective.
- Step 6 After completing Step 5, it is desirable to conduct a brief overview of the data assembled and make refinements as required. It is highly desirable at this point to solicit the observations and comments of informed departments and groups such as the Chamber of Commerce, Planning Department, Assessor's Office, and others.

- Step 7 Establish final boundaries and permanent neighborhood numbers and post to both the Project Master Map and Individual Field Maps used for field appraisal.
- Step 8 Determine, by manual and/or computerized analysis, the comparability of all neighborhoods to each other. The theory here is that even though various neighborhoods may be physically separated, if the predominant value analysis characteristics such as value range, housing characteristics, neighborhood type, etc., are similar, then it is desirable to group similar neighborhoods and thereby create a larger sales data base for comparable property value analysis.
- Step 9 Summarize and collate the final Neighborhood Data Forms and related material and distribute copies to the Vice President and Appraisal Manager in Charleston.

Summary

Obviously these instructions can only be a general guide and will have to be tempered and/or modified to suit local conditions. It is useful to keep in mind during the neighborhood analysis process that our primary purpose is to use the neighborhood established to develop a statistical measuring base for pooling and analyzing sales data, and to subsequently use this data to determine market value for individual properties via the comparable market data approach.

COMMERCIAL/INDUSTRIAL NEIGHBORHOOD DELINEATION

Commercial/Industrial Neighborhood Delineation is the process of sectionalizing a taxing district into a number of economic units for income modeling assignments and application of computer driven land rate tables.

This delineation process consists of a tour of the district, establishing boundaries based on homogeneous property characteristics. These characteristics are best defined and should be grouped as follows -

1. Central Business District
2. Perimeter Central Business District
3. Business Cluster (major intersection shopping mall area)
4. Major Strip
5. Secondary Strip
6. Neighborhood or Spot (Residential Area)
7. Commercial/Industrial Park
8. Industrial Site
9. Apartment/Condominium Complex

Unlike residential delineation in which sale prices dictate boundaries, income potential and uniformity in land values are the prerequisites. Some natural boundaries (such as rivers, railroads, or freeways) assist in the boundary establishing process. More often, though, these groupings must be made simply by determining income potential boundaries.

To assign neighborhood identification numbers to commercial/industrial groupings, consideration must be given to -

- A. The district in which the neighborhood is located.
- B. The location identifier (Codes 1-9).
- C. The fact that it is a commercial or industrial neighborhood.

Field 108 contains 4 character positions to record the neighborhood number. Use the first character position to identify the location using codes 1 through 9 from Field 415 . . . 1 indicating Central Business District, etc. Use the next two character positions to uniquely identify the commercial/industrial neighborhood within the district, i.e., district one may have commercial/industrial neighborhood numbers assigned from 01 to 25. District two, 26 to 50, and so on. Use the suffix character position to identify the neighborhood as a commercial, "C" or industrial, "I." Therefore, a commercial neighborhood located on a major strip in district one may have a neighborhood identification of 4 0 1 / C. A commercial neighborhood located in the Central Business District in the same taxing district may have a neighborhood identification of 1 0 2 / C.

A list of all districts and the neighborhood numbers assigned within is to be maintained on each Project for easy reference.

[illegible]

SAMPLE

WEST VIRGINIA NEIGHBORHOOD DATA FORM

BATCH 01 BY RHL
DATE 12/08/83WOOD COUNTY COUNTY ID 54NEIGHBORHOOD ID 0031① 2 3
ADD CHANGE DELETE

IDENTIFICATION & REFERENCE

MEMORANDUM

11	AREA NAME	<u>KINGWOOD BRIDGE</u>
12	TAXING DISTRICT	<u>HARRIS</u>
13	NO.	<u>02</u>
14	SCHOOL DISTRICT	<u>ELEMENTARY RUSHMORE</u>
15	NO.	<u>04</u>
16	HIGH SCHOOL	<u>MEADOWDALE</u>
17	NO.	<u>03</u>

BOUNDARIES

CODES

DELINEATION CODES

21	NORTH	<u>INDIAN CREEK</u>	22	<u>14</u>
23	EAST	<u>TAYLORSVILLE STREET</u>	24	<u>3</u>
25	SOUTH	<u>US ROUTE 64</u>	26	<u>14</u>
27	WEST	<u>SCHLOSSER WAY</u>	28	<u>4</u>

1. PHYSICAL BARRIERS
2. INCOME LEVEL CHANGE
3. VALUE RANGE CHANGE
4. USE OF LAND CHANGE
5. OTHER (EXPLAIN)

CHARACTERISTICS

31	TYPE	① URBAN	2 SUBURBAN	3 SUBDIVISION	4 RURAL	5 RURAL HAMLET	35	DEMAND/SUPPLY
32	PREDOMINANT LAND USE	① RES.	2 AGR.	3 COMM.	4 IND.	5 OTHER	36	DENSITY
33	RATE OF CHANGE IN LIFE CYCLE	① SLOW	2 STEADY	3 RAPID			37	RATE OF TURNOVER
34	NEIGHBORHOOD LIFE CYCLE	1 INCEPTION & GROWTH	② RELATIVE EQUILIBRIUM	3 DECLINE			38	TYPICAL LOT SIZE
								<u>150</u> FRONT FEET

PREDOMINANT IMPROVEMENT TYPE

PREDOMINANT OCCUPANCY

EST. MARKET VALUE FOR RES. IMPROVED PROP.

41	TYPE	1 1/2 FAM. MULTI FAM. OTHER	42	QUALITY	51	OWNER	<u>095</u> %	52	TENANT	<u>005</u> %	71	\$ <u>451000</u>
	① 2 3			A B C D E								MINIMUM
43	TYPICAL AGE (YEARS)	0-3 4-8 9-18 19-28 29-38 39-49 50+		1 2 ③ 4 5 6 7	53	VACANCY	<u>03</u> % VACANT STRUCTURES				72	\$ <u>601000</u>
					54	CHANGE IN USE	① NOT LIKELY	2 LIKELY	3 TAKING PLACE			MAXIMUM
44	STRUCTURAL COND. (REL. TO AGE)	VG GOOD AVG. FAIR POOR		1 2 ③ 4 5	55	PROBABLE NEW USE	① NONE	2 RES.	3 AGR.	4 COMM.	5 IND.	6 OTHER
											73	\$ <u>551000</u>
												MEDIAN

NOTES

74	
75	

OTHER OBSERVATIONS & COMMENTS

COMPUTER ASSISTED LAND PRICING

INTRODUCTION AND OBJECTIVES

The purpose of this section is to provide a clear and precise understanding of the capabilities and utility of Computer Assisted Land Pricing (CALP). This concept of pricing land reflects a continuing effort to advance and improve the unique computerized systems we presently use.

The following is a list of objectives in employing CALP.

1. To provide update capability of land prices, both during a revaluation program and in subsequent value updating.
2. To provide flexibility in the scheduling of the land pricing process in relation to the project calendar.
3. To provide greater consistency in land pricing within the confines of individual projects.
4. To increase standardization of land pricing.
5. To reduce the need for influence factor application on a parcel-by-parcel basis (e.g., excess frontage).
6. To eliminate the manual transfer of unit land values from land pricing maps to property record cards.
7. To eliminate the encoding of unit land values.

This section should serve as a reference for field and data personnel in the proper application of CALP. It will also familiarize and assist field and data personnel with the land pricing phase of revaluation programs, both manual and computerized.

LAND VALUATION

In making appraisals for Ad Valorem tax purposes, it is generally necessary (essential if you are using the cost approach) to estimate separate values for the land and for the improvements on the land. In actuality, the two are not separated and the final estimate of the property as a single unit must be given prime consideration. However, in arriving at that final estimate of value, aside from contractual and legal requirements, are certain other advantages in making a separate estimate of value for the land:

- An estimate of land value is required in the application of the Cost Approach.
- An estimate of land value is required to be deducted from the total property selling price in order to derive indications of depreciation through market-data analysis. The equation is as follows -

$$\text{Depreciation} = (\text{RCN} + \text{Land Value} - (\text{Selling Price}))$$

- Since land is not a depreciable item, a separate estimate of land value may be required for bookkeeping and accounting purposes.

- Since land may or may not be used to its highest potential, the value of land may be completely independent of the existing improvements on the land. In a situation of economic misimprovement, the value of the land may be a good indicator of the value of the entire parcel.

Comparable Sales Method

A frequently used method in estimating the value of land is the comparable sales method, in which land values are derived from analyzing the selling prices of similar sites. This method is, in essence, the application of the market data approach to value and all considerations pertaining thereto are equally applicable here.

The appraiser must select comparable and valid market transactions, and must weigh and give due consideration to all the factors significant to value, adjusting each to the subject property. The comparable sites must be used in the same way as the subject property, and subjected to the same zoning regulations and restrictions. It is also preferable, whenever possible, to select comparables from the same or a similar neighborhood. The major adjustments will be to account for variations in time, location, and physical characteristics including size, shape, topography, landscaping, access, as well as other factors which may significantly influence the selling price, such as the productivity of farm land.

Although it is preferable to use sales of unimproved lots for comparables, it is not always possible to do so. Older neighborhoods are not likely to yield a sufficient number of representative sales of unimproved lots to permit a valid analysis. In such cases, in order to arrive at an estimate of land values using the comparable sales approach, it is necessary to consider improved property sales and to estimate the portion of the selling price applicable to the structures. The procedure would be to estimate the replacement cost of the buildings as of the date of sale, estimate the accrued depreciation and deduct that amount from the replacement cost resulting in the estimated selling price of the buildings which can be deducted from the total selling price of the property to derive the portion of the selling price which can be allocated to the land. The equation is as follows.

(Selling Price of Property) – Estimated Depreciated Value of Building) = Indication of Land Value

In order to apply the comparable sales method, it is first necessary to establish a common unit of comparison. The units generally used in the valuation of land are *price per front foot*, *price per square foot*, and *price per acre*. The selection of any one particular unit depends upon local past practice, upon local zoning arrangements, and upon the type of property being appraised . . . frontage being commonly used for platted, uniform type lots; square footage for residential lots in square foot zones and for commercial properties; and acreage for larger individual tracts, as well as for irregularly shaped parcels lacking uniformity.

The utility of a site will vary with the footage, width, depth, and overall area. Similarly, the unit land values should be adjusted to account for differences in size and shape between the comparables and the subject property. Since such an adjustment may be necessary for each lot, it is beneficial that the appraiser adopt and/or develop standardized procedures for adjusting the lot size and the unit values to account for the variations.

Some of the techniques commonly employed are as follows.

- Standard lot sizing techniques provide for the adjustment of the frontage, width, and depth of irregular shaped lots to make the units of measurement more comparable with uniform rectangular lots.
- Standard Depth Tables provide for the adjustment of front foot unit values to account for variations in depth from a predetermined norm.

Note: Examples of these will be found in the Land Schedules & Tables section of this manual.

During the process of adjusting the comparable sales to account for variations between them and the subject property, the appraiser must exercise great care to include all significant factors and to properly consider the impact of each of the factors upon the total value. If done properly, the adjusted selling prices of the comparable properties will establish a range in value in which the value of the subject property will fall. Further analysis of the factors should enable the appraiser to narrow the range down to the value level which is most applicable to the subject property.

The Land Residual Technique

In the absence of sufficient market data, income-producing land may be valued by determining the portion of the net income attributable to the land, and capitalizing the net income into an indication of value. The procedure is as follows.

1. Determine the highest and best use of the land, which may be either its present use or hypothetical use.
2. Estimate the net income which the property can be expected to yield.
3. Estimate the replacement cost new of the improvements.
4. If the case involves the present use, estimate the proper allowance for depreciation, and deduct that amount from the replacement cost new of the improvements to arrive at an estimate of their depreciated value.
5. Develop appropriate capitalization rates.
6. Calculate the income requirements of the improvements, and deduct the amount from the total net income to derive that portion of the income which can be said to be attributable to the land.
7. Capitalize the residual income attributable to the land into an indication of value.

Ratio Method

A technique useful for establishing broad indications of land values is a "typical" allocation or ratio method. In this technique, the ratio of the land value to the total value of improved properties is observed in situations where there is good market and/or cost evidence to support both the land values and total values. This market abstracted ratio is then applied to similar properties where the total values are known, but the allocation of values between land and improvements are not known. The ratio is usually expressed as a percentage which represents the portion of the total improved

value that is land value, or as a formula:

$$\frac{\text{Total Land Value}}{\text{Total Property Value}} \times 100\% = \% \text{ Land is of Total Property Value}$$

This technique can be used on most types of improved properties, with important exceptions being farms and recreational facilities, provided that the necessary market and/or cost information is available. In actual practice, available market information limits this technique primarily to residential properties, and to a much lesser extent, commercial and industrial properties such as apartments, offices, shopping centers, and warehouses.

The ratio technique cannot give exact indications of land values. It is nevertheless useful, especially when used in conjunction with other techniques of estimating land values because it provides an indication of the reasonableness of the final estimate of land value.

The ratio should be extracted from available market information and applied to closely similar properties. It should be noted that any factor that affects values may also affect the ratio of values. Zoning is particularly important because it may require more or less improvements be made to the land, or may require a larger or smaller minimum size. This tends to have a bearing on the land values, and so it may also influence the ratio of values considerably from community to community.

The following is an example of a residential land valuation situation.

Market information derived from an active new subdivision

Typical Lot Sale Price (most lots equivalent)	\$15,000
Improved Lot Sales (range)	\$65,000 to \$75,000
Indicated Ratio	$\frac{\$15,000}{75,000} \text{ to } \frac{\$15,000}{65,000} \times 100\%$
	20% to 23%

Similar subdivision, but 100% developed

Typical Lot Sale Price (most lots equivalent)	unavailable
Improved Lot Sales (range)	\$85,000 to \$105,000
Broadest Indicated Range of Lot Values	
(20% × \$85,000 to 23% × \$125,000)	\$17,000 to \$ 24,150
Narrowest Indicated Range of Lot Values	
(23% × \$85,000 to 20% × \$105,000)	\$19,550 to \$ 21,000

If both lots and improvements vary considerably, the broadest range is most important. If most lots vary little and are judged equivalent but the improvements vary somewhat, the narrowest range is appropriate. Most subdivisions exhibit a combination of the two ranges, showing a narrow typical range, but a wider actual range of land values.

Cost of Development Method

This method finds its widest application in the appraisal of large tracts of undeveloped land suitable for residential, commercial, or industrial development. It is a technique which requires a great deal of data, time, and skill, and is therefore generally used only in those cases where an insufficient number of comparable sales are available for analysis. This method involves making an estimate of

the value of the site fully developed for its highest and most likely use and deducting an estimate of the total cost of developing the site to derive an indication of its present value. The procedure for employing the method is as follows.

1. Determine the highest and most likely use of the site, including the optimum size of the lots if the use involves subdividing.
2. Estimate the most likely selling price of the developed site(s) by the comparable sales method.
3. In cases involving subdividing, determine the optimum number of sites which can be developed.
4. Calculate the aggregate selling price which the developer can expect to receive.
5. Estimate the developing cost to include the cost of improvements, taxes, insurance, engineering fees, interest, advertising, sales, profit, and other related expenditures, and deduct that amount from the anticipated gross sales, to arrive at an indication of the present value of the undeveloped tract.

CALP SYSTEM CONCEPT

This system was conceived to expedite the land pricing operation and to allow flexibility, to promote uniformity, and to provide update capability in its application. The system is based upon the land table concept, which recognizes that in many cases, it is possible to develop equal variations in size, shape, topographical features, and other factors which may significantly influence the value of the land.

In utilizing the land table approach associated with computer-assisted land pricing, it is desirable to determine the table values as early in the project as possible. Some flexibility in the timing of this activity is achieved since the unit values do not have to be entered on individual property record cards. It is anticipated that standardization of common influence factors will become a part of this system.

All major land types are covered by this concept, including -

1. Residential
2. Agricultural
3. Commercial
4. Industrial

All Applicable Site Categories (Descriptor Codes) are included in the individual major land type tables. CALP is also based on the idea that individual excess frontage and undersize adjustments be eliminated and that an algorithm be developed to handle this situation if necessary, after analysis of sales data. Vacant and Developed land prices are one and the same and no undeveloped influence factors will be used.

Quality Grades by individual site categories can also be entered when applicable.

Overview

Later in this text, we will cover specific examples relating to major land types, but initially, we will consider an overview of the work flow.

However, before reviewing the procedure to be followed in land pricing, it is important that the appraiser have a basic understanding of how the land pricing table is used by the system.

The land pricing table is used by the cost valuation program in conjunction with cost schedules to "update" master records with cost approach values. In generating costs on land, the cost program processes land entry by entry to compute a land value for each entry line. If a unit price has been input for a particular land breakdown entry on a property record, the unit price is used; if the unit price is omitted and the necessary table data input, the program finds the appropriate unit price in the table and uses it instead of a manually input unit price. The table includes a flexibility not available with the manual unit price - the base rates can provide an automatic adjustment for minor size variations from the norm. The cost program does not physically update the master record with the land unit price from the table . . . this would destroy this distinction between those records in entries to be computer-priced and those which are manually priced. Instead, it stores the rate information in another area of the record which is automatically updated each time the parcel is recosted.

The first task is to identify the geographic delineation boundaries to be included in any given land table. These may be identified as the following.

1. County
2. A Neighborhood
3. A Type of Location
4. An Individual Type
5. Any other logical array of parcels which can be separately identified by the computer.

The next step is to identify the unit value type to be used in the table. Available options are -

1. Front feet
2. Square feet
3. Acreage
4. Gross

It is recommended that only one unit value type be used in the table. It is not mandatory to select one unit value type, and certain situations may dictate that two or all three types be used. If this is the case, extreme caution must be used to ensure value equality among unit types.

After a thorough analysis of market transactions, residual calculations, and size norms, the table is completed by the land pricer. This involves entering unit values for the various land entry types.

Another override situation concerns those parcels which simply will not fit the table. There will always be odd parcels requiring special attention - for instance, a five acre tract in the middle of a

residential subdivision. Our intent is to eliminate the individualized effort on the large majority of the parcels, not on all parcels. The exceptions still need to be identified and need to carry a front-end override. Time spent up front will pay off in increased quality at the end.

Other parcels require less common influence factors (topo, restrictions, economic misimprovement, etc.), but they can still flow through the system. These parcels should be identified and the influence factors entered as early as possible. If this occurs after encoding, i.e., field build, maintenance to the parcel will be necessary.

Completed land tables are to be encoded and placed in the file as a part of the cost valuation program. Values are produced on output sheets with land values shown from the cost approach. Any further land values modifications during final review will require normal maintenance.

It is important to make sure that the land valuation tables are complete, i.e., that all possible situations in which the table is to be used are accounted for in the table. Failure to provide complete land valuation table data can result in run time error conditions. These are manually reported by the cost program and can be corrected subsequently by updating the land valuation table. However, substantial time may be lost in requesting, researching, and supplying the missing information. In the process of field review, it may be determined that several areas of valuation are consistently under- or overpriced. The land valuation table provides an excellent means of updating these land values on a timely and efficient basis. However, in doing this, care must be taken to make sure that various override values on the parcels to be updated are not effected and furthermore, that other parcels which are override situations are still appraised on a consistent basis.

Data Acceptance

1. Land size entry — required for all parcels unless none or gross.
2. Value override — enter rate and influence factor. Do not enter total value unless gross. Computer will calculate value and print on the review document. This parcel will not go through the computer-assisted land pricing procedure. Any lots that gross value is applied to will lose the land description on the printouts, e.g., lot size, etc.
3. Influence factor — do not enter rate. Enter influence code and factor only. This parcel will go through the computer-assisted land pricing procedure and the influence factor will be applied to the resultant value.
4. Land value maintenance — if it is necessary to change a unit land value already in the file, do so through a normal maintenance procedure. If the land valuation table value is to be used and only the influence factor requires adjustment, leave the unit price blank.

RESIDENTIAL LOT SIZE/GROSS VALUE PRICING PROCEDURES AND EXAMPLE

The computer-assisted Residential Lot Size, Gross Value Pricing system operates from a single internal table by neighborhood and county, which is generated by the appraisal field staff. Each individual table will handle up to 15 neighborhoods per county, per page. The table includes the following information.

1. County Name
2. County Identification Number
3. Neighborhood Identification Number
4. Lot Size Information to include a standard effective or typical frontage and site category by neighborhood.
5. Gross Land Information to include Site Category by neighborhood.
6. Lot and Gross Land Unit Price by neighborhood, standard effective front (lots only), and site category.

Prior to entering unit land values on the Residential - Lot Size/Gross Value land pricing table, certain preliminary field activities should already have taken place.

Table Definitions

The following table definitions are provided to assist the land pricer in selecting the correct unit values. All lot entry unit prices are expressed in terms of front foot units or a land measure - one front foot in width along the frontage of a property. Gross value unit prices are expressed in terms of flat dollar (sound value) amounts.

Note: All unit value entries should be right justified.

1. Neighborhood Identification Number — a unique neighborhood identifier denoting a specific neighborhood number. The three character positions to the left of the vertical hashmark are for entering numeric characters 001 to 999. The character position to the right of the vertical hashmark is provided to enter an alpha character (A to E) to denote the creation of a sub-neighborhood within a neighborhood.

Lot Entries

2. Standard Effective Front — a standard or typical effective frontage size within a given neighborhood. While recognizing that within a neighborhood many different effective lot sizes may be present, the standard effective front should be determined by selecting the normalized situation. For example: if 50 lots have an effective frontage of 150', 100 lots have an effective frontage of 120', and 20 lots have an effective frontage of 100', the normal standard effective front should be 120'. An algorithm will be developed to automatically adjust the unit price for effective front feet sizes that deviate from the standard. This is a right justified entry.

3. Regular Lot — either an interior lot, i.e., bordered on two sides by adjacent lots, or a corner lot located at a street intersection with frontage on two sides.
4. Minus Lot/Rear Lot — a lot without street or road frontage. Access is from an adjacent parcel.

Note: By data collection manual definition, the minus lot/rear lot unit value must be the same as the regular lot entry previously recorded on the same line entry or within the same unique neighborhood identification number.

5. Irregular Lot — a lot which is highly irregular in shape such as a cul-de-sac, but standard lot sizing procedures *have* been applied.

Note: The irregular lot unit value may or may not be the same as the regular lot or waterfront entry based on appraisal analysis.

6. Waterfront Lot — either a regular or irregular lot with waterfront access.

Note: The waterfront unit value entry may or may not be the same as the regular lot and/or the irregular lot entry based on appraisal analysis.

Gross Entries

Gross Unit Value entries are made without regard to individual site category sizes.

7. Irregular Lot — a lot which is highly irregular in shape that standard lot sizing procedures *have not* been applied.

Note: The flat dollar (sound value) unit value entry for irregular lot may or may not be the same as the site value or waterfront gross value entry based on appraisal analysis.

8. Site Value — a lot which could be either regular or irregular in shape that standard lot sizing procedures *have not* been applied. An example would be a series of lots within a subdivision which should generate the same value regardless of size.

Note: The flat dollar (sound value) unit value entry for site value may or may not be the same as the irregular lot or waterfront gross value entry based on appraisal analysis.

9. Waterfront — either an irregular lot or site value lot with waterfront access that standard lot sizing procedures *have not* been applied.

Note: The flat dollar (sound value) unit value for gross value waterfront may or may not be the same as irregular lot or site value gross entries based on appraisal analysis.

Based on the analysis of the information gathered and disseminated in the land field procedures area of this section, and the table definitions supplied in this section, the following is an explanation of the correct procedure for filling out a Residential - Lot Size/Gross Value Land Pricing Table.

1. Enter the County Name in the area provided.
2. Enter the County Identification Number in the area provided (consult the data collection manual for correct listings).
3. Enter the Neighborhood Identification Number.
4. For Lot Categories, enter the standard or typical effective front.

5. Enter the unit prices for Regular Lot, Minus/Rear Lot, Irregular Lot, Waterfront Lot and Gross Categories Irregular Lot, Site Value and Waterfront for all applicable site categories within a neighborhood right justified.
6. Continue as above for all neighborhood numbers.

Note: Failure to provide complete land valuation table data can result in run time error conditions (i.e., no match on table). This is correctable, but at the added expense of substantial time and cost.

The following is an example of a correctly completed County Residential Lot Size/Gross Value Land Pricing Table.

MOUNTAINEER COUNTY 8 COUNTY ID 8

[illegible]

Note: In the preceding example for neighborhood 003, no unit prices were applied for waterfront lot or waterfront gross. If these situations were existent, an error condition would be present; however, there is no need to invent unit prices for non-existent situations.

Note: That unit values can be repeated based on appraisal analysis.

RESIDENTIAL/AGRICULTURAL ACREAGE LAND PRICING PROCEDURES AND EXAMPLE

The Computer-Assisted Residential/Agricultural Land Pricing system operates from multiple internal tables by County with factoring capability for both residential and agricultural land on a neighborhood by neighborhood basis, generated by information supplied by the Appraisal Field staff. The tables include the following information.

1. County Name
2. County Identification Number
3. Base Tables
 - a. Residential Base Tables
 - 1) Graded Land category (A-E) by street or road
 - a) Paved
 - b) Semi-Improved
 - c) Dirt
 - 2) Site Category
 - a) Homesite
 - b) Residual
 - c) Waterfront
 - d) Undeveloped - Unclassified
 - 3) Unit prices by graded land category and site category
 - b. Agricultural Base Table
 - 1) Graded Site Category (A-E)
 - a) Tillable
 - b) Pasture
 - c) Woodland
 - d) Wasteland
 - e) Timberland
4. Factoring Tables
 - a. Neighborhood I.D.
 - 1) Residential
 - a) Typical Homesite Grade by Neighborhood
 - b) Residential Factor by Neighborhood
 - 2) Agricultural
 - a) Typical Land Grade by Neighborhood
 - b) Agricultural Factor by Neighborhood

Prior to entering unit load values on the Residential/Agricultural Acreage land pricing tables, certain preliminary field activities should already have taken place.

Table Definitions

The following table definitions are provided to assist the land pricer in selecting the correct unit values. All unit value entries should be right justified.

Residential Base Table

1. Land Category by Street or Road

Paved — to indicate a concrete, blacktop, or comparably surfaced street.

Semi-Improved — to indicate a gravel or comparably surfaced street.

Dirt — to indicate an existing street or road which has no surface improvements in evidence.

2. Graded Land Category - the following information is supplied as a guideline only. It should be tempered with actual in-field situations and experience.

A Grade Street or Road — normally located in medium to high density urban areas with high quality grade improvements in evidence. All public utilities are typically available.

B Grade Street or Road — normally located in urban fringe areas or suburban subdivisions with above-average quality grade improvements in evidence. Public utilities are probably available.

C Grade Street or Road — normally located on rural state routes or in unincorporated rural hamlets. Average quality grade improvements are typically in evidence. Possible public utility availability in rural hamlets. Possible agricultural influence evident.

D Grade Street or Road — normally located on rural county roads with below average quality grade improvements in evidence. Typically no public utilities available. Possible agricultural influence evident.

E Grade Street or Road — normally located on lightly traveled local roads. A possibility of limited access due to poor topography. Low quality grade improvements in evidence. No public utilities available.

3. Site Category

Homesite — any acreage allocated for a dwelling site. Typically one acre or less.

Residual — all excess land considered not an actual or potential building site.

Waterfront — an improved (dwelling) or vacant building site with waterfront access.

Undeveloped/Unclassified — an unimproved or vacant building site or unused excess land.

Agricultural Base Table

1. Site Category

Tillable — cleared acreage capable of growing crops.

Pasture — cleared acreage not economically suitable for growing crops, but suitable for grazing of livestock.

Woodland — acreage of uncleared woodland not planned or used for timber production.

Wasteland — acreage not suitable for building sites, agricultural, or forest land use.

Normally restricted to swampland, ravines, etc.

Timberland — acreage of uncleared woodland planned or used for timber production.

2. Graded Site Category

A Grade — this land will be good loam soil that is easy to work (a tract approximately ten acres or more in one continuous parcel) and can be cultivated safely using good farming methods. This land is nearly level and there is little or no erosion. This quality of land is typically defined by federal and state agricultural agencies as Land Capability Class I.

B Grade — this land will lay level to rolling and can be cultivated safely using good farming techniques. The soil may need lime and fertilizing. The bottom land may need improved drainage. This quality of land is typically defined by federal and state agricultural agencies as Land Capability Class II.

C Grade — this land will also be level to rolling crop land; the drainage of the property will be good. A small amount of erosion could be taking place upon this type of land. The land can be cultivated with care. It needs contour strip cropping. Usually best suited for hay. This type of property will be cut into smaller sections due to some sort of natural or man-made obstructions. This quality of land is typically defined by federal and state agricultural agencies as Land Capability Class III.

D Grade — this land would be considered hillside farmland. The soils have severe limitations that restrict the choice of crops. Very careful management is necessary. This type of land is best suited to pasture woodland or wildlife food and cover. This quality of land is typically defined by federal and state agricultural agencies as Land Capability Classes IV, V, and VI.

E Grade — this cropland will be very steep hillside that will be too steep to farm with modern farm machinery. The soil will be of a poor quality and any cultivation could cause severe erosion. Actual use is restricted largely to grazing, woodland, or wildlife. This quality of land is typically defined by state and agricultural agencies as Land Capability Classes VII and VIII.

Pasture

A Grade — this type of land could be used for either pasture or crop land. The topography of the land will be level to rolling. The land can be clipped with a farm tractor; lime and fertilizer can be applied with modern farm equipment. The drainage of the property will be good and the soil will be of good quality. The land will be clear of any overgrowth such as an excess amount of trees or brush.

B Grade — this land will be of similar nature to the Class "A" Pasture Land, other than the fact that the quality of the soil will not be as good. The size of the parcel will be of a smaller nature. This type of land, for some reason, is not suitable for tilling and would be best suited for permanent pasture.

C Grade — this land will have a moderate amount of erosion. The topography of the land will be average.

D Grade — this land will be hillside pasture that has a very steep degree of slope. The pasture will have some natural obstruction such as overbrush, etc. The type of soil will be of poor quality.

E Grade — this land will be very steep and there will be a mixture of overbrush and pasture throughout. Brush must be cleared with hand tools. The soil consistency will be of a poor quality; lime or fertilizer is seldom applied to this type of land and then only with hand tools.

Woodland

A Grade — this land, if cleared, would be adaptable to growing crops. The soil type will be of loam. The topography of the land will be level to slightly rolling.

B Grade — this land, if cleared, would be adaptable to permanent pasture use. There will be a minimal amount of erosion. The topography of the land will be level to rolling.

C Grade — the topography of this uncleared land is only average. The land will have a moderate amount of erosion. The land is not readily adaptable to either the growing of crops or for permanent pasture usage.

D Grade — this uncleared land has a steep degree of slope. The type of soil will be of generally poor quality. The land is not adaptable for other agricultural use.

E Grade — this uncleared land has a very steep degree of slope. The soil quality is poor. Any attempt at adapting use would cause severe erosion.

Wasteland

By definition, wasteland is not suitable for alternate use. It is restricted to swampland, ravines, etc. It is, therefore, recommended that only one base unit price be developed by county. Since wasteland, by definition, may be found in conjunction with other site categories of all quality grades, it is also recommended that the single base unit price be entered for all quality grades.

Timberland

Timberland is that land which is used for the commercial production of timber. The West Virginia University is responsible for submitting as a part of the regulations, guidelines for valuing timberland.

Residential/Agricultural Acreage Land Pricing Factor Table

1. Neighborhood Identification Number — a unique neighborhood identifier denoting a specific neighborhood number. The three character positions to the left of the vertical hashmark are for entering numeric characters 001 to 999. The character position to the right of the vertical hashmark is provided to enter an alpha character (A to E) to denote the creation of a sub-neighborhood within a neighborhood.
2. Typical Grade of Homesite — used to indicate the typical quality grade of homesite within a neighborhood. If no homesite quality grade is in evidence on an individual property record card and homesite is activated, the system will default to the typical homesite grade of the neighborhood.
3. Residential Neighborhood Factor — if the residential base tables by county do not accurately reflect unit values in an individual neighborhood, it is possible to apply a factor either over or under 1.00 to indicate a multiplier to be applied to the residential base tables, to accurately reflect unit values within that neighborhood. If no modification to the base residential tables are necessary, simply enter 1.00.
4. Typical Agricultural Grade — used to indicate the typical quality grade of agricultural site categories within a neighborhood. If no quality grades are in evidence and agricultural site categories are activated, the system will default to the typical agricultural site category grade of the neighborhood.

5. Agricultural Neighborhood Factor — if the agricultural base table does not accurately reflect unit values in an individual neighborhood, it is possible to apply a factor either over or under 1.00, to indicate a multiplier to be applied to the agricultural base table to accurately reflect unit values within that neighborhood. If no modification to the base agricultural table is necessary, simply enter 1.00.

Based on an analysis of the information gathered and disseminated in the land field procedures area of this section, and the table definitions supplied in this section, the following is the correct procedure for filling out the Residential/Agricultural Acreage Land Pricing Tables.

1. Enter the County Name in the areas provided on both forms.
2. Enter the County Identification Number in the areas provided on both forms.
3. Enter the base unit prices for all applicable entries (Residential/Agricultural) within a county based on land category, site category, and quality grade.
4. Enter the Neighborhood Identification Number.
5. Enter the Typical Neighborhood Homesite Grade.
6. Enter the Residential Neighborhood Factor.
7. Enter the Typical Agricultural Quality Grade by Neighborhood.
8. Enter the Agricultural Neighborhood Factor.
9. Continue (steps 4 - 8) as needed.
10. Enter the Pricing Factors Sheet Number as needed.

Note: Failure to provide complete land valuation table data can result in run time error conditions, i.e., no match on table. This is correctable, but at the added expense of substantial time and cost.

The following is an example of a correctly completed County Residential/Agricultural Acreage Land Pricing Table.

RESIDENTIAL/AGRICULTURAL REAGE LAND PRICING TABLE

MOUNTAINEER COUNTY 18 COUNTY ID 18

RESIDENTIAL BASE TABLE

STREET or ROAD	HOMESITE				
	TYPE CODE - 1				
	A	B	C	D	E
PAVED	15,000	10,000	7,500	5,000	3,000
SEMI IMPROVED	10,000	7,500	5,000	3,000	2,000
DIRT	1,500	5,000	2,500	1,500	1,000

STREET or ROAD	RESIDUAL				
	TYPE CODE - 8				
	A	B	C	D	E
PAVED	1,500	1,000	750	500	300
SEMI IMPROVED	1,000	750	500	300	200
DIRT	750	500	250	150	100

STREET or ROAD	WATERFRONT				
	TYPE CODE - 9				
	A	B	C	D	E
PAVED	18,000	12,000	9,000	6,000	3,500
SEMI IMPROVED	12,000	9,000	6,000	3,500	2,500
DIRT	9,000	6,000	3,000	2,000	1,500

STREET or ROAD	UNDEVELOPED/UNCLASSIFIED				
	TYPE CODE - 0				
	A	B	C	D	E
PAVED	7,500	5,000	3,500	2,500	1,500
SEMI IMPROVED	5,000	3,500	2,500	1,500	1,000
DIRT	3,500	2,500	1,500	1,000	500

AGRICULTURAL BASE TABLE

	A	B	C	D	E
TILLABLE TYPE CODE - 2	2,000	1,500	1,000	500	200
PASTURE TYPE CODE - 3	1,800	1,600	1,400	1,200	1,000
WOODLAND TYPE CODE - 4	400	300	200	100	50
WASTELAND TYPE CODE - 5	50	150	150	150	50
TIMBERLAND	Rate Table to be supplied by W.V.U.				

COMMERCIAL LAND PRICING PROCEDURES AND EXAMPLES

The computer assisted commercial land pricing system operates from multiple internal tables by county and is generated from information supplied by the Appraisal Field Staff. The tables include the following information -

1. County Name
2. County Identification Number
3. Location Classification by unit type and site category
4. Site Category by location classification (land category) and unit type
5. Unit Prices by location classification and site category
6. Quality Factor by location classification based on neighborhood

Prior to entering unit land values and quality grade factors on the County Commercial Land pricing table, certain field activities should already have taken place.

Table Definitions

1. Location Classification (Land Category)

Location for purposes of Commercial Land pricing refers to a commercial neighborhood type. Location is determined by both physical boundaries and the type of improvements located within the boundaries. The following is a general discussion of location definitions to be utilized for purposes of valuation of commercial land.

Central Business District is defined as the core area in the center of a city in which is concentrated the major retail, financial, governmental, professional, and services activities of the city. In many instances, these boundaries have already been established or defined by city planners or other agencies.

Perimeter Central Business District is defined as the outer boundaries of the Central Business District or core area and in which the concentration of major mercantile activity is significantly less pronounced.

Business Cluster is defined as a cluster or number of commercial properties grouped together due to some attracting force such as a major intersection of interstate highways or a major shopping mall.

Major Strip is defined as the type of commercial development wherein the major thoroughfares are bordered by an almost continuous row or strip of retail stores and allied service establishments.

Secondary Artery is defined as row or strip type commercial development bordering secondary arteries.

Neighborhood or Spot is defined as commercial properties - individual or scattered establishments located in basically residential areas.

Commercial-Industrial Park is defined as a controlled park-like development designed to accommodate specific light industrial and mercantile properties and containing the required utilities, streets, and other appurtenances.

Apartment/Condominium Complex is defined as an apartment or condominium complex site.

2. Site Category

Lot Entries

Regular Lot — either an interior lot, i.e., bordered on two sides by adjacent lots, or a corner lot located at a street intersection with frontage on two sides.

Minus Lot/Rear Lot — a lot without street or road frontage. Access is from an adjacent parcel.

Note: By data collection manual definition, the minus lot/rear lot unit value must be the same as the regular lot entry previously recorded.

Irregular Lot — a lot which is highly irregular in shape, such as a cul-de-sac, but standard lot sizing procedures have been applied.

Note: The irregular lot unit value may or may not be the same as the regular lot or waterfront entry based on appraisal analysis.

Waterfront Lot — either a regular or irregular lot with waterfront access.

Note: The waterfront unit value entry may or may not be the same as the regular lot and/or the irregular lot entry based on appraisal analysis.

Square Feet & Acreage Entries

Primary Site is defined as being an adequate area of land for the building and a normal amount of paving. It includes improvements to the land, such as excavation fill, to make the site suitable for building. It also includes utilities available to the site.

Secondary Site is defined as the remaining area of developed land which is not built upon and is set aside for future expansion. It includes improvements to the site such as excavation and fill suitable for building, but does not contain utilities. Can function as a support area, such as yard storage or surplus parking.

Residual is defined as all excess land which has no potential or ability to be developed. It has no improvements to the land. It cannot be considered for expansion or support of the commercial concern. The highest and best use of the land is not commercial. It may be Agricultural - Timber - Waste, etc.

Waterfront — for Commercial purposes waterfront is defined as a primary site with frontage on a body of water.

Undeveloped — is defined as land which has the potential to be developed, but at the present time has not been improved. It contains no improvements to the land.

3. Neighborhood

Neighborhood Identification Number — a unique neighborhood identifier denoting a specific neighborhood number. The three character positions to the left of the vertical hashmark are for entering numeric characters 001 to 999. The character position to the right of the vertical hashmark is provided to enter an alpha character (A to E) to denote the creation of a subneighborhood within a neighborhood.

Based on an analysis of the information gathered and disseminated in the land field procedures area of this section - including the location classification and site category definitions - the following is an explanation of the correct procedure for filling out the County Commercial Land Pricing Tables.

1. Enter the county name in the area provided on both the Commercial land pricing tables and the Commercial land pricing factor forms.

2. Enter the county identification number in the area provided on both the Commercial land pricing tables and the Commercial land pricing factor forms.
3. Enter the unit prices for Lot, Square Feet, and Acreage (right justified) based on location classification and site category for the land types intended to be used.
4. Based on earlier analysis, continue this activity until all possible variables within a county are covered.
5. Enter Neighborhood Identification Numbers as needed.
6. Enter Land Pricing factors by location classification (land category) and neighborhood to reflect a percentage to be applied to the County Base Commercial Land Pricing tables.
7. Enter the applicable sheet number on the Commercial Land Pricing Factor table.

Note: As mentioned earlier, failure to provide complete land valuation table data can result in run time error conditions, i.e., no match on table. This is correctable, but at the added expense of substantial time and cost.

The following is an example of correctly completed County Commercial Land Pricing tables.

Note: In the following example that square foot prices were used across the board for commercial land prices, with the exception of neighborhood or spot commercials, which were to be done on a front foot or acreage basis. If other situations were existent, an error condition would be present. However, there is no need to invent unit prices for nonexistent situations.

Note: That unit values and neighborhood factors can be repeated for different location classifications and site categories based on appraisal analysis.

COMMERCIAL LAND PRICING TABLES

MOUNTAINEER COUNTY 18 COUNTY ID 18

LOCATION	LOT TYPE				SQUARE FEET TYPE			
	REGULAR LOT	REAR LOT	IRREGULAR LOT	WATERFRONT	PRIMARY SITE	SECONDARY SITE	RESIDUAL	WATERFRONT
CENTRAL BUSINESS DISTRICT	---	---	---	---	15.00	15.00	15.00	15.00
PERIMETER CENTRAL BUSINESS DISTRICT	---	---	---	---	10.00	5.00	2.00	10.00
BUSINESS CLUSTER	---	---	---	---	8.00	4.00	1.50	8.00
MAJOR STRIP	---	---	---	---	6.00	3.00	1.00	6.00
SECONDARY STRIP	---	---	---	---	4.00	3.00	.75	4.00
NEIGH or SPOT	---	---	---	---	---	---	---	---
COMM/IND PARK	---	---	---	---	2.50	1.25	.25	2.50
APT/CONDO COMPLEX	---	---	---	---	2.00	1.00	.20	2.00

LOCATION	ACREAGE TYPE				ACREAGE TYPE			
	PRIMARY SITE	SECONDARY SITE	RESIDUAL	WATERFRONT	PRIMARY SITE	SECONDARY SITE	RESIDUAL	WATERFRONT
CENTRAL BUSINESS DISTRICT	---	---	---	---	---	---	---	---
PERIMETER CENTRAL BUSINESS DISTRICT	---	---	---	---	---	---	---	---
BUSINESS CLUSTER	---	---	---	---	---	---	---	---
MAJOR STRIP	---	---	---	---	---	---	---	---
SECONDARY STRIP	---	---	---	---	---	---	---	---
NEIGH or SPOT	4.0000	2.0000	4.0000	4.0000	---	---	---	10.0000
COMM/IND PARK	---	---	---	---	---	---	---	---
APT/CONDO COMPLEX	---	---	---	---	---	---	---	---

COMMERCIAL PRICING FACTOR

MOUNTAINEER COUNTY COUNTY ID 18

LOCATION	NEIGHBORHOOD									
	9001	9011	9021	9031	9041	9051	9061	9071	9081	9091
CENTRAL BUSINESS DISTRICT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PERIMETER CENTRAL BUSINESS DISTRICT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BUSINESS CLUSTER	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MAJOR STRIP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SECONDARY STRIP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEIGH or SPOT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
COMM/PND PARK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
APT/CONDO COMPLEX	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10

LOCATION	NEIGHBORHOOD									
	9001	9011	9021	9031	9041	9051	9061	9071	9081	9091
CENTRAL BUSINESS DISTRICT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PERIMETER CENTRAL BUSINESS DISTRICT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BUSINESS CLUSTER	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MAJOR STRIP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SECONDARY STRIP	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NEIGH or SPOT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
COMM/PND PARK	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
APT/CONDO COMPLEX	1.00	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10

INDUSTRIAL LAND PRICING PROCEDURES AND EXAMPLE

The Computer Assisted Industrial Land Pricing system operates from a single internal table by county which is generated by information supplied by the Appraisal Field staff. The table includes the following information -

1. County Name
2. County Identification Number
3. Industrial Land Classification
4. Land Grade by Land Classification
5. Site Category by Land Grade and Land Classification
6. Acreage Unit Price by Site Category, Land Grade, and Land Classification.

Prior to entering unit values on the County Industrial Land Pricing table, certain field activities should already have taken place.

Land Field Procedures

Land field procedures as used in terms of industrial land mass appraisal will include all aspects of land appraisal that must be carried out within a given county. The numerical sequence of tasks to be performed by the appraiser is listed as a guide only and they should be carried out in actual practice to the appraiser's best advantage. The first numerical listing contains items that should be accomplished upon the initial visit to the county Assessor's office. They include -

1. Obtain list of new facilities from Assessor.
2. Obtain list of all commercial facilities located within an organized industrial park.
3. Gather all PRC's for current and new facilities.
4. Cross-check names of facilities to current landbook to see if any new land parcels are involved.
5. Make list of all tax maps needed and order from the Charleston office.
6. Identify all current land sales (industrial) and record on sales data sheets.
7. Make the necessary appointment with industrial facilities.

As soon as the field maps are received the field work can proceed. The several tasks to be performed at this time are -

1. Correct acreage breakdowns.
2. Classify and grade the industrial site.
3. Classify and grade any residual land.
4. Verify sales data and check for additional land data.

After completion of the field work, the appraiser will have several other duties to accomplish before the county is complete. These are -

1. Necessary corrections to property record cards (use PRC instructions).
2. Contact mapping supervisor to correct any mapping errors identified during field work.
3. Complete market analysis using sales data sheets and any additional information available.
4. List all parcels not appraised (use appropriate form).
5. Complete county industrial pricing schedule.
6. Remit all sales data sheets and land data to the appropriate personnel.
7. Final check and turn work in to the Charleston office.

Remember, this listing of procedures is a guide only and the appraiser may encounter additional tasks during the completion of his/her given county. If this is the case, the appraiser should notify the appropriate personnel of same to include these in the field procedures.

Classification of Industry

Because this part of the section is developed as an industrial land guide, we will discuss industry classifications in terms of the predominant locational factor. It is important for the reader to understand that certain industry might, to some extent, fall into more than one broad category. Generally speaking, however, an industry for the purpose of land appraisal can be viewed as being in one of the following four categories.

1. *Market-oriented industry.* Industries in this category will seek to reduce transportation cost and distribution time by locating near the marketing area. Examples of this type of industry would be printing shops and food processors.
2. *Resources-oriented industry.* This industry will tend to locate near the source of raw materials. The main consideration is that the cost of transporting the finished product is less than importing the raw materials. An example of this type would be ore processors.
3. *Transportation-oriented industry.* For these industries the transportation cost of either the raw materials or the finished product will tend to cause the location to be near the appropriate transportation. An example would be a chemical plant locating on the Ohio River because of the water transportation.
4. *Non-oriented industry.* This type of industry, in general, will consider such factors as local lending arrangements, local taxes, land availability more than the other classifications. An example of this type of industry would be a precision mold producer locating in an industrial park because of tax advantages and preferential lending terms.

This discussion of industry classification should be related to the following one dealing with Industrial Site Classification. It is designed only to acquaint the reader with some important factors in the choice of industrial sites.

Industrial Site Classification

Industrial site classification, for purposes of grading and pricing active industrial land in West Virginia, is separated into four broad categories: Heavy Industrial Sites, Light Industrial Sites, Industrial Parks, and Mine Sites. While superficially this may appear to be an over-simplification considering the wide diversity of industrial real estate, mass appraisal techniques demand the most efficient methods available to accomplish quantity and quality appraisals within a rigid time schedule. With an adequate understanding of the nature and purpose of the classification and grading structure presented herein, the industrial appraiser should be able to perform the necessary office and field functions involved in mass industrial land appraisals thoroughly and expeditiously. Following is a general discussion of active and residual industrial land and the four classes of industrial sites.

Active industrial land is determined to be that portion of land titled to industrial firms or individuals utilized to perform the necessary functions of a manufacturing process. This will include land used to house industrial buildings and equipment, parking areas, and storage areas. In this manual, the term active industrial land is used interchangeably with the term industrial site.

Residual industrial land is considered to be that portion of a parcel of real estate that is currently non-productive in terms of the industrial activity location thereon. This type of land would include land held for industrial expansion, land unsuitable for industrial use, and excess acreage.

Industrial Sites

Heavy Industrial is defined as an industrial site containing more than five acres of plant site. This site will normally be located in outlying areas. This type of land will attract resources-oriented industry and to some extent transportation-oriented industry.

Light Industrial is defined as an industrial site containing five or less acres of land. This site will tend to be more centrally located in relation to urban areas. It will attract more market-oriented industry.

Industrial Parks are defined as a parcel or group of parcels dedicated primarily to commercial and industrial development. The highest and best use of these properties has already been determined as industrial or commercial use.

Mine Sites include portal/shaft area, plus parking lots, water treatment facilities, mine fan areas, gob piles, and preparation plant sites.

Site Category Definitions

Primary Site is defined as being an adequate area of land for buildings and a normal amount of paving that the industrial needs to accomplish the purpose for which it is intended. It includes two types of improvements to the land:

1. Excavation, fill, etc., to make the site suitable for building.
2. Necessary utilities available to the site.

Secondary Site is defined as the remaining area of developed land which is not built upon and is set aside for future expansion or as a support area such as yard storage or surplus parking. It includes improvements to the land such as excavation, fill, etc., to make the site suitable for building, but does not contain utilities available to the site.

Residual Site is defined as that portion of a parcel that can be considered excess to the operation of the industrial concern. It has no potential or ability to be developed. It contains no improvements to the land and cannot be considered for expansion or support of the concern. The highest and best use of the land is *not* industrial. It may be agricultural, timber, waste, etc.

Waterfront Site is defined as a site containing all the attributes of a primary site, with frontage on a body of water.

Undeveloped is defined as land which has the potential to be developed, but at the present time has not been improved. It contains no improvements to the land.

The following Land Grade Specifications are provided as guidelines only, and should be tempered with actual field experience and situations.

Land Grade Specifications

Heavy Industrial

Heavy industrial sites will be more than five acres. In general, they will be found in outlying areas. They will attract mostly transportation-oriented industry and resources-oriented industry. In the scale of grades from A to D, the differences in grades are for the most part quality of location, accessibility, degree of improvements to the land, quality of topography, and room for expansion.

<i>Grade A</i>	In general, this is an excellent location and site for the industry located thereon. There is good access to appropriate transportation. All necessary utilities and improvements to the land are present. Topography is excellent and there is ample room for expansion. No detriments to the site, such as deed restrictions, flooding, etc., are in evidence.
<i>Grade B</i>	In general, this is a good location and site for the industry located thereon. There is average to good access to appropriate transportation. All necessary utilities and improvements to the land are present. Topography is good and there is some room for expansion. No detriments to the site are in evidence.
<i>Grade C</i>	In general this is an average location and site for the industry located thereon. There is fair to average access to appropriate transportation. All or most utilities and improvements to the land are present. Topography is average. There may not be room for expansion. There may be minor detriments in the form of portions flooding, deed restrictions, etc.
<i>Grade D</i>	In general, this is a poor location and site for the industry located thereon. There is limited or poor access to appropriate transportation utilities and necessary improvements to the land may or may not be present. Topography is fair to poor. There is no room for expansion. There may be minor detriments in the form of portions flooding, deed restrictions, etc.

Light Industrial

Light industrial sites will contain five or less acres. They will normally tend to be centrally located to urban areas. They will attract mostly market-oriented industry. The biggest variables in the grade scale are quality of location, degree of improvements to the land, and accessibility to the marketing area.

- Grade A* In general, this is an excellent location and site for the industry located thereon. All necessary utilities and improvements to the land are present. There is good accessibility to the marketing area. Topography is typically very good to excellent. No detriments to the site, such as adverse traffic patterns or zoning, are in evidence.
- Grade B* In general, this is a good location and site for the industry located thereon. All necessary utilities and improvements to the land are present. There is average to good accessibility to the marketing area. Topography is typically good and no detriments to the site are in evidence.
- Grade C* In general, this is an average location and site for the industry located thereon. All or most utilities and improvements to the land are present. There is fair to average accessibility to the marketing area. Topography is typically fair to average. There may be some detriments to the site, such as adverse traffic patterns, parking space, etc.
- Grade D* In general, this is a poor location and site for the industry located thereon. Utilities and necessary improvements to the land may or may not be present. There is poor or limited accessibility to the marketing area. Topography is usually poor. There may be some detriments to the site, such as adverse traffic patterns, parking space, etc.

Industrial Parks

Sites in organized industrial parks are sites under proprietary control. Sponsors of such districts have a continuing interest in their operations. The grade scale will reflect three basic variables: quality of location, degree of improvements to the land, and property rights.

- Grade A* In general, this is an excellent location and site for the industry located thereon. All necessary utilities and improvements to the land are present. These sites have good accessibility to major highways. Topography is typically very good to excellent. There are normally no deed restrictions which would eliminate competition of certain types of industry.
- Grade B* In general, this is a good location and site for the industry located thereon. All necessary utilities and improvements to the land are present. There is accessibility to a major highway. Topography is typically good. There may be minor deed restrictions, such as building requirements, etc.
- Grade C* In general, this is an average location and site for the industry located thereon. All or most necessary utilities and improvements to the land are present. These sites have no more than average accessibility to highways. Topography is typically average. There will be deed restrictions, such as building requirements, upkeep, etc.
- Grade D* In general, this is a poor location and site for the industry located thereon. Utilities and necessary improvements to the land may or may not be present. These sites have fair to poor accessibility to highways. Topography is typically no more than fair. There are enough deed restrictions to limit market competition. These types of parks may cater to just a certain type of industry.

Mine Sites

Mine Sites will assume five basic types: Preparation Plant Sites, Portal Sites, Shaft Sites and Air Shaft Sites, Water Treatment Sites, and Landfill Sites (Gob Disposal). The grade will reflect quality of location, degree of improvements to the land, and site type.

- Grade A* In general, this is a good location and site. All necessary utilities and improvements to the land are present. Typically topography will be good to excellent. Accessibility to the site is usually good. The size of the site is ample and usually has room for expansion. This grade usually will be improved by preparation plants and portals.
- Grade B* In general, this is an average location and site. All or most necessary utilities and improvements to the land are present. Topography range is good to poor. Accessibility to the site is average to poor. This grade usually will contain shaft sites.
- Grade C* In general, this is a fair to poor location and site. Utilities and necessary improvements to the land may or may not be present. Topography is typically poor. Accessibility to the site is limited. This grade will usually contain water treatment sites.
- Grade D* In general, this is a poor to very poor location and site. Utilities and improvements to the land are normally not present. Topography is poor. There is normally no accessibility. This grade will usually be used for landfill.

General Procedure

Based on an analysis of the information gathered and disseminated in the land field procedures portion of this section - including the site classification, land grade specification, and site category definitions - the following is an explanation of the correct procedure for filling out a County Industrial Land Pricing Table.

1. Enter the County Name in the area provided.
2. Enter the County Identification Number in the area provided.
3. Enter the Acreage Unit Price desired (right justified) in the applicable site category column based on the appropriate land grade and industrial site classification.
4. Based on earlier analysis, continue this activity until all possible variables within a county have been covered.

Note: As mentioned earlier, a failure to provide complete land valuation table data can result in run time error conditions, i.e. no match on table. This can be corrected, but at the added expense of substantial time and cost.

The following is an example of a correctly completed Industrial Land Pricing Table.

Note: In the following example that no waterfront prices were supplied for industrial parks or mine sites. If these situations were existent, an error condition would be present. However, there is no need to invent unit prices for non-existent situations.

Note: That unit values and neighborhood factors can be repeated for different site categories, land grades, and site classification based on appraisal analysis.

INDUSTRIAL LAND PRICING TABLE

MOUNTAINEER COUNTY COUNTY ID 18

TYPE	GRADE	PRIMARY	SECONDARY	RESIDUAL	WATERFRONT	UNDEVELOPED
HEAVY INDUSTRIAL (5 or More Acres)	A	1 3 0 1 0 0 0	1 1 5 1 0 0 0	1 3 1 0 0 0	1 3 0 1 0 0 0	1 1 0 1 0 0 0
	B	1 2 5 1 0 0 0	1 1 2 1 5 0 0	1 2 1 5 0 0	1 2 5 1 0 0 0	1 2 8 1 0 0 0
	C	1 2 0 1 0 0 0	1 1 0 1 0 0 0	1 2 1 0 0 0	1 2 0 1 0 0 0	1 1 6 1 0 0 0
	D	1 1 5 1 0 0 0	1 1 1 1 5 0 0	1 1 1 5 0 0	1 1 5 1 0 0 0	1 1 4 1 0 0 0
LIGHT INDUSTRIAL (Less than 5 Acres)	A	1 4 0 1 0 0 0	1 2 0 1 0 0 0	1 4 1 0 0 0	1 4 0 1 0 0 0	1 1 5 1 0 0 0
	B	1 3 2 1 0 0 0	1 1 6 1 0 0 0	1 3 1 0 0 0	1 3 2 1 0 0 0	1 1 2 1 0 0 0
	C	1 2 5 1 0 0 0	1 1 2 1 5 0 0	1 2 1 5 0 0	1 2 5 1 0 0 0	1 1 1 0 1 0 0 0
	D	1 2 0 1 0 0 0	1 1 0 1 0 0 0	1 2 1 0 0 0	1 2 0 1 0 0 0	1 1 7 1 5 0 0
INDUSTRIAL PARK	A	1 6 0 1 0 0 0	1 2 4 1 0 0 0	1 4 1 0 0 0	1 6 1 1 1 1 1	1 2 2 0 1 0 0 0
	B	1 5 0 1 0 0 0	1 2 0 1 0 0 0	1 3 1 0 0 0	1 5 1 1 1 1 1	1 1 6 1 0 0 0
	C	1 4 0 1 0 0 0	1 1 6 1 0 0 0	1 2 1 5 0 0	1 4 1 1 1 1 1	1 1 2 1 0 0 0
	D	1 2 5 1 0 0 0	1 1 0 1 0 0 0	1 2 1 0 0 0	1 2 5 1 1 1 1	1 1 6 1 0 0 0
MINE SITES	A	1 1 0 1 0 0 0	1 1 5 1 0 0 0	1 1 1 5 0 0	1 1 1 1 1 1 1	1 1 4 1 0 0 0
	B	1 6 1 0 0 0	1 3 1 0 0 0	1 1 1 0 0 0	1 6 1 1 1 1 1	1 2 2 1 0 0 0
	C	1 3 1 0 0 0	1 1 1 1 5 0 0	1 1 1 6 0 0	1 3 1 1 1 1 1	1 1 1 1 0 0 0
	D	1 1 1 0 0 0	1 1 6 0 0	1 1 3 0 0	1 1 1 1 1 1 1	1 1 1 6 0 0

LAND INFLUENCE FACTORS

General

The technique of land pricing - as described in other portions of this section - provides for the development of unit land rates for all classes of real property within a given area or neighborhood. These land rates are developed from verified, recent sales and are expected to reflect market value for various prevalent land types as of the effective valuation date for each given area.

Land rates will be developed for parcels in the following categories -

- Lot Size - Frontage and Depth

- Square Foot

- Acreage

- Gross.

It is significant to point out that assigned land rates are based on typical or normal conditions for that class of property and land type within a specific neighborhood or area. It is likely that some number of specific parcels, within a neighborhood, will have unique factors affecting the value of that land parcel. These factors, or "Land Influences," may affect the value of a specific parcel beneficially or detrimentally, i.e., plus or minus, compared to the norm for the neighborhood.

Proper appraisal practice indicates that a land rate adjustment or "Land Influence Factor" should be applied by the review appraiser to properly reflect the unique considerations for a parcel with significant physical or economic characteristics, deviating from the normal conditions reflected by the neighborhood land rates.

The following guidelines have been developed based on research of local market conditions, general appraisal experience and tradition, with consideration given to the various persons responsible for application of this manual.

As the primary goal of a revaluation program is equalization, it is strongly recommended that users of this manual exercise proper judgment and caution in the application of land influence factors.

Land Influence Factor Guidelines

Code 1 Un-Improved

By definition, each selected site type rate, such as primary lot, homesite, primary site, secondary site, etc., *includes* provisions for normal site improvements to the land . . . site preparation, typical utility service (water, sewer or septic disposal, electricity), and typical landscaping, driveways, and walks. Therefore, it is *not* necessary or desirable to apply any un-improved land influence factor to lots, homesites, primary or secondary sites. Those parcels lacking site improvements should be classified in the appropriate non-developed category as un-developed, residual, etc.

Further considerations will be given to both site improvements for the subject parcel and road fronting improvements by means of the rate selection, according to site grade, neighborhood, and street or road category.

The purpose of this rather lengthy explanation is to illustrate that un-improved land influence factors have a very narrow potential utilization.

The use of un-improved land influence factor is presumed applicable only to those cases where the subject parcel is calculated as a lot entry (frontage and depth) and the lot is located on a proposed or "paper street." Correct application is to apply an un-improved land influence factor to recognize this condition. An un-improved factor of -90% is recommended for lots on proposed or paper streets.

Code 2 Excessive Frontage

By definition, excessive frontage would apply only to those land parcels calculated by the lot category, i.e., frontage and depth.

Computer tables for residential lot rates are based on a typical base lot size for the neighborhood. A computer applied rate adjustment for excessive frontage will be applied based on the estimated degree of enhancement created by additional frontage over the base lot size for a specific parcel. This computer applied adjustment is intended to account for routine excess frontage calculations, and may have to be tempered by a reviewer's over-ride.

The computer applied adjustment is based on the premise that the portion of the lot frontage over the base amount is not a buildable lot and, therefore, less desirable than the base lot portion.

Example:

Base Lot: 100 x 150
Subject Lot: 150 x 150
Excess Portion: 50 feet (150 - 100)
Rate Reductions to Excess Portion: Generally 50%
Overall computer applied influence factor: -17%
(Excess 50 foot x 50% = 25 feet non-effective portion
25 feet ÷ 150 feet = -17% land influence factor)

The review appraiser may have to over-ride this adjustment for cases where the excess portion is actually a saleable lot.

Excess frontage adjustments normally do not apply to -

Square foot or acreage categories

Commercial or industrial parcels.

Code 3 Topography

This category is reserved as a reviewer's judgment of the degree of difficulty due to poor topography in erecting a suitable improvement on the subject parcel.

Normally if a suitable improvement is present on the subject lot, the topography problem - if it existed - has been corrected. Therefore, an improved lot normally should have no allowance for topography to the base lot.

However, a topography influence may have to be applied in significant cases of un-improved lots or tracts where poor topography represents an actual detriment to the presumed utilization of the parcel.

Topography factors include irregular land contour, poor drainage, potential subsidence, sub-surface rock ledge, and potential erosion.

TOPOGRAPHY INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	Problem corrected or not significant.	None
<i>Minor</i>	Problem is a moderate handicap to the full utilization of the lot, but is correctable. The lot is buildable, but less desirable than typical lots in the area due to topography problem.	-20%
<i>Major</i>	Problem is significant, but correctable in that it prevents the development of the lot until the topography problem is corrected.	-50%
<i>UN-BUILDABLE</i>	The topography problem is so severe that it is economically not feasible to attempt to correct and develop the lot. A typical example would be lots requiring septic tanks that will not pass health and safety perk tests.	-90%

Code 4 Shape or Size

Shape or size factor is normally a negative adjustment to account for loss of value to a parcel due to highly irregular shape or insufficient size for the presumed utilization of the parcel.

Shape or size factor is a review judgment and may apply to all land types. The basis for any factor is a negative adjustment reducing the subject lot value to the amount and degree of land utility applicable for the presumed utilization.

SHAPE/SIZE INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	Shape or size is no significant detriment to the presumed utilization of the parcel.	None
<i>Minor</i>	The lot is buildable and/or economically usable for the presumed utilization, but irregular shape or insufficient size precludes the full utilization of the parcel.	-20%
<i>Major</i>	Irregular shape or insufficient size represents a significant handicap to the presumed utilization and/or development of the land category is restricted to a significant under-improvement or under-utilization of the parcel.	-50%
<i>UN-BUILDABLE</i>	The shape or size problem is so severe that it renders the land category unuseable and/or unbuildable for the presumed utilization. A typical example would be an undersize lot subject to minimum zoning restrictions which effectively prevent any economical utilization.	-90%

Code 5 Economic

Economic land influence factor is normally a negative adjustment to recognize the loss of value due to either (a) influence from outside the property which is considered detrimental to the property value . . . heavy traffic influences, aircraft traffic noise, undesirable nuisances adjacent to the property, commercial or industrial encroachment; or (b) economic variations within a given neighborhood.

ECONOMIC INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	No significant adverse economic influence or neighborhood variation affects the property.	None
<i>Minor</i>	An adverse economic influence exists which represents a moderate loss of desirability to the property. Example: Lots on streets subject to heavy through traffic.	-20%
<i>Major</i>	Normally this selection would be applicable to a major value level variation in a given neighborhood. Example: A cluster of low value structures within a neighborhood of moderate to high price homes.	-50%
<i>UN-BUILDABLE</i>	The economic influence is so severe that it precludes any but token utilization of the property. Example: Small lot, zoned residential, located adjacent to a large industrial plant with heavy truck traffic and noxious fumes.	-90%

Code 6 Restrictions

A negative land influence adjustment for restrictions is applicable for cases where the property is subject to a legal or physical restriction to its utilization. Typical examples would include -

utility easements, such as power lines and sewer lines; zoning or deed restrictions to the property, limiting the utilization to a less than normal use for typical lots in the neighborhood; physical barriers to the property, such as bridges, highway medians, fence or abutments.

RESTRICTIONS INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	No significant restriction to the property exists.	None
<i>Minor</i>	A restriction of moderate significance, legal or physical, exists which causes the property to be less desirable than similar lots in the area which are not subject to this restriction, but does not prevent utilization of the property for the presumed use.	-20%
<i>Major</i>	A restriction of major significance, legal or physical, exists which causes the property to be restricted to a less than full utilization compared to similar lots in the area which are not subject to this restriction. Example: Power lines bisect the lot, preventing the building of a dwelling, but still suitable for a garage or secondary structure.	-50%
<i>UN-BUILDABLE</i>	A restriction of very severe impact, legal or physical, exists which causes the property to be rendered virtually un-buildable or unuseable for any significant utilization compared to similar lots in the area which are not subject to this restriction. Example: Lot rendered non-accessible by a highway right-of-way.	-90%

Code 7 Economic Mis-Improvement

This category is reserved as a reviewer's judgment of the comparative loss of value due to the presence of a structure which represents an economic mis-improvement to the land (either under-improvement or over-improvement). In essence, this judgment is expressing the appraiser's opinion that the existing structure represents an encumbrance to the full utilization of the land.

The application of a mis-improvement factor for Residential/Agricultural property is possible, but very rare. Most instances occur in Commercial or Industrial situations where market evidence indicates a different economic utilization of the land than the current utilization. It is important to recognize in the application of economic mis-improvement factors that the land is presumed to be valued on the basis of typical "highest and best" utilization and the existing structure is non-contributory to this most economical utilization. Obviously, vacant tracts are not encumbered by any structure; therefore, vacant tracts are not subject to economic mis-improvement factors.

Further, the appraiser should recognize that the economic mis-improvement condition is "curable," i.e., if the structure is removed, the previously applied economic mis-improvement factor is normally no longer applicable.

Typical examples include dwellings in areas converting to commercial development; gross under-improvement, such as an old warehouse located in an area where market evidence indicates modern office complex development.

ECONOMIC MIS-IMPROVEMENT INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	The property is unimproved (no major structures present) or the existing structure is consistent with the economical utilization of the land.	None
<i>Minor</i>	The land is encumbered with a structure that represents an economic mis-improvement and the structure has an assigned value of 20% to 30% of the land value at highest and best use.	-20%
<i>Major</i>	The land is encumbered with a structure that represents an economic mis-improvement and the structure has an assigned value of 50% or more of the land value at highest and best use.	-50%
<i>UN-BUILDABLE</i>	Not applicable.	N/A

Code 8 Frequent Flooding

This category is reserved for application to those parcels subject to a loss of value due to the potential for periodic flooding when compared to similar lots in the area where this problem does not exist. Typically, this is an appraisal judgment recognizing the degree of loss of value from "none" to rendering the parcel "un-buildable" for parcels in flood plain areas.

FREQUENT FLOODING INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	The property is not subject to any potential flooding.	None
<i>Minor</i>	The property is subject to potential flooding at rare or infrequent intervals which does not prevent development, but represents a potential hazard. Example: Land lying in a 10 year flood plain.	-20%
<i>Major</i>	The property is subject to potential flooding at a frequency which should or does limit the development of the property to seasonal and/or marginal utilization.	-50%
<i>UN-BUILDABLE</i>	The property is subject to potential flooding to a degree of frequency and severity that it is not prudent nor possible to utilize the land for permanent structures. Example: Reserved ponding or run-off area adjacent to lakes or rivers.	-90%

Code 9 Corner and/or Alley Influence

This category is reserved for the recognition of the enhancement in land value attributable to the potential utilization of a corner lot, over and above the value of an otherwise comparable inside lot. The enhancement due to the presence of a rear or side alley is normally common to all lots in a given area or block. Therefore, recommended procedure for enhancement due to alley influence, if any, is to consider this factor in the land rate itself.

The amount of enhancement, if any, to a corner lot must be based on the individual merits of each corner location.

Normally, corner influence is not applicable to residential/agricultural property. Corner influence factors should be applied only to those cases of commercial or industrial property where the corner is an actual enhancement to the land.

CORNER and/or ALLEY INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	The presence of a corner or alley has no significant enhancement effect on the property. Example: The side street has restricted access as a dead-end street.	None
<i>Minor</i>	The lot value is moderately enhanced by the presence of corner or alley exposure. Example: Intersection of two secondary streets or a major arterial street and a secondary street.	+10%
<i>Major</i>	The lot value is significantly enhanced by the presence of corner or alley exposure. Example: The intersection of two major arterial streets.	+25%

Code 10 View Influence

This factor is normally a positive adjustment for lots or parcels where the land value is significantly enhanced by the presence of a scenic or waterfront view - when compared to similar lots in the area where no significant view is present.

It is highly recommended that the appraiser exercise due caution in the application of view influence. It is useful to remember that while the subject property may have an appealing view, if this condition is common to most parcels in the area, then comparatively there is probably no real view enhancement. The appraiser should also consider the permanency of the view, i.e., the probability of potential obstruction.

VIEW INFLUENCE FACTOR GUIDE

	Condition	Factor
<i>Normal</i>	The property has no significant view or the view is considered so common to the area that market evidence indicates no actual value enhancement exists.	None
<i>Minor</i>	The subject property has a moderate enhancement due to an appealing view. Example: The subject parcel has an enhancing view not common to other lots in the area, but the view is partially or potentially obstructed by other structures.	+10%
<i>Major</i>	The subject property has a significant enhancement due to an appealing view. Further, the view enhancement is not common to similar lots in the area and there is little or no potential for obstruction of the view by other structures. Example: The subject lot has a desirable waterfront view (but not actually a waterfront lot) and no likelihood exists for structures to be built which obstruct the view.	+25%

Special Cases

Multiple Building Lots

Parcels with a large number of platted, developed, potentially buildable and saleable lots normally have a more lengthy sell-out period than individual lots.

It is recommended that the appraiser give consideration to the possible value reduction of the potential market value of a group of lots as a single entity - compared to the potential market value of a single lot.

This recommendation should *not be* construed as recommending the application of an arbitrary or mechanical "Developers Discount." This procedure would be inconsistent with the general requirement of market value, and should not be applied.

If prudent analysis indicates an actual loss of value to parcels with multiple building lots compared to single lots, the appraiser should apply an appropriate adjustment in the category "Code 4 - Shape/Size."

LAND INFLUENCE FACTOR GUIDE

Influence Type	Condition			
	<i>Normal</i>	<i>Minor</i>	<i>Major</i>	<i>Un-Buildable/Un-Useable</i>
Code 1 Un-Improved	N/A	N/A	N/A	-90% (paper streets)
Code 2 Excessive Frontage	Residential — reduce excess portion by 50% factor Commercial/Industrial — normally N/A			
Code 3 Topography	0	-20%	-50%	-90%
Code 4 Shape/Size	0	-20%	-50%	-90%
Code 5 Economic	0	-20%	-50%	-90%
Code 6 Restrictions	0	-20%	-50%	-90%
Code 7 Economic Mis-Improvement	0	-20%	-50%	N/A
Code 8 Frequent Flooding	0	-20%	-50%	-90%
Code 9 Corner and/or Alley	Residential — N/A Commercial —			
	0	+10%	+25%	N/A
Code 10 View Influence	0	+10%	+25%	N/A

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TYPICAL ABBREVIATIONS

SKETCH

1 ^s Fr	— One Story Frame
1 ^s Br	— One Story Brick
1 ^s Stn	— One Story Stone
1 ^s CB	— One Story Concrete Block
1 ^s Stucco	— One Story Stucco
1½ ^s Fr	— One and One Half Story Frame
2 ^s Fr	— Two Story Frame
2½ ^s Br	— Two and One Half Story Brick
OFP	— Open Frame Porch
OMP	— Open Masonry Porch
OBP	— Open Brick Porch
EFP	— Enclosed Frame Porch
EMP	— Enclosed Masonry Porch
EBP	— Enclosed Brick Porch
<u>OFP</u> B	— Open Frame Porch With a Basement
<u>EFP</u> <u>1^sBr</u> B	— Enclosed Frame Porch Over a One Story Brick With a Basement
<u>A</u> <u>1^sFr</u> B	— Attic Over a One Story Frame With a Basement
MP	— Masonry Patio
MS	— Masonry Stoop
Fr CP	— Frame Carport
Br CP	— Brick Carport
BG	— Brick Garage
FG	— Frame Garage
Stn G	— Stone Garage
<u>1^sFr</u> BG	— One Story Frame Over a Brick Garage
Wd Dk	— Wood (sun) Deck
1 ^s Fr OH	— One Story Frame Overhang

LAND AND LEGAL DESCRIPTIONS

Ac	— Acre
Acg	— Acreage
Act Frt	— Actual Frontage
175' Av	— 175 Foot Average
Bk	— Book
CI	— Corner Influence
Calc Acg	— Calculated Acreage
Dist	— District
Eff Frt	— Effective Frontage
Eff D	— Effective Depth
EMF	— Economical Misimprovement Factor
Esmt	— Easement
F 33'	— Figured Frontage of 33 feet
FR 56'	— Figured Rear Frontage of 56 feet
Frt	— Frontage
HS	— Home Site
IF	— Influence Factor
Imp	— Improvement
Irr	— Irregular
LI	— Land Improvement
L & B	— Land and Buildings
Mp	— Map
Par	— Parcel
Pg	— Page
Prop	— Property
R 75'	— Rear Frontage of 75 feet
Rd	— Road
R. O. W.	— Right-of-way
Rtg No	— Routing Number
St	— Street

Swr	— Sewer
Till	— Tillable
Topo	— Topography
Tw n	— Town
Twp	— Township
UD	— Undeveloped
UI	— Unimproved
Utl	— Utility
Vill	— Village
Wd Lnd	— Woodland
Wtr	— Water
XF	— Excessive Frontage
XD	— Excessive Depth
Zng	— Zoning

MEASUREMENTS AND SYMBOLS

Ac	— Acre
Acg	— Acreage
Bd Ft	— Board Feet
BPD	— Barrels-Per-Day
Brl	— Barrel
BTU	— British Thermal Unit
Bu	— Bushel
Cap	— Capacity
C/F or Cu/Ft	— Cubic Feet
Dbl	— Double
Dia	— Diameter
Ea	— Each
Ft	— Feet

Ga	— Gauge
Gal	— Gallon
GPD	— Gallons-Per-Day
Ht	— Height
Lb	— Pound
L/F or Lin Ft	— Lineal Feet
No	— Number
o.c.	— On Center
S/F or Sq Ft	— Square Feet
31 ⁶	— 31 feet, 6 inches
Yd	— Yard
◻	— Square Feet
φ	— Cubic Feet
<u>s</u>	— Story
# (xx)	— Number
(xx) #	— Pounds
°	— Degree
'	— Feet (or minutes)
"	— Inches (or seconds)
+	— Plus
—	— Minus
±	— Plus or Minus
x	— Times or By
=	— Equals
>	— Is Greater Than
<	— Is Less Than
π	— Pi (3.1416)
∞	— Infinity
@	— "AT," eg. 10 lbs. @ 1.00/lb.
	— Parallel
∟	— Angle
∠	— Angles

□	— Channel
▣	— Channels
/	— Per, eg. Price/Lb.

ARCHITECTURAL

Apt	— Apartment
Art	— Artificial
Asb	— Asbestos
Att	— Attached
Bldg	— Building
Bsmnt	— Basement
BT Pav	— Black Top Paving
CB	— Concrete Block
Clg	— Ceiling
Cmt	— Cement
Col	— Column
Com	— Common
Comp	— Composition
Conc	— Concrete
Const	— Construction
Dbl	— Double
DH	— Double Hung
Dk	— Deck
Dkg	— Decking
Drs	— Doors
DP	— Double Pitch
D & M	— Dressed and Matched
Dwg	— Dwelling
Elec	— Electric
Elev	— Elevators

Equip	— Equipment
Excav	— Excavation
Excl	— Excluding
Ext	— Exterior
Fibr Gls	— Fiberglass
Fin	— Finish
Fixt	— Fixtures
Flr	— Floor
Flrg	— Flooring
Ftg	— Footing
Fdtn	— Foundation
Fr	— Frame
Frt	— Freight
Galv	— Galvanized
GI	— Galvanized Iron
Gar	— Garage
Gls	— Glass
H Col	— H Column
Hd Wd	— Hardwood
Htr	— Heater
Htg	— Heating
HT	— Hollow Tile
Horiz	— Horizontal
HP	— Horse Power
Hse	— House
I Bm	— I Beam
Incl	— Including
I.D.	— Inside Diameter or Identification
Int	— Interior
Int Fin	— Interior Finish
I-Com	— Intercom System
Jst	— Joist

Lam — Laminated
Ldg — Landing
L & P — Lath and Plaster
Lav — Lavatory
L & O — Lead and Oil
Lt — Light
Ltg — Lighting
Lts — Lights
Linol — Linoleum
Mach — Machine
Mas — Masonry
Mech — Mechanical
MF — Mechanical Features
Met — Metal
Mezz — Mezzanine
Misc — Miscellaneous
Mono — Monolithic
Obsol — Obsolete, Obsolescence
Ofc — Office
o.c. — On Center
1 E — One End
1 S — One Side
OF — Other Features
OD — Outside Diameter
OH — Overhead or Overhang
Pnt — Paint
Par — Parapet
Pt — Part
Ptn — Partition
PW — Party Wall
Pass — Passenger
Pav — Paving
Pil — Pilaster
Plk — Plank

Plstr — Plaster
Plstrd — Plastered
Plbg — Plumbing
Pch — Porch
Purl — Purlin
Rec Room — Recreation Room
Rftr — Rafter
RR — Railroad
Refrig — Refrigerated
Rein — Reinforced
Rein Conc — Reinforced Concrete
Ret Wl — Retaining Wall
Rf — Roof
Rfg — Roofing
Rm — Room
Shtg — Sheathing
Sdg — Siding
SP — Single Pitch
SS — Slop Sinks
Sprink — Sprinkler
Sq — Square
Strs — Stairs
Std — Standard
Stdg — Standing
Stm — Steam
Stl — Steel
Stl Pl — Steel Plate
Stge — Storage
Sup — Supports
Sys — System
T & G — Tar and Gravel
 or Tongue and Groove
Terr — Terrace
Tbr — Timber

Toil	— Toilet
TR	— Toilet Room
Unfin	— Unfinished
Urin	— Urinal
Ven	— Veneer
Vent	— Ventilator
Vit	— Vitrified
VT	— Vitrified Tile
Wsct	— Wainscot
Whse	— Warehouse
w c	— Water Closet
WP	— White Pine
WF	— Wide Flange
Wind	— Window
Wir	— Wiring
Wd	— Wood
Wb Fp	— Woodburning Fireplace
Yd	— Yard
YP	— Yellow Pine

GENERAL

Agr	— Agriculture
Assmt	— Assessment
Av	— Average
CDU	— Condition, Desireability, Usefulness
C & D	— Cost and Design
Comm	— Commercial
Depr	— Depreciation
EDP	— Electronic Data Processing
Est	— Estimate(d)

Ex	— Exempt or Excellent
Excl	— Excluding
Gr	— Grade
I & E	— Income and Expense
Incl	— Including
Ind	— Industrial
LDS	— Live Data System
N/A	— Not Applicable
N/C	— New Construction
NF	— Nothing Furnished
NV	— No Value
Obsol	— Obsolete or Obsolescence
PIF	— Priced In Field
PP	— Personal Property
PRC	— Property Record Card
PU	— Public Utility
RC	— Replacement Cost
RCLD	— Replacement Cost Less Depreciation
Res	— Residential
RV	— Replacement Value
Sched	— Schedule
SV	— Sound Value or Site Value
T or Tot	— Total
UF	— Utilities Furnished or Unfinished
Utl Val	— Utility Value
Val	— Value

ARCHITECTURAL TERMS

apartment hotel	a building designed for non-transient residential use, divided into dwelling units similar to an apartment house, but having such hotel accommodations as room furnishings, lounges, public dining room, maid service, etc.
apartment house	a multi-family residence containing three or more non-transient, residential living units and generally providing them with a number of common facilities and services.
attic	an unfinished or semi-finished portion of a building lying between the highest finished story and the roof and wholly within the roof framing.
basement	a building story which is wholly or partly below the grade level.
bay	(1) a horizontal area division of a building usually defined as the space between columns or division walls. (2) an internal recess formed by causing a wall to project beyond its general line.
bay window	a window, or group of continuous windows, projecting from the main wall of a building.
beam	a long structural load-bearing member which is placed horizontally or nearly so and which is supported at both ends or, infrequently, at intervals along its length.
beam, spandrel	a wall beam supporting the wall above, as well as the floor.
building	any structure partially or wholly above ground which is designed to afford shelter to persons, animals, or goods. See also "construction."
building, fireproof	a building in which all parts carrying loads or resisting stresses and all exterior and interior walls, floors, and staircases are made of incombustible materials, and in which all metallic structural members are encased in materials which remain rigid at the highest probable temperature in case its contents are burned, or which provide ample insulation from such a temperature.
building, loft	a building having three or more stories with few or no interior bearing walls and designed for storage, wholesaling, or light industrial purposes.

building (cont.)

building, single-purpose	a building designed for a specific purpose which cannot be used for another purpose without substantial alterations; e.g., a theater or church.
bungalow	a one-story dwelling unit which is somewhat more pretentious than a cottage.
column	a structurally isolated vertical member which is at least 8 to 10 times as long as its least lateral dimension and which is designed to carry loads. Compare "pier."
conduit	a tube, pipe, or small artificial tunnel used to enclose wires or pipes or to convey water or other fluids.
construction, brick	a type of construction in which the exterior walls are bearing walls (q.v.) made of solid brick or brick and tile masonry.
construction, brick veneer	a type of construction in which the exterior walls are one-layer brick curtain walls backed by a wood frame.
construction, fireproof	see "fireproof building."
construction, mill	a type of construction in which the exterior walls are substantial masonry bearing walls, in which the structural members are of heavy timber, and which is further characterized by an open design and by other safeguards against fire hazards. Sometimes called "Slow-Burning Construction."
construction, reinforced concrete	a type of construction in which the principal structural members, such as the floors, columns, beams, etc., are made of concrete poured around isolated steel bars or steel meshwork in such manner that the two materials act together in resisting forces.
construction, steel frame	a type of construction in which there is a framework of steel structural members for the support of all loads and the resistance of all stresses.
construction, wood frame	a type of construction in which there is a framework of wooden structural members for the support of all loads and the resistance of all stresses. Loosely called "Frame Construction."

coping	a special capping at the top of a wall, serving principally as a watershed.
cornice	a projecting element at the top of a wall, serving principally as a decoration or as part of the coping (q.v.).
cottage	a one-story to two-story dwelling unit of small size and humble character.
course	a uniform horizontal layer of brick, stone, terra cotta, shingles, or some other structural material, extending continuously around a building or along a wall.
court	an open space bordered on two or more sides by the walls of a single building, or of two or more buildings, and by a lot line or a yard on any side not so bordered.
dormer	(1) a relatively small structure projecting from a sloping roof. (2) a window set upright in the face of such a structure.
dwelling	any building or portion thereof designed or occupied in whole or in part as a place of residence.
dwelling, attached	a multi-family dwelling in which the dwelling units are separated vertically by means of common or party walls. See "terrace."
dwelling, double	a two-family dwelling in which the dwelling units are separated vertically, by means of a common or party wall. Synonymous with "Semi-detached Dwelling."
dwelling, duplex	a two-family dwelling in which the two dwelling units are separated horizontally with a private street entrance for each; i.e., a two-family flat.
dwelling, multi-family	a building designed as a place of residence for more than two families or households; e.g., an apartment house or tenement.
dwelling, row	any one of a series of similar single-family, two-family, or multi-family dwellings having one or more contiguous common, or party walls. Compare "Terrace"; "Dwelling, Double."
dwelling unit	any room or group of rooms designed as the living quarters of one family or household, equipped with cooking and toilet facilities, and having an independent entrance from a public hall or from the outside.

eaves	the portion of a sloping roof which projects beyond the outside walls of a building.
elevation	a drawing representing a projection of any one of the vertical sides or vertical cross-sections of a building or of any other object. Compare "plan."
facade	the face of a building.
firewall	a wall of fire-resisting material erected between two parts of a building to prevent the spread of fire from one part to the other.
flashing	small metal strips used to prevent leaking of roofs around chimneys, dormers, hips and valleys.
flat	(1) any one floor of a building two or more stories high each floor of which constitutes a single dwelling unit and has a private street entrance. (2) the building containing two or more such floors. Compare "Dwelling, Duplex."
footing	a spreading base to a wall, column, or other supporting member, which serves to widen the ground area to which structural loads are transmitted.
foundation	the structural members below grade level, or below the first tier of beams above grade level, which transmit the load of a superstructure to the ground.
gable	(1) the triangular portion of a wall between the slopes of a double-sloping (i.e., gable) roof. (2) the whole of the wall containing such a triangular portion. (3) a portion of a building extending from the remainder of the building and covered with a gable roof.
girder	a large or principal beam (q.v.) used to support concentrated loads at isolated points along its length. (Girders usually support the beams and structure above).
header	(1) a structural member which is laid perpendicularly to a parallel series of similar members and against which the latter members abut. (2) a brick or other piece of masonry which is laid in a wall in such manner that its longest dimension extends along the thickness of the wall. Contrast "Stretcher."

hip	(1) a sloping line along which two roof surfaces meet to form an external angle of more than 180 degrees. (2) a hip rafter (q.v.) Compare "Ridge"; "Valley."
hotel	a building designed for transient or semi-transient residential use, divided into furnished single rooms and suites, and having such accommodations as lounges, public dining rooms and maid service, etc.
hotel, apartment	see "Apartment Hotel."
joist	one of a series of small parallel beams laid on edge and used to support floor and ceiling loads, and usually supported in turn by larger beams and girders.
lintel	a beam over a wall opening, such as a door or windows, designed to carry the load of the wall over such opening.
loft	an unpartitioned or relatively unpartitioned upper story of a building, designed for storage, wholesaling, or light manufacturing. See also "Loft Building."
louver (or louvre)	a ventilator containing slats which are placed lengthwise across the ventilator opening, each slat being slanted in such manner as to overlap the next lower slat and to permit ventilation but exclude rain.
marquise	a flat roof-like structure which shelters a doorway, which has no floor beneath it, and which is usually supported wholly from the walls or the building.
mezzanine	a low story formed by placing a floor between what would ordinarily be the floor and ceiling of a high story. <i>Note</i> the mezzanine floor frequently has a smaller area than other floors and, if present at all, is usually between the first and second stories.
millwork	all of the wooden portions of a building, whether frame construction or otherwise, which are customarily purchased in finished form from a planing mill, such as doors, windows, trim, balusters, etc.
overhang	a finished portion of a building having full story height which extends beyond the foundation wall line if part of the ground story, or beyond the exterior walls of the ground story if part of any higher story.

overhead structure	similar to overhang above ground story, as O.H. bridge or passage, O.H. walk, O.H. Addition.
partition	see "Wall, Partition."
pier	(1) a thick, solid mass of masonry which is fully or partially isolated from a structural standpoint and which is designed to transmit vertical loads to the earth. (2) a structure projecting from land into water for use in loading and unloading vessels. Compare "Column."
pilaster	a flat-faced pillar projecting somewhat from, but engaged in, the wall of a building and used for decorative purposes or to help support truss and girder loads or both.
pile	a heavy timber, metallic, or masonry pillar forced into the earth to form a foundation member.
pitch	the slope of any structural member, such as a roof or rafter, usually expressed as a simple fraction representing the rise per lateral foot.
plan	a drawing representing a projection of any one of the floors or horizontal cross-sections of a building or of the horizontal plane of any other object or area. Compare "Elevation."
purlin	a beam running along the underside of a sloping roof surface and at right angles to the rafters, used to support the common rafters, and usually supported in turn by larger structural members, such as trusses or girders (usually run along length of building).
rafter	a structural member placed, as a rule, in a sloping position and used as the supporting element for the structural material forming the plane of the roof. See also "Purlin."
rafter, hip	a rafter placed in an inclined position to support the edges of two sloping roof surfaces which meet to form an external angle of less than 180 degrees.
rafter, valley	a rafter placed in an inclined position to support the edges of two sloping roof surfaces which meet to form an external angle of less than 180 degrees.

ramp	an inclined plane connecting two different floor levels and used in lieu of steps.
residence	see "Dwelling."
ridge	a horizontal line along which the upper edges of two roof surfaces meet to form an external angle of more than 180 degrees. Compare "Hip"; "Valley."
rise	(1) in general, any vertical distance. (2) specifically, the rise of a roof, being the distance between the top of an exterior wall and the peak of the roof; the rise of a stair, being the distance from tread to tread.
roof	the top portion of a structure. Types of roofs include double-pitch, flat, gable, gambrel, hip, lean-to, single-pitch.
roof, curb (or curbed)	a roof in which the pitch of the upper part of a sloping side is less than the pitch of the lower part.
roof, flat	a roof which is flat or sloped only enough to provide proper drainage.
roof, gable	a double-sloped roof having a cross section similar in general to the shape of the inverted letter "V".
roof, gambrel	a curbed gable roof
roof, hip (or hipped)	(1) in general, any roof having one or more hips (q.v.) (2) usually, a roof with four sloping sides meeting along four hips or along four hips and a ridge. Compare "Roof, Pyramid."
roof, lean-to	(1) a roof having a single sloping side which is supported at the upper edge by the wall of an attached building or of a larger and higher portion of the same building (preferred). (2) any roof with a single slope. Compare "Roof, Flat."
roof, mansard	a special type of curb roof (q.v.) in which the pitch of the upper part of each of the four equally sloping sides is small or negligible and that the lower part very great, and from the lower part of which a series of dormers project.
roof, monitor	a type of gable roof, commonly found on industrial buildings, having a small raised portion along the ridge with openings for the admission of light and air.

roof, pyramid	a hip roof having four sloping triangular sides, usually of equal pitch, meeting together at the peak.
roof, ridged	a roof having one or more ridges (q.v.).
roof, saw tooth	a roof with a series of parallel sloping surfaces interspersed between a series of vertical surfaces which rise from the lower edges of such sloping surfaces and which contain windows for the admission of light and air.
roof, single pitch	any roof with a single slope other than a lean-to roof.
sash	the wooden or metal framework in which the glass of a door or window is set.
sheathing	the covering, usually of rough lumber, placed immediately over studding or rafters.
sill	(1) the lower horizontal part of a door-case (the threshold) or of a window. (2) the lowest horizontal structural member of a frame building, upon which the superstructure is supported.
sleeper	a structural member laid horizontally on the ground or upon a masonry base as a support to a floor or other superstructures.
specifications	a detailed description of the dimensions, materials, quantities, structural procedures, etc. applicable to a projected or completed piece of construction.
story	that portion of a building enclosed by a floor, a ceiling, and the exterior walls.
story, ground	the first story lying wholly above the ground level. Synonymous with "First Story."
story, half (or one-half)	(1) for buildings with a mansard or gambrel roof, a finished portion of a building which lies above the wall plate or cornice and which has a usable floor area substantially less than that of the next lower story. (2) for all other buildings, a finished portion of a building which is above one or more full stories, which is wholly or partly within the roof frame and which has one or more exterior walls substantially lower than the full height of the story.
story, one	a building having no finished story above the ground story.

stretcher	a brick or other piece of masonry which is laid lengthwise in a wall. Contrast "Header."
strut	any structural member which holds apart two or more other members by counteracting a pressure which tends to bring them together. Contrast "Tie."
stud	one of a series of small slender structural members placed vertically and used as the supporting element of exterior or interior walls. (Plural - "Studs" or "Studding.")
subfloor	the flooring laid directly on top of the floor joists but beneath the finish floor.
tenement	a building, usually of obsolete nature, designed primarily for non-transient residential use and divided into three or more dwelling units having common stairs, halls, and street entrances, and sometimes common bath and toilet rooms. Compare "Apartment House"; "Flat"; "Terrace."
terrace	(1) an unroofed level area covered with grass or masonry or both, raised above the surrounding ground level, and having a vertical or sloping front. (2) a multi-family dwelling in which the dwelling units are separated vertically by means of common or party walls. Compare "Dwelling, Row"; "Dwelling, Double."
terra cotta	a hard-baked pottery molded into decorative tiles, bricks, etc. and used particularly for facing and trim on buildings.
tie	any structural member which binds together two or more members by counteracting a stress which tends to draw them apart. Contrast "Strut."
trim	(1) the wooden portions of a plastered room, such as the doors, windows, wainscoting, and molding, or the corresponding portions of a room finished otherwise than with plaster. (2) the contrasting elements on the exterior of a building which serve no structural purpose but are intended to enhance its appearance; e.g., the cornice. (3) occasionally, the hardware of a house, such as locks, hinges, doorknobs, etc.
truss	a combination of structural pieces fastened together into a rigid open member which is supported at both ends and upon which loads are superimposed. Compare "Girder."

valley	a sloping line along which two roof surfaces meet to form an external angle of less than 180 degrees. Compare "Hip"; "Ridge."
veneer	a thin ornamental or protective facing which does not add appreciably to the strength of the body to which it is attached.
wainscot (or wainscoting)	(1) a wooden facing on the lower portion of a contrasting interior wall. (2) by extension, a facing of marble tile, or the like, on the lower portion of interior walls.
wall	a vertical structure serving to enclose, support, divide; as one of the vertical enclosing sides of a building or room.
wall, bearing	a wall designed primarily to withstand vertical pressure in addition to its own weight.
wall, common	a wall owned by one or two parties and jointly used by both, one or both of whom is entitled to such use under the provisions of ownership.
wall, curtain	a non-bearing wall which is supported by columns, beams, or other structural members, and whose primary function is to enclose space.
wall, fire	see "Firewall."
wall, partition	an interior bearing or non-bearing wall which separates portions of a story. Synonymous with "Partition."
wall, party	a wall jointly used by two parties under easement agreement and erected at or upon a line separating two parcels of land held under different ownership.
wall, retaining	a wall designed primarily to withstand lateral pressures of earth or other filling or backing deposited behind it after construction.
window, bay	see "Bay Window."
window, dormer	see "Dormer."
wing	a subordinate part of a building extending from the main part, or any one of two or more substantially co-ordinate parts of a building which extend out from one or more common junctions.

DATA PROCESSING TERMS

BAUD	A unit of signalling speed equal to the number of discrete conditions or signal events per second.
binary	A characteristic or property involving a selection, choice, or condition in which there are two possibilities, such as the number representation with a radix of two.
bits	The smallest unit of information in the binary number system. An abbreviation of binary digits. Normally, a bit refers to one "on", while a no bit means zero "off".
block	A group of machine words considered or transported as a unit. In flowcharts, each block represents a logical unit of programming.
bytes	A sequence of adjacent binary digits operated upon as a unit; a unit of computer storage capacity equal to eight binary bits.
calculator	A keyboard machine for the automatic performance of arithmetic operations.
CAMA	Computer-Assisted Mass Appraisal — Utilizing data processing to compare parcels, calculate values, and maintain property characteristics to increase efficiency and accuracy in the appraisal process.
columns binary	Pertaining to the binary representation of data on punched cards in which adjacent positions in a column correspond to adjacent bits of data; each column in a 12-row card may be used to represent 12 consecutive bits of 36-bit word.
computer	A computational device distinguished by its high speed, programmable operation, and large memory.
computer program	A series of instructions, in a form acceptable to the computer, prepared so as to achieve a certain result.
CPU	Central Processing Unit — The heart of the computing system, which contains the arithmetic, logical, and control circuits necessary for the interpretation, execution of a program and controls the functioning of the entire system.
CRT	See video display terminal.
data base	A minimally redundant stored collection of data. A collection of data maintained by a computer.

data base management	A combination of hardware and software that controls and processes all requests for data in data bases.
data element	The smallest unit of data stored on some medium to which a reference or none may be assigned.
data entry	The process of placing information into machine-readable form.
data path	The input-processing-output flow followed by data (often repeatedly) during normal computer operations.
data processing	Performing operations on machine-readable data, either with or without the use of a computer.
data structure	The particular form in which data are to be treated by the computer program: whether as whole numbers, decimal fractions, or alphabetic characters, and whether as single pieces of information or as related sets or arrays of data.
data verification	Checking the accuracy of data that has been placed into a data processing system.
direct access	An addressing scheme or random access storage medium that permits direct addressing of data locations.
disk file	A means for storing data on a magnetic disk or platter.
encode	To apply a set of rules specifying the manner in which data may be represented such that a subsequent decoding is possible.
feedback	The process of returning portions of the output of a machine, process, or system for use as input in a further operation.
flowchart	A graphical representation of the definition, analysis, or solution of a problem using symbols to represent operations, data flow, and equipment.
hard copy	Output that appears on paper.
hardware	The physical equipment in a data processing system.
indexed sequential	A file in which records are organized sequentially with indexes that permit quick access to individual records as well as rapid sequential processing.

kilobytes	(kilo = 1000, bytes = characters) byte: A form of saying a character — numerical, letter, or symbol, in machine-readable form. Data processing personnel measure the size of records by bytes, instead of number of characters. Exactly, a kilobyte (KB or K) has 1,024 “characters”.
library	A collection of standard proven computer routines, usually kept on a library tape or random access file, by which problems or portions of problems may be solved.
master file	A file of records containing a cumulative history or the results of accumulation; updated in each file processing cycle, and carried forward to the next cycle.
megabyte	(< 1 million bytes) This unit is quite large and is usually used to measure the volume of a file, a disc, etc.
memory	The part of the computer that stores the program, holds intermediate results, and various constant data. Same as storage.
modem	A contraction of “Modulator Demodulator.” Its function is to interface with data processing devices and convert data to a form compatible for sending and receiving on transmission facilities.
MRA	Multivariate Regression Analysis — Also called the least squares method, is a mathematical method for producing a model for a dependent variable as a linear function of independent factors. As an example — the predicted sales price (dependent variable) is a function of independent factors such as Square Feet, Style, Neighborhood, etc.
multiplexor	A computer hardware device used as a screening agent to the main computer. It polls all the messages from all terminals and transmits one by one to the main computer. It also dispatches “messages” to receiving ends. . . it can be compared to the secretary of a big boss!
multiprocessing	Systems software that enables several CPU's to be connected together to provide faster, more reliable computing.
multiprogramming	Systems software that enables the computer to run several programs simultaneously.
on-line	Peripheral equipment or devices in direct communication with the central processing unit, and from which information reflecting current activity is introduced into the data processing system as soon as it occurs.

operating system	The systems software that manages all other software in the computer (also known as an executive or monitor).
operator's instructions	These are sets of operation instructions which tell the operator what to do to get the jobs done on the computer. The instructions are designed for two types of operators: 1. Computer operators — run the computer, execute a job, mount a tape, etc. 2. Use operators — run different applications such as payroll, CAMA. The instructions tell them how to add a new record, delete a word, on a terminal or using cards.
output	Information that has been processed by the computer.
peripheral equipment	Units that work in conjunction with the computer, but are not part of the computer itself, such as tape reader, card reader, magnetic tape feed, high-speed printer, typewriter, etc.
printer	Hardware for outputting on paper.
program	The instructions that enable a computer to process data.
programming language	A system for coding instructions for computer processing.
punched cards	A storage medium similar to index cards.
random access	For device or media, the accessing of data by address rather than by sequence.
record	A collection of related items of data treated as a unit.
sequence	An arrangement of items of data according to a specified set of rules.
sequential processing	The procedure of processing data records in the same order that they occur.
sequential storage	Storing of data in sequential order.
software	The programs and routines used to extend the capabilities of computers, such as compilers, assemblers, routines, and subroutines. Also, all documents associated with a computer, e.g., manuals, circuit diagrams.
source	That which provides information to be entered into the computer.

source document	A form containing raw data for entry into the computer.
source file	A computer program in high-level language code.
standard deviation	A statistical measure of the variation of a characteristic about its average value. Standard deviation is the square root of the variance of a characteristic about its average observed value. Variance is the sum of the squared deviations of each observed value from the average, divided by one less than the number of observations. For normally distributed observations, approximately 70% of the observations will fall within one standard deviation of the mean or average value.
storage	The retention of information in the computer system.
summary report	Output that displays only the end product of processing in a concise format.
system software	Computer software that provides overall housekeeping functions for the computer.
systems design	The development of a computer system (hardware and software) to suit a particular application, by using the program development cycle.
terminal	A device in a system or communication network at which point data can either enter or leave the system.
transaction file	A file containing transient data to be processed in combination with a master file.
turn-around document	A document or form prepared as output at one stage of the data processing cycle, and sent to a customer or other user with the intention of having it returned and used as input at a later stage.
unit record	A record in which all data concerning each item in a transaction is punched into one card.
variable	A quantity that, when identified by a symbolic name, can assume any of a given set of values.
verify	To determine whether a transcription of data or other operation has been accomplished accurately. To check the results of key punching.
video display terminal	Hardware for output on a television-style picture tube (cathode-ray tube or CRT).
word	A set of characters that occupies one storage location and is treated by the computer circuits as a unit and transported as such.

REAL ESTATE APPRAISAL TERMS

abstract	a computer-printed report of appraised and/or assessed values for each parcel of real property in a given taxing district; generally sequenced geographically.
accrued depreciation	see <i>depreciation</i> .
actual age	the number of years elapsed since the original construction, as of the effective valuation date. Compare with <i>effective age</i> .
ad valorem tax	in reference to property, a tax based upon the value of the property.
agricultural property	land and improvements devoted to or best adaptable for the production of crops, fruits and timber and the raising of livestock.
air rights	the right to the use of a certain specified space within the boundaries of a parcel of land and above a specified elevation.
alley influence	the enhancement to the value of a property rising out of the presence of an abutting alley; most generally applicable to commercial properties.
amenities	in reference to property, the intangible benefits arising out of ownership, <i>amenity value</i> refers to the enhancement of value attributable to such amenities.
appraisal	an estimate, usually in written form, of the value of a specifically described property as of a specified date; may be used synonymously with <i>valuation</i> or <i>appraised value</i> .
appraisal schedules	any standardized schedules and tables used in conjunction with a re-valuation program such as replacement cost pricing schedules, depreciation tables, land depth tables, etc.
appraised value	see <i>appraisal</i> .
appraiser	one who estimates value. More specifically, one who possesses the expertise to execute or direct the execution of an appraisal.
assessed value	see <i>assessment</i> .
assessing	the act of valuing a property for the purpose of establishing a tax base.
assessment	the value of taxable property to which the tax rate is to be applied in order to compute the amount of taxes; may be used synonymously with <i>assessed value</i> , <i>taxable value</i> , and <i>tax base</i> .

assessment district	an assessor's jurisdiction; it may or may not be an entire tax district.
assessment period	the period of time during which the assessment of all properties within a given assessment district must be completed; the period between tax lien dates.
assessment ratio	the ratio of assessed value to a particular standard of value, generally the appraised value. A percentage to be applied to the appraised value in order to derive the assessed value.
assessment roll	the official listing of all properties within a given taxing jurisdiction by ownership, description, and location showing the corresponding assessed values for each; also referred to as <i>tax list</i> , <i>tax book</i> , <i>tax duplicate</i> and <i>tax roll</i> .
assessor	the administrator charged with the assessment of property for ad valorem taxes; his precise duties differ from state to state depending upon state statutes.
asthetic value	a value, intangible in nature, which is attributable to the pleasing appearance of a property.
average deviation	in a distribution of values, the average amount of deviation of all the values from the mean value, equal to the total amount of deviation from the mean divided by the number of deviations. As applied to an assessment-to-sale ratio distribution, the average amount which all the ratios within the distribution deviate from the mean ratio.
base price	a value or unit rate established for a certain specified model, and subject to adjustments to account for variations between that particular model and the subject property under appraisal.
blighted area	a declining area characterized by marked structural deterioration and/or environmental deficiencies.
Board of Equalization	a non-jurisdictional board charged with the responsibility of reviewing assessments across properties and taxing districts and to assure that said properties and districts are assessed at a uniform level either raising or lowering assessments accordingly; also referred to as <i>Board of Appeals</i> , and <i>Board of Review</i> .
building residual technique	a building valuation technique which requires the value of the land to be a known factor; the value of the buildings can then be indicated by capitalizing the residual net income remaining after deducting the portion attributable to the land.

capitalization	a mathematical procedure for converting the net income which a property is capable of producing into an indication of its current value. See <i>income approach</i> .
CDU rating	a composite rating of the overall condition, desirability, and usefulness of a structure as developed by the Cole-Layer-Trumble Company and used nationally as a simple, direct, and uniform method of estimating accrued depreciation.
central business district	the center of the city in which the primary commercial, governmental and recreational activities are concentrated.
certified assessment evaluator	a professional designation (C.A.E.) conferred by the International Association of Assessing Officers (IAAO) upon qualifying assessors.
classified property tax	an ad valorem property tax under which the assessment ratio varies for different property classes.
component part-in-place method	the application of the unit-in-place method to unit groupings or construction components. See <i>unit-in-place method</i> .
corner influence	the enhancement to the value of a property rising out of its corner location; most generally applicable to commercial properties.
cost approach	one of the three traditional approaches to value by which an indication of the value of a property is arrived at by estimating the value of the land, the replacement or reproduction cost new of the improvement, and the amount of accrued depreciation to the improvement; the estimated land value is then added to the estimated depreciated value of the improvements to arrive at the estimated property value. Also referred to as the <i>cost-to-market approach</i> to indicate that the value estimates are derived from market data abstraction and analysis.
cost factor	a factor or multiplier applied to a replacement or reproduction cost to account for variations in location and time, as well as for other elements of construction costs not otherwise considered.
cubic content	the cubic volume of a building within the outer surface of the exterior walls and roof and the upper surface of the lowest floor.
deed	a written instrument which conveys an interest in real property. A <i>quitclaim deed</i> conveys the interest described therein without warranty of title. A <i>trust deed</i> conveys interest described therein to a trustee. A <i>warranty deed</i> conveys the interest described therein with the provisions that the freehold is guaranteed by the grantor, his heirs, or successors.

depreciation	loss in value from all causes; may be further classified as <i>physical</i>, referring to the loss of value caused by physical deterioration; <i>functional</i>, referring to the loss of value caused by obsolescence inherent in the property itself; and <i>economic</i>, referring to the loss of value caused by factors extraneous to the property. <i>Accrued</i> depreciation refers to the actual depreciation existing in a particular property as of a specified date. <i>Normal</i> depreciation refers to that amount of accrued depreciation one would normally expect to find in buildings of certain construction, design, quality and age.
depreciation allowance	a loss of value expressed in terms of a percentage of replacement or reproduction cost new.
depth factor	a factor or multiplier applied to a unit land value to adjust the value in order to account for variations in depth from an adopted standard depth.
depth table	a table of depth factors.
design factor	a factor or multiplier applied to a computed replacement cost as an adjustment to account for cost variations attributable to the particular design of the subject property which were not accounted for in the particular pricing schedule used.
deterioration	impairment of structural condition evidenced by the wear and tear caused by physical use and the action of the elements, also referred to as <i>physical depreciation</i> .
economic depreciation	see <i>depreciation</i> .
economic life	the life expectancy of a property during which it can be expected to be profitably utilized.
economic obsolescence	obsolescence caused by factors extraneous to the property. Also referred to as <i>economic depreciation</i> .
economic rent	the rent which a property can be expected to bring in the open market as opposed to <i>contract rent</i> or the rent the property is actually realizing at a given time.
effective age	an age assigned to a structure based upon its condition as of the effective valuation date; it may be greater or less than the structure's actual age. Compare with <i>actual age</i> .

effective depth	in reference to property valuation, that depth, expressed in feet, upon which the selection of the depth factor is based.
effective frontage	in reference to property valuation, that total frontage, expressed in lineal feet, to which the unit land value is applied; it may or may not be the same as the actual frontage.
effective gross income	the estimated gross income of a property less an appropriate allowance for vacancies and credit losses.
effective valuation date	in reference to a revaluation program, the date as of which the value estimate is applicable.
encroachment	the displacement of an existing use by another use.
environmental deficiency	a neighborhood condition such as adverse land uses, congestion, poorly designed streets, etc. operating to cause economical obsolescence and, when coupled with excessive structural deterioration, blight.
equalization program	a mass appraisal (or reappraisal) of all property within a given taxing jurisdiction with the goal of equalizing values in order to assure that each taxpayer is bearing only his fair share of the tax load; may be used synonymously with a <i>revaluation program</i> .
equity	in reference to property taxes, a condition in which the tax load is distributed fairly or <i>equitably</i>; opposite of <i>inequity</i> which refers to a condition characterized by an unfair or <i>unequitable</i> distribution of the tax burden. <i>Inequity</i> is a natural product of changing economic conditions which can only be effectively cured by periodical equalization programs. In reference to value, it is that value of the property remaining after deducting all liens and charges against it.
excessive frontage	frontage which because of the particular utility of the lot does not serve to add value to the lot.
exempt property	see <i>tax exemption</i> .
fee appraisal	see <i>mass appraisal</i> .
field crew	the total professional staff assigned to a specific appraisal project, including listers, reviewers, staff appraisers, and clerical and administrative supporting personnel.

functional depreciation	<i>see depreciation.</i>
functional obsolescence	obsolescence caused by factors inherent in the property itself. Also referred to as <i>functional depreciation</i> .
functional utility	the composite effect of a property's usefulness and desirability upon its marketability.
grade	the classification of an improvement based upon certain construction specifications, and quality of materials and workmanship.
grade factor	a factor or multiplier applied to a base grade level for the purpose of interpolating between grades or establishing an intermediate grade.
grantee	a person to whom property is transferred and property rights are granted by deed, trust instrument, or other similar documents. Compare with <i>grantor</i> .
grantor	a person who transfers property or grants property rights by deed, trust instrument, or other similar documents. Compare with <i>grantee</i> .
gross area	the total floor area of a building measured from the exterior of the walls.
gross income	the scheduled annual income produced by the operation of a business or by the property itself.
gross income multiplier	a multiplier representing the relationship between the gross income of a property and its estimated value.
gross sales	the total amount of invoiced sales before making any deductions for returns, allowances, etc.
ground lease	a document entitling the lessee certain specified rights relating to the use of the land.
ground rent	net rent from a ground lease; that portion of the total rent which is attributable to the land only.
improved land	land developed for use by the erection of buildings and other improvements.
income approach	one of the three traditional approaches to value which measures the present worth of the future benefits of a property by the capitalization of its net income stream over its remaining economic life. The approach involves making an estimate of the potential net income the property may be expected to yield, and capitalizing that income into an indication of value.

income property	a property primarily used to produce a monetary income.
industrial park	a subdivision designed and developed to accommodate specific types of industry.
industrial property	land, improvements, and/or machinery used or adaptable for use in the production of goods either for materials, or by changing other materials and products...i.e. assembling, processing and manufacturing ...as well as the supporting auxiliary facilities thereof.
inequity	see <i>equity</i> .
influence factor	a factor serving to either devalue or enhance the value of a particular parcel of land, or portions thereof, relative to the norm for which the base unit values were established; generally expressed in terms of a percentage adjustment.
institutional property	land and improvements used in conjunction with providing public services and generally owned and operated by the government or other nonprofit organizations...hospitals, schools, prisons, etc. Such property is generally held exempt from paying property taxes.
interest rate	the rate of return from an investment.
land classification	the classification of land based upon its capabilities for use; and/or production.
land contract	a purchase contract wherein the grantee takes possession of the property with the grantor retaining the deed to the property until the terms of the contract are met as specified.
land residual technique	a land valuation technique which requires the value of the building(s) to be known; the value of the land can then be indicated by capitalizing the residual net income remaining after deducting the portion attributable to the building(s).
landscaping	natural features such as lawns, shrubs and trees added to a plot of ground or modified in such a way as to make it more attractive.
land use restrictions	legal restrictions regulating the use to which land may be put.
land value maps	a map used in conjunction with mass appraising, generally drawn to a small scale, and showing comparative unit land values, on a block to block basis.

lease	a written contract by which one party (lessor) gives to another
lessee	party (lessee) the possession and use of a specified property, for a
lessor	specified time, and under specified terms and conditions.
leasehold	a property held under the terms of a lease.
leasehold improvements	additions, renovations, and similar improvements made to a leased property by the lessee.
leasehold value	the value of a leasehold; the difference between the contractual rent and the currently established economic or market rent.
legal description	a description of a parcel of land which serves to identify the parcel in a manner sanctioned by law.
lister	a field inspector whose principle duty is to collect and record property data. (not an appraiser).
market data approach	one of the three traditional approaches to value by which an indication of the value of a property is arrived at by compiling data on recently sold properties which are comparable to the subject property and adjusting their selling prices to account for variations in time, location, and property characteristics between the comparables and the subject property.
market value	the price an informed and intelligent buyer, fully aware of the existence of competing properties, and not compelled to act, would be justified in paying for a particular property.
mass appraisal	appraisal of property on a mass scale, such as an entire community, generally for ad valorem tax purposes, using standardized appraisal techniques and procedures to affect uniform equitable valuations within a minimum of detail, within a limited time period and at a limited cost... as opposed to a <i>fee appraisal</i> which is generally used to refer to a rather extensive detailed appraisal of a single property or singularly used properties for a specified purpose.
member appraisal institute	a professional designation (M.A.I.) conferred by The American Institute of Real Estate Appraisers upon qualifying real estate appraisers.
mineral rights	the right to extract subterranean deposits such as oil, gas, coal, and minerals, as specified in the grant.
minimum rental	that portion of the rent in a percentage lease which is fixed.

model method	a method of computing the replacement or the reproduction cost of an improvement by applying the cost of a specified model and adjusting the cost to account for specified variations between the subject improvement and the model.
modernization	the corrective action taken to update a property so that it may conform with current standards.
mortgage mortgagee mortgagor	a legal document by which the owner of a property (mortgagor) pledges the property to a creditor (mortgagee) as security for the payment of a debt.
neighborhood	a geographical area exhibiting a high degree of homogeneity in residential amenities, land use, economic and social trends, and housing characteristics.
neighborhood trend	three stages in the life cycle of a neighborhood...the <i>improving stage</i> characterized by development and growth; the <i>static stage</i> characterized by a leveling off of values; and the <i>declining stage</i> characterized by infiltration and decay.
net income	the income remaining from the effective gross income after deducting all operating expenses related to the cost of ownership.
net lease	a lease wherein the lessee assumes to pay all applicable operating expenses related to the cost of ownership; also referred to as <i>net net</i> , or <i>net net net lease</i> .
net sales	gross sales less returns and allowances.
net sales area	the actual floor area used for merchandising, excluding storage rooms, utility and equipment rooms, etc.
non-conforming use	a use which, because of modified or new zoning ordinances, no longer conforms to current use regulations, but which is nevertheless upheld to be legal so long as certain conditions are adhered to.
observed depreciation	that loss in value which is discernable through physical observation by comparing the subject property with a comparable property either new or capable of rendering maximum utility.
obsolescence	a diminishing of a property's desirability and usefulness brought about by either functional inadequacies and overadequacies inherent in the property itself, or adverse economic factors external to the property. Refer to <i>functional depreciation</i> and <i>economic depreciation</i> .

operating expenses	the fixed expenses, operating costs, and reserves for replacements which are required to produce net income before depreciation, and which are to be deducted from effective gross income in order to arrive at net income.
overage income	rental received in addition to the minimum contract rental based upon a specified percentage of a tenant's business receipts.
overall rate	a capitalization rate representing the relationship of the net income (before recapture) of a property to its value as a single rate; it necessarily contains, in their proper proportions, the elements of both the land and the building capitalization rates.
overassessed	a condition wherein a property is assessed proportionately higher than comparable properties.
parcel	piece of land held in one ownership.
percentage lease	a type of lease in which the rental is stipulated to be a percentage of the tenant's gross or net sales, whichever specified.
permanent parcel number	an identification number, which is assigned to a parcel of land to uniquely identify that parcel from any other parcel within a given taxing jurisdiction.
personal property	property which is not permanently affixed to and a part of the real estate, as specified by state statutes.
physical depreciation	<i>see depreciation.</i>
preferential assessment	an assessing system which provides preferential treatment in the form of reduced rates to a particular class of property, such as a system providing for farm properties to be assessed in accordance to their value in use as opposed to their value in the open market.
property class	a division of like properties generally defined by statutes and generally based upon their present use. The basis for establishing assessment ratios in a classified property assessment system. <i>See classified property tax.</i>
property inspection	a physical inspection of a property for the purpose of collecting and/or reviewing property data.
property record card	a document specially designated to record and process specified property data; may serve as a source document, a processing form; and/or a permanent property record.

public utility property	properties devoted to the production of commodities or services for public consumption under the control of governmental agencies such as the Public Utility Commission.
quantity survey method	a method of computing the replacement or the reproduction cost of an improvement by applying unit costs to the actual or estimated material and labor quantities and adding an allowance for overhead, profit, and all other indirect construction costs.
real estate	the physical land and appurtenances affixed thereto; often used synonymously with <i>real property</i> .
real property	all the interests, benefits, and rights enjoyed by the ownership of the real estate.
reassessment	the revaluation of all properties within a given jurisdiction for the purpose of establishing a new tax base.
rent	the amount paid for the use of a capital good. See <i>economic rent</i> .
replacement cost	the current cost of reproducing an improvement of equal utility to the subject property; it may or may not be the cost of reproducing a replica property. Compare with <i>reproduction cost</i> .
reproduction cost	the current cost of reproducing a replica property. Compare with <i>replacement cost</i> .
reserve for replacements	a reserve established to cover renewal and replacements of fixed assets.
residential property	vacant or improved land devoted to or available for use primarily as a place to live.
revaluation program	see <i>equalization program</i> .
sales ratio study	a statistical analysis of the distribution of assessment or appraisal-to-sale ratios of a sample of recent sales made for the purpose of drawing inferences regarding the entire population of parcels from which the sample was abstracted.
salvage value	the price one would be justified in paying for an item of property to be removed from the premises and used elsewhere.
site development costs	all costs incurred in the preparation of a site for use.

soil productivity	the capacity of a soil to produce crops.
sound value	the depreciated value of an improvement.
sound value estimate	an estimate of the depreciated value of an improvement made directly by comparing it to improvements of comparable condition, desirability, and usefulness without first estimating its replacement cost new.
standard depth	that lot depth selected as the norm against which other lots are to be compared; generally the most typical depth.
sublease	see <i>lease</i> ; the lessee in a prior lease simply becomes a lessor in a sublease.
tax bill	an itemized statement showing the amount of taxes owed for certain property described therein and forwardable to the party(s) legally liable for payment thereof.
tax book	see <i>assessment roll</i> .
tax district	a political subdivision over which a governmental unit has authority to levy a tax.
tax duplicate	see <i>assessment roll</i> .
tax exemption	either total or partial freedom from tax; total exemption such as that granted to governmental, educational, charitable, religious, and similar nonprofit organizations, and partial exemption such as that granted on homesteads, etc.
tax levy	in reference to property taxes, the total revenue which is to be realized by the tax.
tax list	see <i>assessment roll</i> .
tax mapping	the creation of accurate representations of property boundary lines at appropriate scales to provide a graphic inventory of parcels for use in accounting, appraising and assessing, such maps show dimensions and the relative size and location of each tract with respect to other tracts.
tax notice	a written notification to a property owner of the assessed value of certain properties described therein; often mandated by law to be given to each property owner following a revaluation of his property.

tax rate	the rate generally expressed in dollars per hundred or dollars per thousand (mills) which is to be applied against the tax base (assessed value) to compute the amount of taxes. The tax rate is derived by dividing the total amount of the tax levy by the total assessed value of the taxing district.
tax roll	<i>see assessment roll.</i>
tillable land	land suitable for growing annual crops.
underassessed	a condition wherein a property is assessed proportionately lower than comparable properties.
uniformity	as applied to assessing, a condition wherein all properties are assessed at the same ratio to market value, or other standard of value depending upon the particular assessing practices followed.
unimproved land	vacant land; a parcel for which there is no improvement value.
unit cost or price	the price or cost of one item of a quantity of similar items.
unit-in-place method	a method of computing the replacement or reproduction cost of an improvement by applying established unit-in-place rates, developed to include the cost of materials, equipment, labor, overhead and profit, to the various construction units.
use density	the number of buildings in a particular use per unit of area, such as a density of so many apartment units per acre.
use value	the actual value of a commodity to a specific owner, as opposed to its value in exchange or market value.
vacancy	an unrented unit of rental property.
vacant land	unimproved land; a parcel for which there is no improvement value.
valuation	<i>see appraisal.</i>
view	the scene as viewed from a property.
waterfrontage	land abutting on a body of water.
woodland	land which is fairly densely covered with trees.
zoning regulations	governmental restrictions relating to the use of land.

STATISTICAL TERMS

aggregate ratio	as applied to real estate, the ratio of the total assessed value to the total selling price.
average deviation	in a distribution of values, the average amount of deviation of all the values from the mean value equal to the total amount of deviation from the mean divided by the number of deviations.
cells	the basic units making up a stratified sample; each sale representing a distinct group within the total universe.
coefficient	a value prefixed as a multiplier to a variable or an unknown quantity.
coefficient of dispersion	as applied to an assessment-to-sale ratio distribution, a measure of dispersion in a given distribution equal to the average deviation of the ratios from the mean ratio divided by the mean ratio.
frequency distribution	a display of the frequency with which each value in a given distribution occurs; or in a <i>grouped frequency distribution</i> , a display of the frequency with which the values within various intervals, or value groupings, occur.
mean	a measure of central tendency equal to the sum of the values divided by the number. Also referred to as <i>arithmetic average</i> or <i>arithmetic mean</i> .
median	a measure of central tendency equal to that point in a distribution above which 50% of the values fall and below which 50% of the values fall. The 50th percentile. The 2nd quartile.
mode	a measure of central tendency equal to that value occurring most frequently in a given distribution. In a grouped frequency distribution, the mode is equal to the mid point of the interval with the greatest frequency.
normal distribution	a distribution in which all the values are distributed symmetrically about the mean value, with 68.26% of the values falling between ± 1 standard deviation, 95.44% between ± 2 standard deviations, and 99.74% between ± 3 standard deviations.
percentile rank	the relative position of a value in a distribution of values expressed in percentage terms; for instance, as applied to an assessment-to-sale ratio distribution, a ratio with a percentile rank of 83 would indicate that 83% of the ratios were lower and 17% of the ratios were higher than that particular ratio.
precision	as applied to real estate, it refers to the closeness of estimated value to actual selling price on an aggregate basis.

price related differential	as applied to real estate, an analytical measure of the vertical uniformity of values in a given distribution calculated by dividing the mean ratio by the aggregate ratio; a ratio of more than 1 being generally indicative of the relative undervaluation of high priced properties as compared to the less valuable properties, whereas a ratio of less than 1 would indicate the converse relationship.
quartile	positions in a distribution at 25 percentile intervals; the <i>first quartile</i> being equal to the 25th percentile, the <i>second quartile</i> being equal to the 50th percentile or the median, and the <i>third quartile</i> being equal to the 75th percentile.
regression analysis	a statistical technique for making statements as to the degree of linear association between a criterion (dependent) variable and one or more predictor (independent) variables; a simple linear regression having one independent variable, and multiple linear regression having more than one independent variable.
range	the difference between the highest and the lowest value in a distribution.
ratio	a fixed relationship between two similar things expressed in terms of the number of times the first contains the second; the quotient of one quantity divided by another quantity of the same type, generally expressed as a fraction.
sample	as applied to real estate, a set of parcels taken from a given universe which is used to make inferences about values for the universe. <i>A probability sample</i> is a sample in which each parcel in the universe is given equal chance of being included. Also referred to as <i>random sample</i>. <i>A non-probability sample</i> is a sample in which each parcel in the universe being chosen by other criteria, is not given an equal chance of being included. Essentially all assessment-to-sale ratio studies are non-probability samples.
sample size	as applied to real estate, the number of parcels needed from a universe to achieve a desired level of precision, given the total number of parcels in the universe and the standard deviation thereof.
standard deviation	a measure of dispersion, variability or scatter of values in a given distribution equal to the square root of the arithmetic mean of the squares of the deviations from the mean.
standard error of the mean	a measure of the statistical variability of the mean equal to the standard deviation of the distribution divided by the square root of the sample size.
stratified sampling	the selection of sample parcels from distinct groups within the total universe based upon the known sizes and characteristics of these distinct groups.
universe	as applied to real estate, all the parcels of a given type in the group under study, i.e., all the parcels of a given neighborhood, district, etc. Also referred to as <i>population</i> .

DIVISION OF A SECTION OF LAND

SEC. = 1 SQ. MILE = 640 ACRES

4 furlongs 40 ch. 160 rds. 2640 feet				2 furlongs		20 chains	
4 furlongs	NW¹/₄ 160 ACRES			40 chains 160 rods	NE¹/₄ 80 ACRES		2640 feet
	160 rods				80 rods 1320 feet		
10 chains 1 fur.	2 furlongs 20 ACRES 1320 feet		660 ft. 20 AC.	40 rods 20 AC.	20 chains 40 ACRES N.W.S.E.	80 rods 40 ACRES N.E.S.E.	
	20 chains 20 ACRES 80 rods						
SW¹/₄		SE¹/₄					
40 rds. 5 ACRES	20 rds.	330 ft.	1 furlong	10 chains	20 chains	1320 feet	
660 ft. 5 ACRES	5A	5A	10A	10A	S.W.S.E. 40 ACRES	S.E.S.E. 40 ACRES	
10A	10A	10A	10A	10A	1320 feet	2 furlongs	
1 fur.	10 ch.	40 rds.	660 ft.	1320 feet			

1 MILE = 8 FURLONGS

320 RDS. = 5280 FT.

1 LINK = 7.92 inches
1 FOOT = 12 inches

1 SQUARE FOOT = 144 sq. inches
1 SQUARE YARD = 9 sq. feet

36 in.
1 YARD 3 ft.
1 ROD OR POLE 16.5 ft.
5.5 yds.
25 links

272.25 sq. feet
1 SQUARE ROD 30.25 sq. yards

1 CHAIN 66 ft.
100 links
4 rods

43560 sq. feet
1 ACRE 160 sq. rods
10 sq. chains

1 FURLONG 40 rods
660 ft.

1 ACRE is about 208.75 sq. ft. or 8 rods wide by 20 rods long or any two numbers of rods whose product is 160 (25 x 125 ft.) = .0717 of an acre.

1 MILE 5280 ft.
320 rods
80 chains
8 furlongs

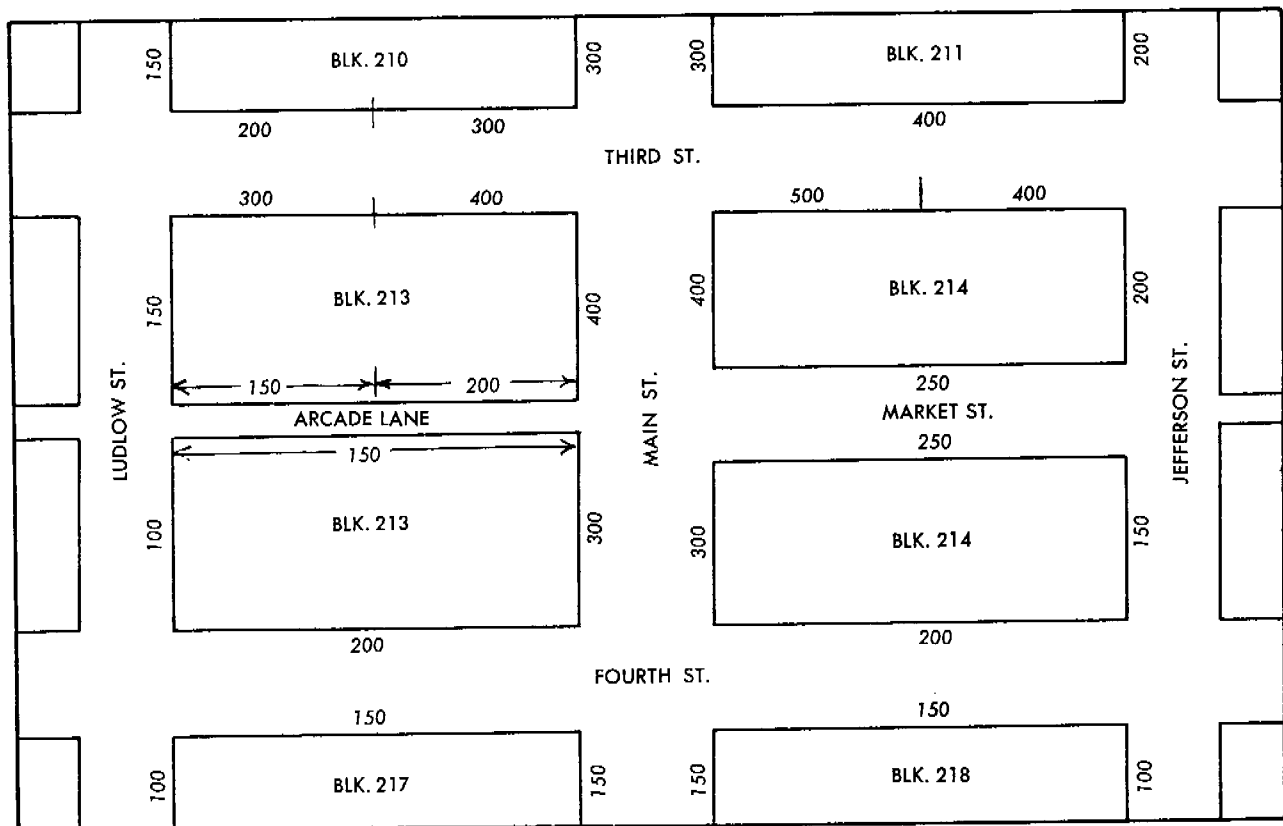
1 SQUARE MILE OR
1 SECTION EQUALS 640 ACRES

1 TOWNSHIP 36 sq. miles
OR 36 sections

1 TOWNSHIP = 6 MILES SQ.

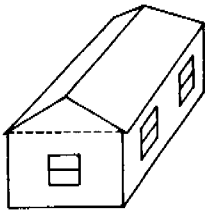
EXAMPLE UNIT LAND VALUE MAP

Unit land value maps are desirable for recording the unit value for all parcels on each street, block or section. These maps often differ from plat maps in that they may be drawn at a much smaller scale in order to cover a larger area. It is not necessary for the map to be drawn to scale, as long as the shape and position of each block or area can be recognized. An example of a unit land value map showing commercial unit front foot values is shown below. Normally, all designated land values are considered to be on the basis of front foot values, unless otherwise indicated. If the land unit value is indicated to be on a square foot or acreage basis, then those designated lands are to be computed accordingly.

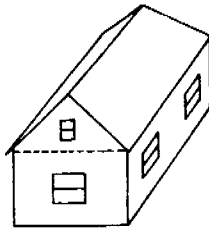


Example of a Unit Land Value Map.

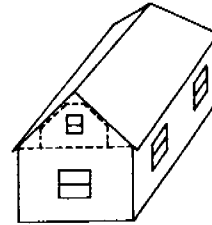
STORY HEIGHT ILLUSTRATIONS



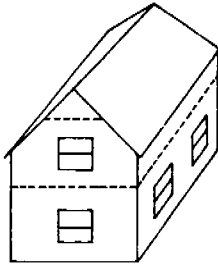
- (A) **1 Story.** All rooms are on one floor and are below the square of house at the eave line. This type usually has a low pitch roof with a slope of about $\frac{1}{6}$.



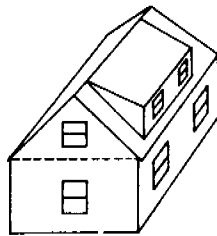
- (B) **1 Story and Attic.** Same basic design as 1 story except the pitch of the roof is usually greater with a slope of about $\frac{1}{4}$ or $\frac{1}{3}$. This type design has a permanent stairway to a usable floored attic area. There are usually windows at each end of the attic.



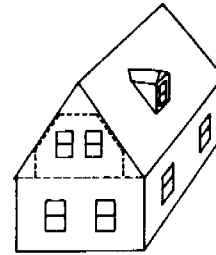
- (C) **1 Story and Finished Attic.** Same basic design as 1 story and attic except the attic interior is finished and is usually divided into rooms. The attic floor is approximately 55% of the first floor area.



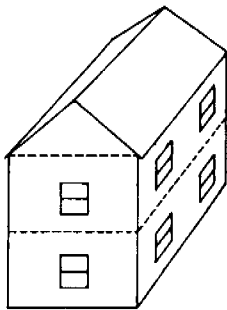
- (D) **1½ Story.** The second floor area of this type is equal to the area of the first floor, however, the wall height of the second floor is approximately $\frac{1}{2}$ that of the first floor with the balance of wall height as sloping ceiling.



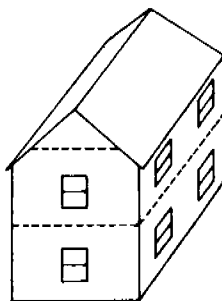
- (E) **1½ Story.** This type is similar to the 1 story and finished attic design except the roof pitch is greater with a slope of about $\frac{1}{3}$ or $\frac{1}{2}$ and there is a large dormer on one side of the roof and possibly one or 2 small dormers on the opposite side of the roof. Area of the finished second floor is approximately 75% of the first floor area.



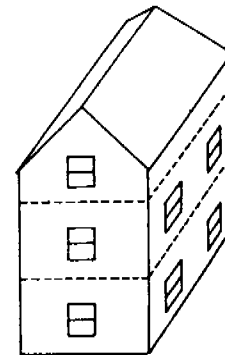
- (F) **1½ Story.** This type has a high pitch roof with a slope of about $\frac{5}{8}$ or $\frac{3}{4}$ with small dormers on one or both sides of the roof. The area of the finished second floor is approximately 75% of the first floor area.



- (G) **2 Story.** This is a typical 2 story dwelling with the second floor area equal to the first floor area.



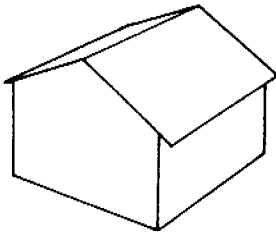
- (H) **2 Story.** Similar to the 2 Story in example (G) except the second floor side walls are less than full height. Consequently part of the second floor ceiling follows the slope of the roof.



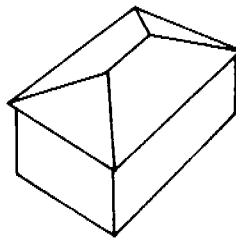
- (I) **2½ Story.** This type has two full stories and a $\frac{1}{2}$ story similar to example (D). A 2½ story dwelling may also be similar in design to examples (E) or (F).

ROOF TYPE ILLUSTRATIONS

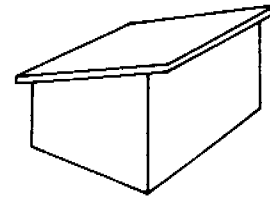
GABLE



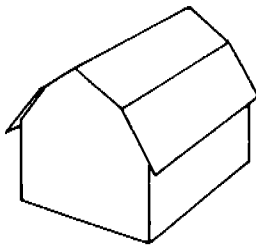
HIP



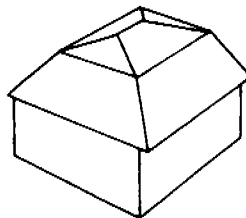
SHED



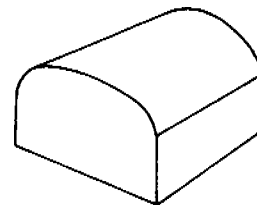
GAMBREL



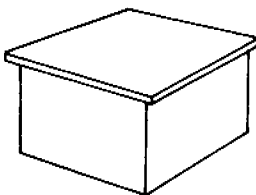
MANSARD



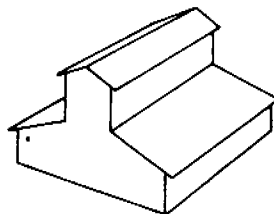
ARCHED



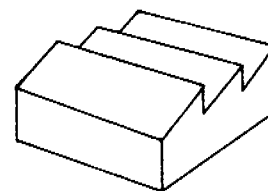
FLAT



MONITOR



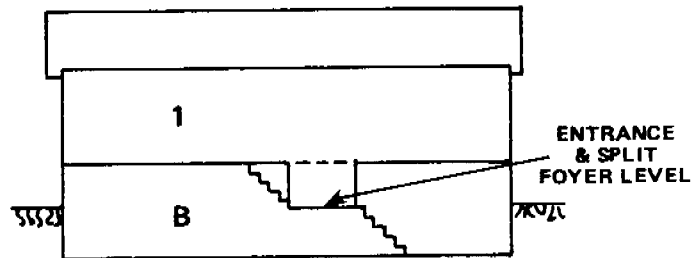
SAWTOOTH



BI-LEVEL, SPLIT AND TRI-LEVEL DWELLINGS SECTIONAL ILLUSTRATIONS

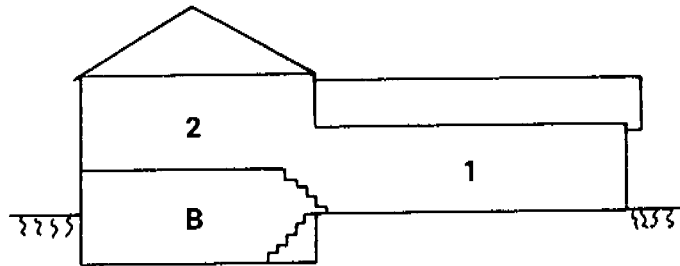
BI-LEVEL

List this type as a regular 1 Story & Basement dwelling. Basement may be fully or partially finished. Price finished basement area from the schedule.



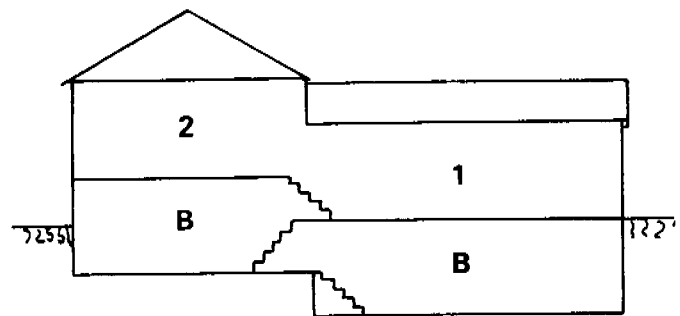
SPLIT or TRI-LEVEL

List this type as a 1 Story and $\frac{1}{2}$ Basement dwelling. Add 5% to 10% Design Factor for irregular construction. Basement may be fully or partially finished. Price finished basement area from the schedule.



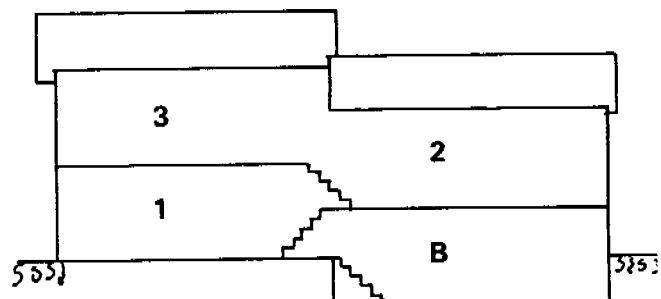
SPLIT LEVEL

List this type as a 1 Story and full Basement dwelling. Add 5% to 10% Design Factor for irregular construction. This type usually has at least $\frac{1}{2}$ of the Basement area fully finished. Price finished Basement areas from the schedule.



SPLIT LEVEL

List this type as a 1 Story and Full Basement dwelling. Add 5% to 10% Design Factor for irregular construction. Basement may be fully or partially finished. Price finished Basement area from the schedule.



RESIDENTIAL / AGRICULTURAL / EXEMPT LAND USE CODES

100	Residential Vacant
101	Residential 1 Family
102	Residential 2 Family
103	Residential 3 Family
104	Residential 4 Family
105	Mixed Residential/Commercial
106	Condominium (common element)
107	Condominium (fee simple)
108	Mobile Home
109	Auxiliary Improvement
110	Salvage Value Building
112	Active Farm
113	Inactive Farm
123	Large Vacant Tracts with Unknown Potential (more than 100 acres)
201	Residential Structure on Apartment Value Land
318	Boarding and Rooming Houses
600	Vacant Exempt Land
601	Cemetery
602	Post Office
603	Federal/State Buildings
604	Other Miscellaneous Exempt
610	Recreational/Health
611	Library
612	School
613	College & University
620	Religious
630	Auditorium
640	Hospital
660	Police or Fire Station
670	Correctional

Note: An active farm is defined as a farm that has been actively used within the last year, containing at least three acres of pasture or tillable ground. It does not have to have improvements located on it.

RESIDENTIAL/AGRICULTURAL STYLES

Definitions and Representative Photographs

01 Conventional



Main Style Features:

- Typical American utilitarian, functional dwellings
- Generally low to modest quality of construction
- Frame or brick exterior walls
- 1 or 2 story
- Probably can be most accurately described as functional, standard quality
- Typically American
- Old style designs

02 Ranch



Main Style Features:

- 1 story
- Frame or brick exterior walls
- Long rectangular or "L" shape design
- Normally has low pitched gable or hip roof
- Frequently has attached garage

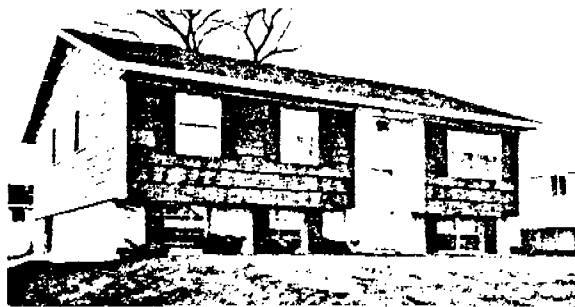
03 Modern or Contemporary



Main Style Features:

- Modernistic dwelling
 - 1 or 2 story
 - Frame or masonry exterior walls
 - Flat or sloping roof
 - Extensive use of glass window walls
 - General lack of exterior ornamentation
-

04 Bi-Level



Main Style Features:

- (also referred to as Raised Ranch or Split Foyer)
 - Rectangular raised, one-story over a partially exposed basement which is usually finished into living area.
 - Significant feature — front, central split foyer entry, which has steps leading up to the upper living area and also steps leading down to the lower living area.
 - See bi-level and sectional illustrations.
-

05 Tri-Level or Split Level



This design is very similar to the Bi-Level design, with the additional characteristics of a roof break and dissimilar floor levels. This design often has a 1' or 2' upper level living area overhang. See tri-level-split level, and sectional dwelling illustrations.

06 Row House or Town House



Main Style Features:

Modern or old, 2 story, row house construction
Frame, masonry or combination exterior walls
Common walls with adjacent dwellings

07 Cabin or Cottage



Main Style Features:

Seasonal type residence -- generally low-cost construction
Normally not insulated, with non-central type heating
Frame exterior walls
Boxy, square, or rectangular design
1 or 2 story

08 Colonial



Main Style Features:

- 2 or 2½ story
 - Frame or brick exterior walls
 - Symmetrical, square or rectangular box-like design
 - Central entrance
 - Ornamental front entrance
 - Fireplaces, if present, are located on gable ends
 - Large number of small pane glass windows with ornamental shutters
-

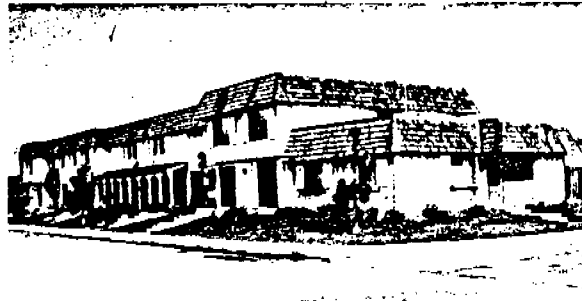
09 Cape



Main Style Features:

- 1 and attic or 1½ story
- Frame or brick exterior walls (frame upper)
- Compact with central entrance
- Shutters and simple double hung windows
- Main cornice line at second story level, with sloping roof

10 Condominium



Main Style Features:

May be townhouse, hi-rise style, or garden apartment style. This definition primarily identifies a distinct type of ownership.

The unit living area is owned exclusively (fee simple) by the unit owner. The other components, such as the land, common hallways, stairwells, roof, foundation, and exterior recreation features - such as pools, tennis courts, etc., are owned in common by all unit owners.

11 Other

By definition, this category is reserved for all special styles and designs not elsewhere coded. Normally this would include architecturally unique and high quality elaborate mansion type homes. Other examples would include earth homes, underground homes, geodesic homes, etc.

LAND GRADING SYSTEM

Descriptions of classes for Homesites, Tillable, Pasture, and Woodland are as follows:

1. HOMESITE

Class "A"

This homesite will be situated on or near a state highway. The parcel of land will be rather large; there will be an excess amount of shrubbery; the lawn will be very well manicured; and all utilities will be available to the site. In most cases, "but not always" the site will be improved with a "B" grade or better home.

Class "B"

This parcel of land will be situated on or near a state highway. The parcel of land will be of a good size and all utilities will be available. There will be an above average amount of shrubbery. The lawn will be well manicured. The accessibility to the property will be very good. The site will usually be improved with a good gravel driveway.

Class "C"

There will be the average size homesite situated on or near a state highway. There will be an average amount of shrubbery; the lawn will be of average maintenance; and all utilities will be available to the site. There will normally be a gravel driveway coming into the site. The property will normally be improved with a "D" grade or better dwelling.

Class "D"

This homesite will have a very minimal amount of shrubbery and the lawn will be in fair to poor condition. There will be an unimproved driveway coming into the site. All utilities will be available.

Class "E"

This homesite will be situated on or near a paved highway. There will be no shrubbery and no lawn. The depth of the parcel sometimes is just enough for the construction of a small substandard house. There will be a limited number of utilities, usually electric and gas. There is normally no driveway.

2. TILLABLE

Class "A"

This land will be good loam soil that is easy to work (a tract approximately ten acres or more in one continuous parcel) and can be cultivated safely with ordinary good farm methods. This land is nearly level and there is little or no erosion.

Class "B"

This land will lay level to rolling and can be cultivated safely with ordinary good farm methods. the soil may need lime and fertilizing. The bottom land may need improved drainage.

Class "C"

This land will also be level to rolling crop land; the drainage of the property will be good. A small amount of erosion could be taking place upon this type of land. The land can be cultivated with care. It needs contour strip cropping. Usually best suited for hay. This type of property will be cut into smaller sections due to some sort of natural or man-made obstructions.

Class "D"

This land will be good hillside farmland; 80 percent of this land can be farmed with a tractor. The soil will be of a good quality and the drainage will be good. This type of land will be best suited for the raising of hay.

Class "E"

This crop land will be very steep hillside that will be too steep to farm with modern farm machinery. The soil will be of a poor quality and the cultivation may cause severe erosion.

3. PASTURE

Class "A"

This type of land could be used for either pasture or crop land. The topography of the land will be level to rolling. The land can be clipped with a farm tractor; lime and fertilizer can be applied with modern farm equipment. The drainage of the property will be good and the soil will be of good quality. The land will be clear of any overgrowth such as an excess amount of trees or brush.

Class "B"

This land will be of similar nature to the Class "A" Pasture Land other than the fact that the quality of the soil will not be as good. The size of the parcel will be of a smaller nature. This type of land, for some reason, is not suitable for tilling and would be best suited for permanent pasture.

Class "C"

This land will have a moderate amount of erosion. The typography of the land will be average.

Class "D"

This land will be hillside pasture that has a very steep degree of slope. The pasture will have some natural obstruction such as overbrush, etc. The type of soil will be of poor quality.

Class "E"

This land will be very steep and there will be a mixture of overbrush and pasture throughout. Brush must be cleared with hand tools. The soil consistency will be of a poor quality; lime or fertilizer is seldom applied to this type of land and then only with hand tools.

4. WOODLAND

Class "A"

This land will be adaptable for use. The topography of the land will be level to slightly rolling. The soil type will be of loam. There will be a stand of trees of commercial species. The size being from 14 to 20 inches and above.

Class "B"

This land will also be level to rolling. It will be adaptable for other profitable uses. There will be a minimal amount of erosion. The soil will be a good quality. This land will be predominantly covered with a stand of timber from 10 to 14 inches.

Class "C"

The topography of this land is not economically feasible to use for anything other than growing trees. The predominant size of the trees on this grade of woodland would be from six (6) to eight (8) inches. There will be some erosion of the soil.

Class "D"

The topography of this land will indicate that the best use of this land is the growing of timber. There will be a stand of trees of commercial species that clearly indicate soundness and are of good form. The dimensions at breast height would measure from four (4) to six (6) inches. Such trees will become saw timber if left to grow.

Class "E"

Trees of commercial species less than four (4) inches in diameter at breast height and of good form and vigor. The land will be of a poor quality. The topography will be steep. It will be rather difficult to harvest the timber.

COUNTY/DISTRICT CODES

01 BARBOUR COUNTY

- 01 Barker District
- 02 Belington Corporation
- 03 Cove District
- 04 Elk District
- 05 Glade District
- 06 Junior Corporation
- 07 Philippi District
- 08 Philippi Corporation
- 09 Pleasant District
- 10 Union District
- 11 Valley District

02 BERKELEY COUNTY

- 01 Arden District
- 02 Falling Waters District
- 03 Gerrardstown District
- 04 Hedgesville District
- 05 Hedgesville Corporation
- 06 Martinsburg Corporation
- 07 Mill Creek District
- 08 Opequon District

03 BOONE COUNTY

- 01 Crook District
- 02 Danville Corporation
- 03 Madison Corporation
- 04 Peytona District
- 05 Scott District
- 06 Sherman District
- 07 Sylvester Corporation
- 08 Washington District
- 09 Whitesville Corporation

04 BRAXTON COUNTY

- 01 Birch District
- 02 Burnsville Corporation
- 03 Flat Woods Corporation
- 04 Gassaway Corporation
- 05 Holly District
- 06 Otter District
- 07 Salt Lick District
- 08 Sutton Corporation

05 BROOKE COUNTY

- 01 Beech Bottom Corporation
- 02 Bethany Corporation
- 03 Buffalo District
- 04 Cross Creek District
- 05 Follansbee Corporation
- 06 Weirton Corporation
- 07 Wellsburgh Corporation

06 CABELL COUNTY

- 01 Barboursville District
- 02 Barboursville Corporation
- 03 Grant District
- 04 Guyandotte District
- 05 Huntington-Gideon Corporation
- 06 Huntington-Guyandotte Corporation
- 07 Huntington-Kyle Corporation
- 08 McComas District
- 09 Milton Corporation
- 10 Union District

07 CALHOUN COUNTY

- 01 Center District
- 02 Grantsville Corporation
- 03 Lee District
- 04 Sheridan District
- 05 Sherman District
- 06 Washington District

08 CLAY COUNTY

- 01 Buffalo District
- 02 Clay Corporation
- 03 Henry District
- 04 Otter District
- 05 Pleasant District
- 06 Union District

09 DODDRIDGE COUNTY

- 01 Central District
- 02 Cove District
- 03 Grant District
- 04 Greenbrier District
- 05 McClellan District
- 06 New Milton District
- 07 Southwest District
- 08 West Union District
- 09 West Union Corporation

10 FAYETTE COUNTY

- 01 Falls District
- 02 Fayetteville District
- 03 Kanawha District
- 04 Mountain Cove District
- 05 Nuttall District
- 06 Quinnimont District
- 07 Sewell Montain District
- 08 Ansted Corporation
- 09 Fayetteville Corporation
- 10 Gauley Bridge Corporation
- 11 Meadow Bridge Corporation
- 12 Montgomery Corporation
- 13 Mount Hope Corporation
- 14 Oak Hill Corporation
- 15 Pax Corporation
- 16 Smithers Corporation
- 17 Thurmond Corporation

11 GILMER COUNTY

- 01 Center District
- 02 De Kalb District
- 03 Glenville District
- 04 Glenville Corporation
- 05 Layopolis Corporation
- 06 Troy District

12 GRANT COUNTY

- 01 Bayard Corporation
- 02 Grant District
- 03 Milroy District
- 04 Petersburg Corporation
- 05 Union District

13 GREENBRIER COUNTY

- 01 Alderson Corporation
- 02 Anthony Creek District
- 03 Blue Sulphur District
- 04 East Rainelle Corporation
- 05 Falling Springs District
- 06 Falling Springs Corporation
- 07 Fort Springs District
- 08 Frankford District
- 09 Irish Corner District
- 10 Lewisburg District
- 11 Lewisburg Corporation
- 12 Meadow Bluff District
- 13 Quinwood Corporation

13 GREENBRIER COUNTY (Continued)

- 14 Rainelle Corporation
- 15 Ronceverte Corporation
- 16 Rupert Corporation
- 17 White Sulphur District
- 18 White Sulphur Springs Corporation
- 19 Williamsburg District

14 HAMPSHIRE COUNTY

- 01 Bloomery District
- 02 Capon District
- 03 Capon Bridge-Bloomery Corporation
- 04 Capon Bridge-Capon Corporation
- 05 Gore District
- 06 Mill Creek District
- 07 Romney District
- 08 Romney Corporation
- 09 Sherman District
- 10 Springfield District

15 HANCOCK COUNTY

- 01 Butler District
- 02 Chester Corporation
- 03 Clay District
- 04 Grant District
- 05 New Cumberland Corporation
- 06 Weirton Corporation

16 HARDY COUNTY

- 01 Capon District
- 02 Lost River District
- 03 Moorefield District
- 04 Moorefield Corporation
- 05 South Fork District
- 06 Wardensville Corporation

17 HARRISON COUNTY

- 01 Clark-Outside District
- 02
- 03 Clark-Stonewood Corporation
- 04 Clark-Clarksburg Corporation
- 05 Clark-Out City Corporation
- 06 Clark-Independent Corporation
- 07 Clark-Stealey Heights Corporation
- 08 Clark-Broad Oaks Corporation
- 09 Clark-Nutter Fort Corporation
- 10 Clay-Outside District
- 11
- 12 Clay-Shinnston Corporation
- 13 Coal-Outside District
- 14
- 15 Coal-Clarksburg Corporation
- 16 Coal-Adamston Corporation
- 17 Coal-Northview Corporation
- 18 Eagle-Outside District
- 19
- 20 Eagle-Lumberport Corporation
- 21 Elk-Outside District
- 22
- 23 Grant-Outside District
- 24
- 25 Grant-Lost Creek Corporation
- 26 Sardis-Outside District
- 27
- 28 Simpson-Outside District
- 29
- 30 Simpson-Bridgeport Corporation
- 31 Simpson-Anmoore Corporation
- 32 Tenmile-Outside District
- 33
- 34 Tenmile-Salem Corporation
- 35 Union-Outside District
- 36
- 37 Union-West Milford Corporation

18 JACKSON COUNTY

- 01 Grant District
- 02 Ravenswood District
- 03 Ravenswood Corporation
- 04 Ripley District
- 05 Ripley Corporation
- 06 Union District
- 07 Washington District

19 JEFFERSON COUNTY

- 01 Bolivar Corporation
- 02 Charles Town District
- 03 Charles Town Corporation
- 04 Harpers Ferry District
- 05 Harpers Ferry Corporation
- 06 Kabletown District
- 07 Middleway District
- 08 Ranson Corporation
- 09 Shepherdstown District
- 10 Shepherdstown Corporation

20 KANAWHA COUNTY

- 01 Big Sandy District
- 02 Clendenin Corporation
- 03 Cabin Creek District
- 04 Cedar Grove Corporation
- 05 East Bank Corporation
- 06 Glasgow Corporation
- 07 Montgomery Corporation
- 08 Pratt Corporation
- 09 Charleston South Annex Corporation
- 10 Charleston North Corporation
- 11 Charleston East Corporation
- 12 Charleston West Corporation
- 13 Kanawha City Corporation
- 14 15th Ward Corporation
- 15 Elk District
- 16 Jefferson District
- 17 St. Albans Corporation
- 18 Spring Hill Corporation
- 19 Loudon District
- 20 Chesapeake Corporation
- 21 Marmet Corporation
- 22 South Charleston Corporation
- 23 Malden District
- 24 Poca District
- 25 Union District
- 26 Dunbar Corporation
- 27 Nitro Corporation
- 28 Washington District
- 29 Belle Corporation
- 30 Smithers Corporation
- 31 Handley Corporation

21 LEWIS

- 01 Collins Settlement District
- 02 Court House District
- 03 Freemans Creek District
- 04 Hackers Creek District
- 05 Jane Lew Corporation
- 06 Skin Creek District

21 LEWIS (Continued)

- 07 Weston-Courthouse Corporation
- 08 Weston-Freemans Creek Corporation
- 09 Weston-Hackers Creek Corporation

22 LINCOLN

- 01 Carroll District
- 02 Duval District
- 03 Hamlin Corporation
- 04 Harts Creek District
- 05 Jefferson District
- 06 Laurell Hill District
- 07 Sheridan District
- 08 Union District
- 09 Washington District
- 10 West Hamlin Corporation

23 LOGAN

- 01 Chapmanville Corporation
- 02 Guyan District
- 03 Island Creek District
- 04 Logan District
- 05 Logan Corporation
- 06 Man Corporation
- 07 Mitchell Heights Corporation
- 08 Triadelphia District
- 09 West Logan Corporation

24 MARION

- 01 Barrackville Corporation
- 02 Fairmont District
- 03 Fairmont-Fairmont Corporation
- 04 Fairmont-Grant Annex Corporation
- 05 Fairmont-Union Corporation
- 06 Fairmont-Winfield Corporation
- 07 Fairview Corporation
- 08 Farmington Corporation
- 09 Grant District
- 10 Grant Town Corporation
- 11 Lincoln District
- 12 Mannington District
- 13 Mannington Corporation
- 14 Monogah-Grant Corporation
- 15 Monogah-Lincoln Corporation
- 16 Paw Paw District
- 17 Rivesville Corporation
- 18 Union District
- 19 Winfield District
- 20 Worthington-Lincoln Corporation

25 MARSHALL

- 01 Benwood Corporation
- 02 Cameron Corporation
- 03 Cameron District
- 04 Clay District
- 05 Franklin District
- 06 Glendale Corporation
- 07 Liberty District
- 08 McMechen Corporation
- 09 Meade District
- 10 Moundsville-Clay Corporation
- 11 Moundsville-Washington Corporation
- 12 Sand Hill District
- 13 Union District
- 14 Washington District
- 15 Webster District
- 16 Wheeling-Sandhill Corporation

26 MASON

- 01 Arbuckle District
- 02 Glendenin District
- 03 Cologne District
- 04 Cooper District
- 05 Graham District
- 06 Hannan District
- 07 Hartford Corporation
- 08 Henderson Corporation
- 09 Leon Corporation
- 10 Lewis District
- 11 Mason Corporation
- 12 New Haven Corporation
- 13 Point Pleasant Corporation
- 14 Robinson District
- 15 Union District
- 16 Waggener District

27 MC DOWELL

- 01 Adkin District
- 02 Anawalt Corporation
- 03 Big Creek District
- 04 Browns Creek District
- 05 Davy Corporation
- 06 Elkhorn District
- 07 Gary Corporation
- 08 Jaeger Corporation
- 09 Keystone Corporation
- 10 Kimball Corporation
- 11 Northfork District
- 12 Northfork Corporation
- 13 Sandy River District
- 14 War Corporation
- 15 Welch Corporation
- 16 Bradshaw Corporation

28 MERCER

- 01 Athens Corporation
- 02 Beaver Pond District
- 03 Bluefield Corporation
- 04 Bramwell Corporation
- 05 East River District
- 06 Jumping Branch District
- 07 Matoaka Corporation
- 08 Oakvale Corporation
- 09 Plymouth District
- 10 Princeton Corporation
- 11 Rock District

29 MINERAL

- 01 Cabin Run District
- 02 Elk District
- 03 Elk Garden Corporation
- 04 Frankfort District
- 05 Ridgeley Corporation
- 06 New Creek District
- 07 Keyser Corporation
- 08 Piedmont District
- 09 Piedmont Corporation
- 10 Welton District

30 MINGO

- 01 Delbarton Corporation
- 02 Gilbert Corporation
- 03 Hardee District
- 04 Harvey District
- 05 Kermit District
- 06 Lee District
- 07 Magnolia District
- 08 Matewan Corporation
- 09 Stafford District
- 10 Tug River District
- 11 Williamson Corporation
- 12 Kermit Corporation

31 MONONGALIA

- 01 Battelle District
- 02 Blacksville Corporation
- 03 Cass District
- 04 Clay District
- 05 Clinton District
- 06 Granville Corporation
- 07 Grant District

31 MONONGALIA (Continued)

- 08 Morgan District
- 09 Morgantown-1st Ward Corporation
- 10 Morgantown-2nd Ward Corporation
- 11 Morgantown-3rd Ward Corporation
- 12 Morgantown-4th Ward Corporation
- 13 Morgantown-5th Ward Corporation
- 14 Morgantown-6th Ward Corporation
- 15 Morgantown-7th Ward Corporation
- 16 Osage Corporation
- 17 Star City Corporation
- 18 Union District
- 19 Westover Corporation

32 MONROE

- 01 Alderson Corporation
- 02 Peterstown Corporation
- 03 Red Sulphur District
- 04 Second Creek District
- 05 Springfield District
- 06 Sweet Springs District
- 07 Union District
- 08 Union Corporation
- 09 Wolf Creek District

33 MORGAN

- 01 Allen District
- 02 Bath District
- 03 Berkeley Springs Corporation
- 04 Cacapon District
- 05 Paw Paw Corporation
- 06 Rock Gap District
- 07 Sleepy Creek District
- 08 Timber Ridge District

34 NICHOLAS

- 01 Beaver District
- 02 Grant District
- 03 Hamilton District
- 04 Jefferson District
- 05 Kentucky District
- 06 Richwood Corporation
- 07 Summersville District
- 08 Summersville Corporation
- 09 Wilderness District

35 OHIO

- 01 Washington Corporation
- 02 Washington-Fulton Corporation
- 03 Clay Corporation
- 04 Madison Corporation
- 05 Union Corporation
- 06 Center Corporation
- 07 Webster Corporation
- 08 Ritchie City Corporation
- 09 Leatherwood Corporation
- 10 Woodsdale Corporation
- 11 Edgewood Corporation
- 12 Pleasant Valley Corporation
- 13 Elm Grove Corporation
- 14 Patterson Corporation
- 15 Triadelphia Town Corporation
- 16 Triadelphia-Fulton Corporation
- 17 Triadelphia Country District
- 18 Triadelphia Wheeling Corporation
- 19 Liberty District
- 20 Warwood Corporation
- 21 Woodsdale Richland Corporation
- 22 Richland Country District
- 23 Ritchie Country District
- 24 Richland Wheeling Corporation
- 25 Ritchie Bethlehem Corporation
- 26 Valley Grove District
- 27 Clearview Corporation
- 28 West Liberty Corporation

36 PENDLETON COUNTY

- 01 Bethel District
- 02 Circleville District
- 03 Franklin District
- 04 Franklin Corporation
- 05 Mill Run District
- 06 Sugar Grove District
- 07 Union District

37 PLEASANTS COUNTY

- 01 Belmont Corporation
- 02 Grant District
- 03 Jefferson District
- 04 Lafayette District
- 05 McKim District
- 06 St. Marys Corporation
- 07 Union District
- 08 Washington District

38 POCAHONTAS COUNTY

- 01 Cass Corporation
- 02 Durbin Corporation
- 03 Edray District
- 04 Greenbank District
- 05 Hillsboro Corporation
- 06 Huntersville District
- 07 Little Levels District
- 08 Marlinton Corporation

39 PRESTON COUNTY

- 01 Albright Corporation
- 02 Brandonville Corporation
- 03 Bruceton Mills Corporation
- 04 Grant District
- 05 Kingwood District
- 06 Kingwood Corporation
- 07 Lyon District
- 08 Masontown Corporation
- 09 Newburg Corporation
- 10 Pleasant District
- 11 Portland District
- 12 Reedsville Corporation
- 13 Reno District
- 14 Rowlesburg Corporation
- 15 Terra Alta Corporation
- 16 Tunnelton Corporation
- 17 Union District
- 18 Valley District

40 PUTNAM COUNTY

- 01 Bancroft Corporation
- 02 Buffalo District
- 03 Buffalo Corporation
- 04 Curry District
- 05 Eleanor Corporation
- 06 Hurrican Corporation
- 07 Nitro Corporation
- 08 Poca District
- 09 Poca Corporation
- 10 Scott District
- 11 Teays Valley District
- 12 Union District
- 13 Winfield Corporation

41 RALEIGH COUNTY

- 01 Beckley Corporation
- 02 Clear Fork District
- 03 Lester Corporation
- 04 Mabscott Corporation
- 05 Marsh Fork District
- 06 Rhodell Corporation
- 07 Richmond District
- 08 Shady Spring District
- 09 Slab Fork District
- 10 Sophia Corporation
- 11 Town District
- 12 Trap Hill District

42 RANDOLPH COUNTY

- 01 Beverly Corporation
- 02 Beverly District
- 03 Coalton Corporation
- 04 Dry Fork District
- 05 Elkins Corporation
- 06 Elkins Ind District
- 07 Harman Corporation
- 08 Huttonsville Corporation
- 09 Huttonsville District
- 10 Leadsville District
- 11 Middle Fork District
- 12 Mill Creek Corporation
- 13 Mingo District
- 14 Montrose Corporation
- 15 New Interest District
- 16 Roaring Creek District
- 17 Valley Bend District
- 18 Whitmer Corporation

43 RITCHIE COUNTY

- 01 Auburn Corporation
- 02 Cairo Corporation
- 03 Clay District
- 04 Ellenboro Corporation
- 05 Grant District
- 06 Harrisville Corporation
- 07 Murphy District
- 08 Pennsboro Corporation
- 09 Pullman Corporation
- 10 Union District

44 ROANE COUNTY

- 01 Curtis District
- 02 Geary District
- 03 Harper District
- 04 Reedy District
- 05 Reedy Corporation
- 06 Smithfield District
- 07 Spencer District
- 08 Spencer Corporation
- 09 Walton District

45 SUMMERS COUNTY

- 01 Forest Hill District
- 02 Greenbrier District
- 03 Green Sulphur District
- 04 Hinton Corporation
- 05 Jumping Branch District
- 06 Pipestem District
- 07 Talcott District

46 TAYLOR COUNTY

- 01 Booths Creek District
- 02 Court House District
- 03 Fetterman District
- 04 Flemington Corporation
- 05 Flemington District
- 06 Grafton-East Corporation
- 07 Grafton-West Corporation
- 08 Grafton-Blueville Brownlow Corporation
- 09 Grafton-Lucretia Corporation
- 10 Grafton District
- 11 Knottsville District

47 TUCKER COUNTY

- 01 Black Fork District
- 02 Clover District
- 03 Davis District
- 04 Davis Corporation
- 05 Dry Fork District
- 06 Fairfax District
- 07 Hambleton Corporation
- 08 Hendricks Corporation
- 09 Licking District
- 10 Parsons Corporation
- 11 St. George District
- 12 Thomas Corporation

48 TYLER COUNTY

- 01 Centerville District
- 02 Ellsworth District
- 03 Friendly Corporation
- 04 Lincoln District
- 05 McElroy District
- 06 Meade District
- 07 Middlebourne Corporation
- 08 Paden City Corporation
- 09 Sistersville Corporation
- 10 Union District

49 UPSHUR COUNTY

- 01 Banks District
- 02 Buckhannon District
- 03 Buckhannon Corporation
- 04 Meade District
- 05 Union District
- 06 Warren District
- 07 Washington District

50 WAYNE COUNTY

- 01 Butler District
- 02 Ceredo District
- 03 Ceredo Corporation
- 04 Ceredo Kenova District
- 05 Fort Gay Corporation
- 06 Huntington Corporation
- 07 Kenova Corporation
- 08 Lincoln District
- 09 Stonewall District
- 10 Union District
- 11 Wayne Corporation
- 12 Westmoreland District

51 WEBSTER COUNTY

- 01 Camden-On-Gauley Corporation
- 02 Cowen Corporation
- 03 Fork Lick District
- 04 Glade District
- 05 Hacker Valley District
- 06 Holly District
- 07 Webster Springs Corporation

52 WETZEL COUNTY

- 01 Center District
- 02 Church District
- 03 Clay District
- 04 Grant District
- 05 Green District
- 06 Hundred Corporation
- 07 Littleton Corporation
- 08 Magnolia District
- 09 New Martinsville Corporation
- 10 Paden City Corporation
- 11 Pine Grove Corporation
- 12 Proctor District
- 13 Smithfield Corporation

53 WIRT COUNTY

- 01 Burning Springs District
- 02 Clay District
- 03 Elizabeth District
- 04 Elizabeth Corporation
- 05 Newark District
- 06 Reedy District
- 07 Spring Creek District
- 08 Tucker District

54 WOOD COUNTY

- 01 Clay District
- 02 Harris District
- 03 Lubeck District
- 04 Parkersburg District
- 05 Parkersburg Corporation
- 06 Slate District
- 07 Steele District
- 08 Tygart District
- 09 Union District
- 10 Vienna Corporation
- 11 Walker District
- 12 Williams District
- 13 Williamstown Corporation
- 14 North Hills Corporation

55 WYOMING COUNTY

- 01 Baileysville District
- 02 Barkers Ridge District
- 03 Center District
- 04 Clear Fork District
- 05 Huff Creek District
- 06 Mullens Corporation
- 07 Oceana District
- 08 Oceana Corporation
- 09 Pineville Corporation
- 10 Slab Fork District